# DUBLIN HIGH SCHOOL COURSE HANDBOOK

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface and Counseling Department introduction</td>
<td>2</td>
</tr>
<tr>
<td>Selection of Courses, planning a course of study, Counseling Department policies</td>
<td>3</td>
</tr>
<tr>
<td>High school graduation requirements</td>
<td>7</td>
</tr>
<tr>
<td>Four-year plans and college information</td>
<td>8</td>
</tr>
<tr>
<td>Blank four-year plan</td>
<td>11</td>
</tr>
<tr>
<td>Dublin High School Career Pathways</td>
<td>13</td>
</tr>
<tr>
<td>Health Science and Biomedical Technology Academy information</td>
<td>28</td>
</tr>
<tr>
<td>Engineering and Design Academy information</td>
<td>29</td>
</tr>
<tr>
<td>Culinary Academy Information</td>
<td>30</td>
</tr>
<tr>
<td>Important websites</td>
<td>31</td>
</tr>
<tr>
<td>Visual Arts course descriptions</td>
<td>32</td>
</tr>
<tr>
<td>Performing Arts course descriptions</td>
<td>36</td>
</tr>
<tr>
<td>Music course descriptions</td>
<td>39</td>
</tr>
<tr>
<td>Family and Consumer Studies course descriptions</td>
<td>43</td>
</tr>
<tr>
<td>English course descriptions</td>
<td>46</td>
</tr>
<tr>
<td>English Language Development (ELD) courses</td>
<td>52</td>
</tr>
<tr>
<td>Mathematics courses</td>
<td>54</td>
</tr>
<tr>
<td>Non-departmental courses</td>
<td>60</td>
</tr>
<tr>
<td>Physical Education courses</td>
<td>65</td>
</tr>
<tr>
<td>Science flowchart for NextGen Science Standards (Class of 2021)</td>
<td>68</td>
</tr>
<tr>
<td>Science courses</td>
<td>69</td>
</tr>
<tr>
<td>Social Science courses</td>
<td>79</td>
</tr>
<tr>
<td>Special Education courses</td>
<td>84</td>
</tr>
<tr>
<td>World Language courses</td>
<td>89</td>
</tr>
<tr>
<td>Engineering Academy courses</td>
<td>95</td>
</tr>
<tr>
<td>Biomedical Science Academy courses</td>
<td>98</td>
</tr>
</tbody>
</table>
Culinary Academy courses 100
Tri-Valley ROP (Regional Occupational Program) courses 102

PREFACE

By opening this handbook, students are beginning the process of planning their high school career pathway. To ensure the selection of appropriate courses, you are encouraged to work cooperatively with your counselor, teachers and parents/guardians. The choices you will make are important because they will affect your future. This handbook has been prepared to help you make these decisions.

Counseling and guidance services are available to students throughout your four years in high school. Counselors work with you not only to make plans for the present, but to assist you in planning for the future. They evaluate educational and vocational information and help you to relate this information to your own talents and interests. Counselors also assist you in evaluating study time and developing techniques that aid you in the organization of school work. Your personal needs, to the extent that they affect your performance in school, are also of concern to your counselor.

Our Counseling Department consists of:

Kim Halket  Counselor, A - Brod, Engineering and Culinary Academies and
SPED Case Manager: Mr. O’Neil
Dianna Heise  Counselor, Broe - Ge
SPED Case Manager: Mr. Mann
Cynthia Walker  Counselor, ELD, AVID and Gh -
Jan and
SPED Case Manager: Ms. Sethi
Gloria DaSilva  Counselor, Jao - Mura and
SPED Case Manager: Mr. Trammell
Warren Parker  Counselor, Murb - Sheph and
SPED Case Manager: Mrs. Bretey
Eric Calloway  Counselor, Shepi - Z and
SPED Case Manager: Ms. Machado-Potestio
Caroline Rubio  Head Counselor, Biomedical
Health Science Academy and
SPED Case Managers: Mrs. Melvin, Mrs. Middleton, Ms. Edgar
Dena Merrill  Registrar
Leah Villanueva  Counseling Secretary
Emily O’Shea  Data Processor

LCSN-KGLR-C4WC  2
SELECTION OF COURSES

Certain courses are required of all students, while others, (elective courses) are of your own choosing. The brief course descriptions which follow will inform you of the general nature of each course. Please consider these carefully, and with the help of a parent/guardian, teacher or counselor decide on the program of study. When registering, you should indicate several elective choices, because conflicts may make first choices difficult to schedule. The elective courses listed will be offered only if there is sufficient enrollment. Due to scheduling conflicts, course changes may not be possible. Therefore, make your selections wisely. If a student selects an elective and receives it in their schedule, even if it is not their first choice of elective, please bear in mind that this was what worked with the master schedule, and students will be expected to adhere to this schedule.

PLANNING A COURSE OF STUDY

Keep in mind that you will be planning a course of study for the full school year; you will make choices for both Fall and Spring semesters. Course selection changes may not be made after March 30th. Students will meet individually with their counselor to go over course requests. After that initial meeting, students may only make one subsequent change to their course requests, and this must be done by March 30th.

REPEATING CLASSES

In order for a student to repeat a class for the purpose of improving a grade, or to raise his/her grade point average (GPA), the student and parent/guardian need to be aware of the following:

● A student cannot receive credit twice for the same class. That is to say, even though the student received a grade of "D", this does constitute passing the class at the high school level. If a student wants to repeat a class to improve the letter grade of "D" s/he will receive credit only once. Repeated course may receive elective credits if needed.
● A grade of "D" is not accepted by colleges as completion of a requirement. This includes Honors and Advanced Placement courses. Courses where students earned “C” grades may not be retaken for grade improvement, as a “C” grade is a college-eligible grade. Even if the course were retaken, the “C” grade would be what is still considered by the college for admissions purposes
● Loss of credits as a result of repeating a class may result in the reclassification of the student due to insufficient credits for the grade level.
● If a student needs to repeat a class in summer school due to a poor or failing grade (D or F), the student will not be placed in an accelerated class in that subject area in the subsequent academic year.
Change of Schedule Policy

Schedule changes **will** be honored for the following reasons during the first 5 days of each semester:

- **Level Change Within Department**- teacher recommends change of level or student needs next class level (i.e., Spanish 1 to Spanish 2)
- **Repeated Class**- necessary course was completed in summer school
- “**Hole**” in **Schedule**- missing a class during the seven-period day
- **ROP**- transportation/schedule conflict
- **Student Assistant Assignment** - only if the assignment is for a class on original course selection sheet and has been approved by the student’s counselor

Schedule changes **will not** be granted for the following reasons:

1) Change of teacher  
2) Change of sequence of classes during the day or change of Gael period  
3) Change of elective classes that are different from original course selection sheet or a change to another elective selected on the course sheet  
4) Change of academic classes if currently passing the class with a grade of D or higher

*There may be exceptions to the general policy of changing classes including balancing classes, cancelled classes and administrative requests. Direct any questions regarding this policy to the Head Counselor.*
Dublin High School Scheduling Policies

- All present Dublin High School students will be given a grade-level scheduling sheet and instructions on entering their courses on the portal during the month of February.
- Students will then have two weeks to talk with their teachers and get signatures on the grade-level sheet when indicated. For “core courses” (English, Social Studies, World Language, Math and Science), teachers will enter their courses on the portal.
- For other classes, if a teacher recommendation is required, students will obtain the teacher’s signature on the course scheduling sheet. This is REQUIRED for any class that has a “TR” next to the course title on the scheduling sheet.
- Students will then enter their courses and alternates on the student portal.
- Students will meet with their counselor individually in their Social Studies, Health 9 or Freshman Seminar class to review the classes and collect the grade-level sheet with teacher and parent signatures.
- Students must have all teacher recommendations and a parent signature on the form with them for the meeting. Students may not be enrolled in classes requiring a teacher recommendation if none has been obtained. If the student does not have the signed scheduling form with them at the time they meet with their counselor, it needs to be turned in to the Counseling Department within 24 hours, or counselors will place students in open elective courses.
- Bear in mind that courses inputted into the portal are requests, and that student schedules will be generated by determining what works in the master schedule.
- There will be absolutely no class changes, including level changes, after March 30.

Credit by Exam:

No “credit by exam” is allowed. In order to earn credit in high school and to progress to the next level of a course, students must have taken the course in high school in order to earn credit and be placed in the next level.

Guidelines for Enrolling in Advanced, Honors and AP Classes:

1) Students must successfully complete the previous course or prerequisite as needed and have a history of excellent attendance and homework completion.
2) Student must obtain a teacher recommendation for the course and attend an informational meeting about the class if necessary.
3) Student will then meet with their counselor to review course load. We do not recommend students take more than three advanced courses per semester, including community college courses.
4) On the back of the course selection sheet are statements regarding academic honesty and integrity. Students are expected to adhere to the honor code in all courses.
5) Note about weighted courses: weighted courses, such as AP Human Geography or Honors Chemistry or any community college class if taken during 9th grade or the summer after 9th grade will be weighted
only in the cumulative GPA; the weighting does not occur in the “college prep” GPA, which is derived from grades 10 - 12.

6) Each college will determine the score requirement to accord college credit for AP courses taken in high school. Scores of 1 or 2 are not eligible for credit from any post-secondary institution.

Courses Taken Outside of Dublin High School

All classes must be pre-approved by the student’s counselor before enrollment. No credit will be given for any course taken outside of Dublin High School without prior high school counselor approval. This includes DPIE, ATDP (Academic Talent Development Program), Tzu Chi Academy, Tamil Academy and community college classes. Only these programs are approved for outside courses. In order to earn credit on the student’s high school transcript, an official transcript in a sealed envelope must be turn in to the Counseling Office and verified by the student’s counselor after the student has finished their elective course. This should be done immediately after course completion.

Community College Classes

-Students may take classes at any community college for enrichment purposes after they have completed their freshman year with at least a 2.0 GPA. These classes are for remediation of a failing grade and not for acceleration, and you may not take classes required for high school graduation, with the exception of the Visual/Performing Arts requirement.

-Classes must be CSU/UC transferable courses and will earn elective credit only. The two exceptions are if you are taking a world language that we do not offer (i.e., Italian) or if you are taking a class to fulfill the Visual/Performing Arts requirement for 4-year college admission. To determine if a course meets the Visual/Performing Arts requirement, check on www.ucop.edu/doorways or on www.assist.org and type in the name of the community college. These courses should be listed under the “f” area to qualify as Visual/Performing Arts. Courses must be 3 semester credits or 4.5 quarter credits to equate to 10 high school credits.

-Students interested in taking theses classes must meet with their counselor to get pre-approval using the college’s concurrent enrollment form.

-After completing the class, students must bring in a copy of the college transcript to the Counseling Office if they wish to have the grade posted on their high school transcript. All grades are weighted if they are a C or higher, and students receive 3.33 high school credits for every 1 college credit (3 college credits = 10 high school credits). Please note that grades of D or F are posted on the high school transcript if this is the grade that the student earns, as students are expected to report ALL courses and grades taken in high school, including outside courses.

-Note about weighted courses: weighted courses, such as AP Human Geography or Honors Chemistry or any community college class if taken during 9th grade or the summer after 9th grade will be weighted only in the cumulative GPA; the weighting does not occur in the “college prep” GPA, which is derived from grades 10 - 12.

Online Classes
Online classes are for remediation purposes only. Students must take the class through an accredited school that has been approved by the UC system and is listed on the UC A-G Course Management Portal. The exception is if a student is taking an online community college course for elective credit that was pre-approved by the student’s high school counselor.

---

**HIGH SCHOOL GRADUATION REQUIREMENTS/STANDARDS OF PROFICIENCY**

Students shall receive diplomas of graduation from Dublin High School upon completing the required course of study and meeting the standard of proficiency established by the District. Students must complete at least 230 credits in a six-period instructional day over a four-year period. The minimum requirements for graduation from Dublin High School shall be:

- **English** - 40 credits
- **Mathematics** - 30 credits
  (Must include Algebra and Geometry and one other math course)
- **Science** - 30 credits
  (Must include Biology, any Physics class (Class of 2021 and beyond), and Chemistry or Earth Science)
- **Social Science** - 30 credits
  (World History, US History, and Civics/Economics)
- **Physical Education** - 20 credits (Freshman PE is required)
- **Health** - 5 credits
- **World Language** - 20 credits
  (May include one year of middle school and one year of high school - no high school credit is given for a world language taken in middle school, but it validates first year world language)
- **Visual/Performing Arts or Applied Arts** - 10 credits
- **Electives** - 45 credits

**Total 230 credits**
Four-Year Plan and College Requirements

Community College Requirement
California residents are eligible to apply for admission to a community college if they are high school graduates, or if they are over 18 years of age and not a high school graduate, they may be admitted on probation. If you are interested in completing the Transfer Program in a community college to a university, we recommend that you follow a 4-year college plan, including maintaining minimum grades of “C” in all college preparatory courses.

CALIFORNIA STATE UNIVERSITY AND THE UNIVERSITY OF CALIFORNIA
ADMISSION REQUIREMENTS

Subject Requirement
You must complete specific high school subjects with at least a “C” in each semester of each course. To see a list of which Dublin High School courses have been approved by the University of California, refer to the following website: www.ucop.edu/doorways.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits Required</th>
<th>Credits Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a- History/Social Science</strong></td>
<td>2 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two years of history/social science, including one year of world history, cultures and geography; and one year of U.S. history or one-half year of U.S. history and one-half year of civics or American government.</td>
<td></td>
</tr>
<tr>
<td><strong>b- English</strong></td>
<td>4 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Four years of college-preparatory English that include frequent and regular writing, and reading of classic and modern literature. No more than one year of ESL-type courses can be used to meet this requirement.</td>
<td></td>
</tr>
<tr>
<td><strong>c- Mathematics</strong></td>
<td>3 years</td>
<td>4 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three years of college-preparatory mathematics that include the topics covered in elementary and advanced algebra and two- and three-dimensional geometry. Approved integrated math courses may be used to fulfill part or all of this requirement, as may math courses taken in the seventh and eighth grades that your high school accepts as equivalent to its own math courses.</td>
<td></td>
</tr>
<tr>
<td><strong>d- Laboratory Science</strong></td>
<td>2 years</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two years of laboratory science providing fundamental knowledge in two of these three foundational subjects: biology, chemistry and physics. Advanced laboratory science classes that have biology, chemistry or physics as prerequisites and offer substantial additional material may be used to fulfill this requirement. The final two years of an approved three-year integrated science program may be used to fulfill this requirement.</td>
<td></td>
</tr>
<tr>
<td><strong>e- Language other than English</strong></td>
<td>2 years</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two years of the same language other than English. Courses should emphasize speaking and understanding, and include instruction in grammar, vocabulary, reading, composition and culture. Courses in languages other than English taken in the seventh and eighth grades may be used to fulfill part of this requirement if your high school accepts them as equivalent to its own courses.</td>
<td></td>
</tr>
<tr>
<td><strong>f- Visual and Performing Arts (VPA)</strong></td>
<td>1 year</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A single year-long approved arts course from a single VPA discipline: dance, drama/theater, music or visual art.</td>
<td></td>
</tr>
</tbody>
</table>
g- College Preparatory Electives – 1 year required
One year (two semesters), in addition to those required in "a-f" above, chosen from the following areas: visual and performing arts (non-introductory level courses), history, social science, English, advanced mathematics, laboratory science and language other than English (a third year in the language used for the "e" requirement or two years of another language).

University of California (UC) Eligibility Requirements:

The University of California utilizes a process, “Comprehensive Review”, which consists of more than a dozen academic and personal factors that are considered in the evaluation process. Admission is offered to students who receive the highest rankings.

Factors the UC System considers in order of importance:

* Academic grade point average in all completed "a-g" courses, including additional points for completed UC-certified honors or Advanced Placement courses.

* Scores on the ACT With Writing or SAT Reasoning Test with Essary. SAT Subject Tests are optional.

* Number of, content of and performance in academic courses beyond the minimum "a-g" requirements.

* Number of and performance in UC-approved honors and Advanced Placement courses.

* Identification by UC as being ranked in the top 9 percent of their high school class at the end of junior year ("eligible in the local context," or ELC).

* Quality of a student’s senior-year program, as measured by the type and number of academic courses in progress or planned.

* Quality of their academic performance relative to the educational opportunities available in their school.

* Outstanding performance in one or more academic subject areas.

* Outstanding work in one or more special projects in any academic field of study.

* Recent, marked improvement in academic performance, as demonstrated by academic GPA and the quality of coursework completed or in progress.

* Special talents, achievements and awards in a particular field, such as visual and performing arts, communication or athletic endeavors; special skills, such as demonstrated written and oral proficiency in other languages; special interests, such as intensive study and exploration of other cultures; experiences that demonstrate unusual promise for leadership, such as significant community service or significant participation in student government; or other significant experiences or achievements that demonstrate the student’s promise for contributing to the intellectual vitality of a campus.
*Completion of special projects undertaken in the context of a student’s high school curriculum or in conjunction with special school events, projects or programs.

*Academic accomplishments in light of a student’s life experiences and special circumstances.

*Location of a student’s secondary school and residence.

**California State University (CSU) Requirements:**

The grades you earn in high school are an important factor in CSU admission decisions. Your high school grade point average is calculated using your grades in all your college preparatory “a-g” classes completed after the 9th grade.

Test scores are required unless you have a grade point average above 3.0 and are a resident of California. The CSU uses a calculation called an eligibility index that combines your high school grade point average with the score you either earn on the SAT or ACT tests. Even if you have a GPA above 3.0, it is useful to take either an SAT Reasoning Test or ACT as the score may indicate if you do not need to take English and math placement tests after you are admitted and before you enroll at the CSU. If you have your high school GPA and the results of your SAT or ACT test, then you can calculate your eligibility index. From there you can quickly see whether you meet the minimum admission standards. Remember, some campuses have higher standards for particular majors or those students who live outside the local campus area.

**GRADING SYSTEM**

Dublin High School issues letter grades for all courses. Pass/Fail is not an option. Pluses and minuses are not weighted.

<table>
<thead>
<tr>
<th>Grading System</th>
<th>Grade Points</th>
<th>Weighted (AP and Honors Courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = Excellent</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B = Good</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>C = Average</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>D = Passing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>F = Failure</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Following is a SAMPLE “Four-year Plan” meeting the minimum requirements for University of California* and California State University:

<table>
<thead>
<tr>
<th>9th Grade Courses (Core Program)</th>
<th>10th Grade Courses (Core Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall semester</td>
<td>Spring semester</td>
</tr>
<tr>
<td>1) English 1</td>
<td>1) English 1</td>
</tr>
<tr>
<td>2) Algebra 1</td>
<td>2) Algebra 1</td>
</tr>
<tr>
<td>4) Freshman PE</td>
<td>4) Freshman PE</td>
</tr>
<tr>
<td>5) Biology</td>
<td>5) Biology</td>
</tr>
<tr>
<td>7) Health 9 and Freshmen Seminar</td>
<td>7) Health 9 and Freshmen Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11th Grade Courses</th>
<th>12th Grade Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall semester</td>
<td>Spring semester</td>
</tr>
<tr>
<td>1) English 3♦</td>
<td>1) English 3♦</td>
</tr>
<tr>
<td>2) U.S. History♦</td>
<td>2) U.S. History♦</td>
</tr>
<tr>
<td>5) Chemistry♦ or Earth Science</td>
<td>5) Chemistry♦ or Earth Science</td>
</tr>
<tr>
<td>6) Elective</td>
<td>6) Elective</td>
</tr>
</tbody>
</table>

* U.C. recommends exceeding minimum entrance requirements. ♦ Advanced/Honors classes are encouraged if eligible. ♣ 4 years of Math recommended.
**What is Your Four Year Plan?**

*Note: Counselors work with all 9th grade students to complete four-year plans prior to spring scheduling season.*

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Student Courses</th>
<th>Grade</th>
<th>Units</th>
<th>Career Information and Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td></td>
<td></td>
<td></td>
<td>Career</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td></td>
<td>Goal/Major:</td>
</tr>
<tr>
<td>Biology/Bio w/Research</td>
<td></td>
<td></td>
<td></td>
<td>Supporting Activities:</td>
</tr>
<tr>
<td>Freshman PE</td>
<td></td>
<td></td>
<td></td>
<td>(9-12)</td>
</tr>
<tr>
<td>World Lang.</td>
<td></td>
<td></td>
<td></td>
<td>Total Credits:</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman Seminar and Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer School:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English 2</td>
<td></td>
<td></td>
<td></td>
<td>Career</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td></td>
<td>Goal/Major:</td>
</tr>
<tr>
<td>World History</td>
<td></td>
<td></td>
<td></td>
<td>PSAT 10</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td>Pre-ACT</td>
</tr>
<tr>
<td>PE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective/W Lang.</td>
<td></td>
<td></td>
<td></td>
<td>Total Credits:</td>
</tr>
<tr>
<td>Summer School:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English 3</td>
<td></td>
<td></td>
<td></td>
<td>Career</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td></td>
<td>Goal/Major:</td>
</tr>
<tr>
<td>U.S. History</td>
<td></td>
<td></td>
<td></td>
<td>PSAT 11</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td>SAT</td>
</tr>
<tr>
<td>PE/Elective/W Lang</td>
<td></td>
<td></td>
<td></td>
<td>SAT II</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>ACT</td>
</tr>
<tr>
<td>Summer School:</td>
<td></td>
<td></td>
<td></td>
<td>Total Credits:</td>
</tr>
<tr>
<td>English 4</td>
<td></td>
<td></td>
<td></td>
<td>Career</td>
</tr>
<tr>
<td>Civics/Econ.</td>
<td></td>
<td></td>
<td></td>
<td>Goal/Major:</td>
</tr>
<tr>
<td>Math-(highly recommended)</td>
<td></td>
<td></td>
<td></td>
<td>SAT</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
<td>SAT II</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Credits:</td>
</tr>
</tbody>
</table>
Dublin High School Career Pathways

A career pathway is a series of course offerings within an industry sector which provides students with a variety of learning opportunities to develop knowledge and skills in the context of a career. The course offerings begin in middle school with opportunities to develop career awareness such as the Career Education class in the 6th grade elective wheel. It expands in high school with career exploration and hands-on, skill application classes such as those offered through the Tri-Valley Regional Occupational Program (ROP), as well as internship and job shadowing experiences. All pathways conclude with some type of post-secondary training/education, and most career pathways end with either a two or four year college degree. DHS currently has thirteen career pathways:

- Video and Film Production
- Digital Arts
- Digital Design
- Performing Arts
- Fine Arts
- Fashion and Interior Design
- Biotechnology
- Patient Care
- Mental and Behavioral Health
- Culinary Arts
- Software and Systems Development
- Engineering Design
- Public Safety

For more information on career pathways please see [www.laspositascollege.edu/tec](http://www.laspositascollege.edu/tec)
Dublin Unified School District
*Arts, Media and Entertainment Industry Sector*

**Video/Film Production Pathway**

Students must complete all high school graduation requirements along with the following classes:

- Video Production 1
- Video Production 2 and 3
- Film as Literature/Creative Writing
- Production Management
  *(Obtain certification in Pro Tools)*

DVC or Ohlone College -
A.A. Broadcasting - TV, Radio, Video, Film

SJSU or SFSU -
B.A. Radio, Television, Film

**Careers Requiring Less than a Baccalaureate Degree:**
- Theatrical Technician
- Production Assistant
- Audio Production

**Careers Requiring a Baccalaureate Degree:**
- Producer/Director
- Videographer
- Film/Video Editor
Dublin Unified School District
Arts, Media and Entertainment Industry Sector

Digital Arts Pathway

Students must complete all high school graduation requirements along with the following classes:

- Drawing or Ceramics

ROP Animation I
(Credit by Exam at Ohlone MM121-B and at Cogswell College DAA106)

ROP Video Game Art and Design
(Credit by Exam at Ohlone MM121-A and at Cogswell College DAA240)

Las Positas College - A.A. in Visual Communications

B.A.-Cogswell College, Expressions, SF Art Institute

Careers Requiring Less than a Baccalaureate Degree:
- 2D/3D Animator
- Production Artist
- Website Designer

Careers Requiring a Baccalaureate Degree:
- Computer Game Designer
- Electronic Simulation Consultant
- Technical Writer
Dublin Unified School District
Arts, Media and Entertainment Industry Sector

*Digital Design Career Pathway*

Students must complete all high school graduation requirements along with the following classes:

- Drawing or 2D Design
- Intermediate Painting and Printmaking
  Honors Artist Portfolio

Las Positas College-
A.A. Visual Communications or Photography

CSUEB-
B.A. Photography or Graphic Design

**Careers Requiring Less than a Baccalaureate Degree:**
- Junior Designer
- Graphic Artist
- Photographer

**Careers Requiring a Baccalaureate Degree:**
- Web Page Designer
- Architect
- Graphic Designer
Dublin Unified School District
Arts, Media and Entertainment Industry Sector

Performing Arts Career Pathway

Students must complete all high school graduation requirements along with the following classes:

Drama 1, Choir, Show Choir, Musical Theater, Orchestra, Advanced Band, Jazz Band, Dance 1

Drama 2
Advanced Concert Choir
Dance 2

Drama 3
Chamber Vocal Ensemble
AP Music Theory
Playwriting/Dramaturgy
Dance 3

Las Positas College-
A.A. in Dance, Theater Arts, or Music

CSUEB-
B.A. Music, Theater Arts, or Theater Education

Careers Requiring a Baccalaureate Degree:
High School Performing Arts Teacher
Music Conductor
Director/Producer
Dublin Unified School District
Arts, Media and Entertainment Industry Sector

Fine Arts Career Pathway

Students must complete all high school graduation requirements along with the following classes:

- Drawing
- Two Dimensional Design
- Sculpture and Ceramics

Intermediate Painting and Printmaking

Advanced Placement Studio Art classes

Las Positas College - A.A. Art
CSUEB - B.A. Fine Arts
SF Academy of Art University - B.A. Art

Careers Requiring Less than a Baccalaureate Degree:
- Calligrapher
- Drafter
- Fashion Illustrator
- Papermaker

Careers Requiring a Baccalaureate Degree:
- Painter
- Scenic Artist
- Art Critic
- Fine Arts Teacher
Dublin Unified School District
Fashion and Interior Design Industry Sector

**Fashion and Interior Design Career Pathway**

Students must complete all high school graduation requirements along with the following classes:

- Fashion and Interior Design
- Two Dimensional Design or Drawing

Introduction to Engineering Design
Intermediate Painting and Printmaking
**ROP Marketing**
*(Credit by Exam at Chabot BUS 36, BUS 95, ENTR 1)*

**ROP Economics of Business Ownership**
*(Credit by Exam at Chabot BUS 36, BUS 95, ENTR 1)*

Las Positas College- A.S. Interior Design
FIDM- A.A. Fashion Design and A.A. Interior Design

**Careers Requiring Less than a Baccalaureate Degree:**
Interior Designer, Fashion Designer
Costume Designer
Apparel Manufacturer

**Careers Requiring a Baccalaureate Degree:**
Apparel Business Owner
Management Level Owner
Fashion Marketer
Dublin Unified School District
Health Science and Medical Technology Industry Sector

**Biotechnology Career Pathway**

Students must complete all high school graduation requirements along with the following classes:

- Biotechnology
- Principles of Biomedical Sciences

TVROP Intro to Health Careers
*(Credit by Exam at LPC HSCI 55)*

TVROP Medical Occupations
*(Credit by Exam at Chico HLTH 55, HLTH 50)*

Ohlone College- A.S. Biotechnology

CSUEB- Certificate in Biotechnology

**Careers Requiring Less than a Baccalaureate Degree:**
- Medical Lab Technician
- Quality Control Analyst
- Validation Technician
- Medical Information Tech.

**Careers Requiring a Baccalaureate Degree:**
- Genetics Researcher
- Biomedical Engineer
- Biochemist
- Microbiologist
Dublin Unified School District
Health Science Industry Sector

**Patient Care Career Pathway**

Students must complete all high school graduation requirements along with the following classes:


- **TVROP Intro to Health Careers**
  *(Credit by Exam at LPC HSCI 55)*

- **TVROP Medical Occupations**
  *(Credit by Exam at Chabot HLTH 50, 55)*

- **TVROP Nursing Careers**
  *(Credit by Exam at Chabot HLTH 70A)*

- **TVROP Sports Medicine I and II**
  *(Credit by Exam at Chabot I-KIN 2, BUS 95, 96 and II-WEXP 95, 96)*

**Las Positas College-**
A.A. Surgical Technician or Nursing Assistant or Health Science

**CSUEB-** B.S. Nursing or B.S. Health Science

**Careers Requiring Less than a Baccalaureate Degree:**
Surgical Technical, Health Aide, EMT, Respiratory Therapist

**Careers Requiring a Baccalaureate Degree:**
Biological Engineer, Anesthesiologist, Operating Room Nurse, Surgeon
Dublin Unified School District
Health Science and Medical Technology

Mental and Behavioral Health Career Pathway

Students must complete all high school graduation requirements along with the following classes:

- Health, Child Development
  - TVROP Intro to Health Careers
    (Credit by Exam at LPC HSCI 55)

  - AP Psychology
  - TVROP Medical Occupations
    (Credit by Exam at Chabot HLTH 55, HLTH 50)
  - Developmental Psychology of Children I and II
    (Credit by Exam at LPC I- ECD 64, 95, 96 and II-ECD 50, 54)

Las Positas College - Certificate in Human Services

CSUEB - B.S. Health Sciences, B.A. Sociology and Social Services

Careers Requiring Less than a Baccalaureate Degree:
- Child Care Worker
- Drug and Alcohol Counselor
- Community Outreach Worker
- Gerontology Aide

Careers Requiring a Baccalaureate Degree:
- Hospital Administrator
- Social Worker
- Physical Therapist
- Psychologist
Dublin Unified School District
Hospitality, Tourism and Recreation Industry Sector

**Culinary Arts Academy**

Students must complete all high school graduation requirements along with the following classes:

- Culinary Arts
- International Cuisine
- Baking and Pastry
  *(Obtain Food Handlers Certification from DVC)*

Catering, Advanced Catering, Home Ec. 101
*(Articulated with DVC CULN 105, 153 and
  Johnson & Wales and the Culinary Institute of America)*

**ROP Economics of Business Ownership**
*(Credit by Exam at Chabot BUS 36, BUS 95, ENTR 1)*

Diablo Valley College-
Certificate or AS in Culinary Arts or Baking & Pastry

CSUEB- B.S. Hospitality and Tourism

SJSU- B.S. Nutritional Science

**Careers Requiring Less than a Baccalaureate Degree:**
- Pastry Chef
- Caterer
- Restaurant Chef
- Food Service Worker

**Careers Requiring a Baccalaureate Degree:**
- Dietician
- Restaurant Owner
- Culinary Arts Teacher
- Hotel Manager
Software and Systems Development Career Pathway

Students must complete all high school graduation requirements along with the following classes:

- Introduction to Engineering Design
  *(Obtain CAD Certification)*
- Computer Science Principles
- Honors Principles of Engineering
  *(Articulated with LPC ENGIN 10)*

- Cybersecurity
- AP Computer Science Applications
- Honors Digital Electronics
  *(Articulated with DVC ELTRN 116)*

Las Positas College - A.S. Computer Science
A.A. CIS and Computer Networking Technology

CSUEB and SJSU - B.S. Computer Engineering

Careers Requiring Less than a Baccalaureate Degree:
- Data Entry
- Computer Network Technician
- Administrative Assistant

Careers Requiring a Baccalaureate Degree:
- System Analyst
- Computer Programmer
- Software Developer
- Computer Engineer
Dublin Unified School District
Information and Communication Technologies Industry Sector

**Computer Networking Career Pathway**

Students must complete all high school graduation requirements along with the following classes:

- **ROP Cybersecurity/ICT Essentials**
  (Credit by Exam at LPC CNT 51)

- **ROP CCNA 1 and ROP CCNA 2**
  (Credit by Exam at LPC CNT 62A, 62B)

*These three courses prepare you for the CISCO CCNA and A+ Certifications*

Las Positas College- A.S. Computer Science
A.A. CIS and Computer Networking Technology

CSUEB and SJSU - B.S. Computer Engineering

**Careers Requiring Less than a Baccalaureate Degree:**
- Data Entry
- Computer Network Technician
- Administrative Assistant

**Careers Requiring a Baccalaureate Degree:**
- System Analyst
- Computer Programmer
- Software Developer
- Computer Engineer
Dublin Unified School District
Engineering and Architecture Industry Sector

**Engineering Technology Career Pathway**

Students must complete all high school graduation requirements along with the following classes:

- Introduction to Engineering Design *(Obtain CAD Certification)*
- Honors Principles of Engineering *(Articulated with LPC ENGIN 10)*

- Honors Digital Electronics *(Articulated with DVC ELTRN 116)*
  - TVROP Computer Integrated Manufacturing
  - TVROP Civil Engineering and Architecture

Las Positas College - Engineering Transfer Program
CSUEB - B.S. Industrial Engineering
SJSU - School of Engineering
UC Berkeley - School of Engineering

**Careers Requiring Less than a Baccalaureate Degree:**
- Auto CAD Drafter
- Industrial Machinery Mechanic
- Industrial Engineering Technician
- Technical Writer

**Careers Requiring a Baccalaureate Degree:**
- Civil Engineer
- Chemical Engineer
- Mechanical Engineer
- Electrical Engineer
Dublin Unified School District
Public Services Industry Sector

Public Safety Career Pathway

Students must complete all high school graduation requirements along with the following classes:

Law and Society, Speech and Debate, Forensic Science, AP Psychology

- TVROP Introduction to Criminal Justice
  (Credit by Exam at LPC AJ 50, AJ 61)

- TVROP Criminal Justice Academy at Las Positas
  (Credit by Exam at LPC AJ 54, AJ 60, AJ 68, AJ 70, KINFSC 1-4)

- AP Psychology

- Emergency Medical Responder
  (Credit by Exam at LPC EMS 30, 61)

Las Positas College- A.A. Administration of Justice

LPC - Certificate in Human Services and Drug/Alcohol Counseling

CSUEB- B.A. Criminal Justice Administration

Careers Requiring Less than a Baccalaureate Degree:
Police Officer, Security Personnel, Drug and Alcohol Counselor, Military Service

Careers Requiring a Baccalaureate Degree:
Coroner, Police Detective, Federal FBI Agent, Fire Captain
Dublin High School’s Health Science and Biomedical Technology Academy

The Academy will be centered around Project Lead the Way’s Biomedical Sciences Program, a well-developed and highly respected curriculum designed to prepare students for a post-secondary education and career in the biomedical sciences. This program consists of a sequence of three required courses, with an optional fourth capstone course. All courses are aligned to the Common Core and Next Generation Science Standards, and will serve as additional courses taken alongside traditional science classes. These classes will connect concepts from the various science disciplines to the field of medicine, while allowing hands-on, problem-solving and project-based learning to deepen student understanding of scientific principles and human health. Advanced technology will play a central role in creating real-world learning experiences, through use of 1-to-1 laptops, Vernier probeware, and various biotechnology equipment. Students will be asked to play the role of biomedical professionals, as they investigate cases and then explore the prevention, diagnosis and treatment of the diseases involved. Collaboratively, they will design innovative solutions to common health challenges by researching cutting-edge science. Students and teachers will work as a team across disciplines: English Language Arts, Math, History, and PE.

Through our biomedical pathway, students will develop a deep and practical understanding of biomedical science. In addition, they will acquire invaluable skills including strong communication, collaboration, organization, critical-thinking, and problem-solving that will benefit them in any post-secondary field. Students will be exposed to numerous careers in biomedical science, through classroom discussion and through interaction with the community. We believe we will graduate students capable of filling the many roles of health science professionals and assistants, and more than capable of post-secondary academic work.

Principles of Biomedical Science is the Introductory Course: Biology meets the real world! This course allows students to apply their knowledge of physiology and genetics as they solve the mystery of a fictional woman’s death, beginning with an introduction to DNA, molecular biology techniques, and bioethics. As the units progress throughout the course, students are given more autopsy finding results. Each unit centers on a disease that the victim suffered from at some point, and students will explore medical preventions that might have prolonged her life. The culminating unit leads the students to discern which of these diseases was the actual cause of the woman’s death, and to realize the interconnections of the various body systems. The course is hands-on, project-based and utilizes technology as a central learning component, and will be taken concurrently with Biology with Research.
**Dublin High School’s Engineering and Design Academy**

The PLTW Engineering and Design Academy is a specialized three-year learning program that provides students with a combination of the foundational knowledge needed to succeed in a post-secondary engineering program and career exploration opportunities. All engineering curriculum is project-based with hands-on activities that combine math and science skills with real-world problems. As part of an Academy cohort, students will share common classes with other Academy students and see integrated use of technology within these classes. Though our engineering classes are open electives, our Academy cohort students earn priority into these classes and additional opportunities, as well as earn an Engineering Certificate upon graduation.

To earn the Engineering Certificate, students must successfully complete two of the three foundation courses:

- *Introduction to Engineering Design*
- *Computer Science Principles*
- *Honors Principles of Engineering (required)*

Students must then successfully complete one specialization course:

- *Honors Digital Electronics*
- *AP Computer Science Applications*
- *Cybersecurity*
- *Biotechnology*
- *AP Environmental Science*
- *ROP Computer Integrated Manufacturing*
- *ROP Civil Engineering and Architecture*

Additionally, students must complete the DEDA Mentoring Program during their junior year, and submit a final online portfolio of their work during their senior year.

Students who complete the above requirements will earn a PLTW DEDA certificate of completion and a special distinction on their transcript upon graduation. Students will also receive a special engineering cord to wear during commencement.
Dublin High School’s Culinary Academy

The Culinary Academy is a CTE, California Technical Program, that specializes in careers in the Hospitality and Tourism Industry. These careers could include but are not limited to Restaurant Developer/Owner or Manager, Executive Chef, Dietitian, Pastry Chef and Sommelier. All students enrolled in our entry level classes receive training on basic culinary essentials such as safety and sanitation, knife skills, cooking methods, the science of baking and so much more.

Once a student advances into our Catering or Advanced Catering courses they become eligible to graduate as part of the Culinary Academy. These fast paced courses are production-based classes where the students run the Gaels Catering Company. The company offers catering services to the Tri Valley area that helps sustain our culinary programs. Each year the academy awards scholarships to the graduating seniors, funds field trips, purchases equipment and provides donations to various local organizations.

All of our culinary courses fulfill the Dublin High School Applied Arts requirement and fulfill the CSU/UC “g” elective requirement. In addition, once a student completes Catering or Advanced Catering they will earn up to 2.5 college units through our articulation with Diablo Valley College. These units may be used at DVC to bypass two of the entry level culinary courses or used as transfer credit to another college. Additionally we are articulated with two of the country’s premier culinary colleges, Johnson and Wales and California Institute of America. Students will earn the right to bypass additional courses and some school entry requirements when they graduate as part of our Dublin High School Culinary Academy. Many of our students go on to earn their B.A., B.S. or culinary arts credential.

To graduate as a member of the Academy, students must complete one of the following courses and obtain a recommendation to the advanced level courses:

- Baking and Pastry
- Culinary I/II
- International Cuisine
- Consumer and Family Student Assistant
- Home Economics Student Assistant

Students must then complete at least one of these additional courses for a minimum of six semesters of culinary courses:

- Catering
- Advanced Catering
Important Websites

www.californiacolleges.edu
-explore all post-secondary schools in California including all 2 and 4 year colleges in the state, also includes financial aid and career assessment tools and information.

www.collegedata.com
-Calculate chances of getting into specific colleges using grades and test scores, search schools

https://www2.calstate.edu/apply
-California State University website, explore campuses, online application, career and college major exploration sites, financial aid calculator.

www.ucop.edu
-University of California website, explore campuses, on-line application and admission planning tools. Also, for UC Personal Statement assistance, use www.ucgateways.org

wue.wiche.edu
-Western Interstate Commission for Higher Education-lets residents of Western States enroll in 2 or 4 year colleges outside their own state at a reduced fee

www.collegeboard.com
-official SAT and AP Test website, register for the SAT, sample tests, explore colleges

www.actstudent.org
-official ACT website, register for the ACT, sample tests, explore careers and colleges

www.mymajors.com
-plug in your high school experiences and personal values into a simple quiz and get matched with five recommended college majors with career information and links

www.fastweb.com
-college and scholarship searches, information galore for parents and students!

www.fafsa.ed.gov
-complete PIN information and FAFSA financial aid form online, also has links to other financial assistance websites.

www.volunteerinfo.org and www.helpnow.org
-Bay Area volunteer/community service information website

www.how-to-study.com
-free study skills, test taking strategies and homework tips

www.testatkingtips.com/test and www.studygs.net
-tips on taking different types of tests, how to prepare for tests, and how parents can help their students prepare for tests and overcome test anxiety

VISUAL ARTS
**DRAWING 1**

Grade Level: 9-12  
Length: 1 year  
Prerequisite: None  
Graduation: Fulfills Fine Arts requirement  
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better

In this hands-on course, students discover the laws of perspective, learn how to judge proportions and create an illusion of three-dimensional space with realistic shading. Students also learn to draw the human portrait, and to mix colors and use them expressively. This is an entry level course, no prior experience is necessary, yet the advanced artists will also be challenged to learn new skills and techniques. Each sequential step of the curriculum is designed to build confidence and lay the foundation for self-expression. Knowing how to draw is no less than learning how to see and that is the fundamental knowledge underlying all the visual arts. This is a great course to prepare students for future studies in fine and applied arts, including electronic media. Homework involves weekly drawing in a sketchbook, with a minimum of one hour per week. Cultural connections will be made through the study of art history. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**SCULPTURE & CERAMICS**

Grade Level: 9-12  
Length: 1 year  
Prerequisite: None  
Graduation: Fulfills Fine Arts requirement  
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better

Take matter into your own hands... learn how to make pottery and sculpture from earth’s clay! Discover the magic of fire, as it turns mud into stone with temperatures in excess of 2000 degrees Fahrenheit (think molten lava!). No prior experience in art or ceramics is required. It's a great preparatory class for the ROP Video Game Art & Design class. Demonstrations and slide shows will be an ongoing part of a curriculum presentation which is designed to build a skill base and confidence level that will enable students to explore their own creative interests and potentials. This course teaches students a functional knowledge and practical mastery of the complex material called ceramics, and teaches how to integrate this understanding with the creative potential that is not only latent in it, but in all of us as well. Homework for the class consists of occasional reflective free-writes based on in-class presentations regarding global arts questions. This course may be repeated for elective credit. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**TWO DIMENSIONAL DESIGN**

Grade Level: 9-12  
Length: 1 year  
Prerequisite: None  
Graduation: Fulfills Fine Arts requirement  
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” area requirement with a grade of “C” or better

Want to start your own brand? Get people to come to an event? Persuade others to listen to your ideas? Take 2D Design and create logos, posters, advertising, and branding in this hands-on course. Explore a variety of media such as painting, printmaking, pen and ink, calligraphy, graphite, and collage. Discover the basic language of art and design while expressing your creativity. Presentations on the history of art and design supplement course instruction. This course is a perfect first step for the beginning artist or designer interested in Animation, Visual Communication, or AP Studio Art while still providing new challenges for the experienced artist. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
INTERMEDIATE PAINTING AND PRINTMAKING
Grade Level: 9 -12
Length: 1 year
Prerequisite: Completion of Drawing 1 or 2 Dimensional Design or approval of instructor with portfolio review
Graduation: Fulfills Fine Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” area requirement with a grade of “C” or better

Painting and Printmaking is intended for students who have had significant instruction and practice in various two dimensional media. Students will learn new skills and techniques with watercolor, tempera and acrylic paints, mixed media, block printing and monotypes. Students will have diverse opportunities in class to work from observation and from their own resources. Traditional and contemporary styles will be explored with the still life, portrait and landscape. Homework will include practice and review of drawing skills, as well as research and brainstorming for class projects. Students will also develop a critical vocabulary for defending and critiquing their work. Finally, they will create work for public display in art galleries, contests, and their own portfolios. Students will learn about famous artists from diverse cultures to supplement and support class projects. This class provides an excellent opportunity for students wishing to prepare for Advanced Placement Studio Art. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

AP STUDIO ART (AP 2-D ART AND DESIGN, AP 3-D ART AND DESIGN OR AP DRAWING)
Grade Level: 10-12
Length: 1 year
Prerequisite: Successful completion of previous art-making experience and teacher approval
Graduation: Fine Arts Requirement/ Elective credit
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” area requirement with a grade of “C” or better, weighted grade

This rigorous class prepares high school students to produce art at the college level. Students will create artwork for either the AP 2D Design portfolio (including photography, digital art, and graphic design) or the AP Drawing portfolio (including traditional drawing, watercolor, and acrylic techniques). Successful portfolios will earn college credit. Each of these portfolios requires students to create a broad variety of artworks in diverse media as well as pursue a self-generated topic in a focused concentration of related work. Students will produce work both at home and in class which will be critiqued by faculty and their peers. Students can expect to dedicate at least an hour per night to making artwork at home. Students will learn how to take and edit high-quality photographs of their work as well as select and mat their pieces for display. Students will also have opportunities to display their work in gallery shows, online, and for competitions.

VIDEO PRODUCTION I
Grade Level: 9-12
Length: 1 Year
Prerequisite: None
Graduation: Fulfills Fine/Applied Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” area requirement with a grade of “C” or better

Students will learn basic composition and integrating narrative, audio, and visual elements to produce a series of production assignments. During the course of the year students will build skills in the following areas: planning and overall production process, storyboarding, script writing, editing, critique, and animation. Students will be expected to develop a sense of professional behavior and ethics as they learn about intellectual property rights and responsibilities as well as career opportunities. Students will analyze, evaluate and write descriptive responses to all work individually produced in the class as well as evaluate peer work and give feedback. This class will explore the history of motion pictures, both globally and in the United States, while exploring career opportunities and the future of filmmaking. Students will read about, analyze,
discuss, evaluate, and interpret current issues, techniques, styles and materials relating to art and movies. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

VIDEO PRODUCTION II
Grade Level: 9-12
Length: 1 Year
Prerequisite: Successful completion of Video Production I or a student who has published work that is reviewed by instructor
Graduation: Fulfills Fine/Applied Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” area requirement with a grade of “C” or better
Those course builds on the foundation acquired in Video Production I, the introductory course. Students work on more complex projects in the field of video production, enhancing their skills and work in this art medium.
Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

VIDEO PRODUCTION III HONORS
Grade Level: 11-12
Length: 1 year
Prerequisite: Video Production I, Video Production II, approval of instructor
Graduation: Fulfills Fine Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” area requirement with a grade of “C” or better, weighted course (Pending Honors Approval)
This course is designed for the experienced Video Production student who has developed a strong skill set of working in this area. Extended work on projects of a more complex nature as well as increasing proficiency in the field is done in this class.
Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ROP ANIMATION & MOTION GRAPHICS
Grade Level: 11-12
Length: 1 Year/2 hours per day
Prerequisite: None
Graduation: Fulfills Fine Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better
Animation students develop their mastery of the skills required to be a professional digital graphic artist or animator. Animation and Motion Graphics combines theory, such as the 12 Principles of Animation, with the knowledge to expertly navigate and use the various digital design programs. Throughout the year, we will be using Adobe Photoshop for digital editing and pre-production, followed by ToonBoom Harmony for our 2D Animation or Autodesk Maya for our 3D work. Students learn the steps of working through a professional animation workflow, working on our new iMac workstations daily and with access to our assortment of Wacom drawing tablets. Projects from this class are shared through internet media such as YouTube, for purposes of leaving the class with a final portfolio of your work to show to possible employers or college institution. Students may also complete the Autodesk Certified User and Adobe Certified Associate certification exams. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ROP VIDEO GAME ART AND DESIGN
Grade Level: 11-12
Prerequisite: None
Length: 1 year
Graduation: Fulfills Fine Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better
Video Game Art & Design students get hands-on experience working in Autodesk Maya learning the skills to be a 3D
Modeler. Students spend the majority of the year exploring the methods used to develop 3D models for games, including the ability to prepare and generate textures for their models in Adobe Photoshop. The class also touches on game engines, such as Unreal and Unity, as well as 3D sculpture tools Zbrush and Mudbox. While exploring the development of games, students learn about ludology, the theory of gameplay, in order to understand why people play games and their reaction to game mechanics. All students will develop a portfolio of their work, which can be used when seeking internships and/or to gain admission in post-secondary game design programs. Students may also complete the Autodesk Certified User and Adobe Certified Associate certification exams. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**GRAPHIC PUBLICATIONS I (YEARBOOK)**

Grade Level: 9-12  
Length: 1 Year (may be repeated for credit)  
Prerequisite: Applications are available in the spring and selected applicants will be contacted by the adviser for an interview. Teacher recommendation (including Middle School English teacher recommendation for incoming freshmen).  
Graduation: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better  

The Graphic Publications class is a year long class that produces the *Gaela Mor* yearbook. Staff members, selected on the basis of an application and interview with the adviser, must demonstrate a high level of responsibility, maturity, and organization. The class is run like a small business. Student editors generate an overview for the yearbook and delegate assignments under the supervision of the adviser. Students will learn all components of publishing, including interviewing, reporting, copywriting, editing, photography, graphic design, theme development, layout, advertising, distribution, development of leadership skills and the importance of teamwork. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**HONORS ARTIST PORTFOLIO**

Grade Level: 11-12  
Length: 1 Year (may be repeated for credit)  
Prerequisite: Previous art experience/portfolio and approval of instructor  
Graduation: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better, weighted grade with “C” or better  

The Honors Artist Portfolio course is a challenging course that focuses on building a body of work for student’s professional portfolios. Successful students will demonstrate their development of technical skills and application of the elements and principles of art. The class will focus on the strengthening of independent thinking and creativity, the development of personal style and technique, as well as critical thinking skills through problem solving. This course is designed for students who are committed to improving their skills in visual art and are planning to take AP Studio Art and/or pursue art in college and career.  

Coursework will expose students to art through history from international cultures and movements. Students will do written analysis and critique of their own art and other artists, and review respond to a current gallery or museum exhibition. During the class, students will write formal self and group critiques, analysis and statements about artwork. Throughout the school year, Honors Artist Portfolio students will participate in preparing and exhibiting their work publicly. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
PERFORMING ARTS

Performances are an essential component of each course, and attendance is required. Students signing up for performing groups must realize their responsibility in arranging their own schedule so that outside activities do not conflict with performances. Courses in this department meet the Fine Arts requirement.

**DRAMA 1**
Grade Level: 9-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills Fine Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better

This is a beginner level course in the fundamentals of acting. You will establish an understanding of all aspects of the theatre making process including: content vocabulary, acquiring basic skills in an actor’s process, and all of the production jobs in theatre. Through exercises, analysis and improvisations, the student actor will explore their mind, body, and voice as the actor’s primary creative resources when creating a character. Units will include Improvisation, Use of Voice, Pantomime, Scene Study, and Character Analysis. In theatre, as in life, we learn by doing. Be prepared that this is a practical class and you should expect active participation as an essential component of your success in this course. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for performance preparation.

**DRAMA 2**
Grade Level: 9-12
Length: 1 year
Prerequisite: Successful completion of Drama 1 or teacher recommendation
Graduation: Fulfills Fine Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better

This is an intermediate level Theatre Class. In this class you will discover the lineage of drama from the works of the Ancient Greeks and Medieval Drama, to Shakespeare, to Japanese Theatre, and finally Contemporary trends. Within each unit of study there will be elements of theatre making partnered with textual analysis. While you study each era you will also be collaborating in a group on an original piece of theatre that reflects the themes and characteristics of the time period. Along with performance based assessments you will also have some traditional assessments in the form of quizzes and tests. Please be prepared that this is a practical class and you should expect to be actively participating as an essential component of this class. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for performance preparation.

**DRAMA 3**
Grade Level: 10-12
Length: 1 year
Prerequisite: Successful completion of Drama 1 and Drama 2 or Teacher recommendation
Graduation: Fulfills Fine Arts requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement

This is an advanced level acting class; it is modeled after college level courses. In this class you will begin to deepen your connection to characters and your performance skills by exploring the work of influential directors such as Konstantin Stanislavsky, Sanford Meisner, Lee Strasberg (Method Acting), Stella Adler and Anne Bogart to name a few. We will also work on defining what it means to be “in the moment” and what makes a believable and truthful performance through your rehearsal of Monologues, two person scenes, improvisations and group scenes. In Theatre, you are the art that is being
viewed. Please be prepared that this is a practical class and you should expect to be actively participating as an essential component of this class. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for performance preparation.

**DRAMATURGY AND PLAYWRITING**

Grade Level: 9-12  
Length: 1 year  
Prerequisite: None, interest in Drama and/or Creative Writing recommended  
Graduation: Fulfills Fine Arts requirement  
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement (Pending UC Approval)  

Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

Do you find yourself daydreaming, journaling, creating elaborate stories, or do you love dramatic literature and creative writing?! Do you want to read and analyze plays? Then Dramaturgy and Playwriting is for you! In this course you can expect to dissect how stories are structured, how to improve your use of dialogue, how to create dynamic characters, analyze the use of tension and obstacle in plays, and identify the differences between novels, movies, and dramatic literature. You will be investigating Monologues, Fairy Tales, William Shakespeare, and writing original dramas to discuss these topics. We will also read and analyze works such as, but not limited to: Oedipus Rex, Shakespeare, The Seagull, The Importance of Being Earnest, Blythe Spirit, The Crucible, Our Town and a TBD Contemporary Play. Throughout this course each dramaturg will be required to create educational resource guides, technical theatre designs, character breakdowns, and perform a scene from each play of study. An interest in Drama or English is suggested for success in this course.

**DANCE 1**

Grade Level: 9-12  
Length: 1 year course  
Prerequisite: None  
Graduation: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better  

This course is designed as a year-long, introductory course that provides students with a foundation in dance. Students will create, perform, respond and connect in the development of different dance genres. They will begin to develop technical strength through the basic skills of ballet, tap, jazz, folk-ethnic and creative (modern) movement. Elements of dance, history, genre, terminology, critical analysis and performance will be covered. This course may be taken either for Physical Education credit or to fulfill the Visual/Performing Arts requirement. Students will be highly encouraged to participate in the dance concerts at the end of each semester or will be expected to attend and an alternate assessment will be given.  

Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**DANCE 2**

Grade Level: 9-12  
Length: 1 year  
Prerequisite: One or more years of dance experience and audition  
Graduation: Fulfills Fine Arts requirement  
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better  

This course for students with at least one or more years of formal dance training. Its purpose is to increase one’s body awareness and technique while demonstrating dance movement. Through the continued exploration of a variety of dance genres, students will advance their dance vocabulary, deepen their connection between the physical and emotional components of dance and continue to broaden their choreography and technical skills. Students will continue to explore the elements of self-expression through improvisational work and self-choreographed pieces. The students will prepare for
performance opportunities through rehearsal of routines, staging awareness, technical preparation for live audiences in costumed performances. The goal for this course to give students the opportunity to advance on a technical level, create dance pieces as a means of self-expression, evaluate the process and product of that creation and better learn to assess their own progress throughout the course. Students will perform in the semester dance concerts or will be expected to attend and an alternate assessment will be given. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

DANCE 3
Grade Level: 9-12
Length: 1 year
Prerequisite: Two or more years of dance experience and audition is required
Graduation: Fulfills Fine Arts requirement

College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better

Advanced Dance is a class designed for students who have completed Dance Beginning and Intermediate dance who are determined to be prepared for the participation in frequent performances which require a high level of skill. The class is for students who wish to excel in the art of dance through the experience of exposure to advanced techniques. Students will have opportunities to perform student and professionally choreographed works in front of a variety of audiences on our campus and in the community. Students will apply dance techniques previously learned and learn new techniques. The genres of contemporary, ballet, jazz, tap, and cultural/traditional dance forms will be taught, created and learned. While learning these various techniques, students will develop an advanced level of vocabulary and movement that will help them name and define their steps at a professional pace and level in both improvisational work and choreography. Students will have the opportunity to see performances and respond critically through both writing and discussion. Students will apply dance techniques and understanding of the content standards that they have mastered by dancing in a variety of performance settings. The California Performing Arts Standards are interwoven throughout each unit, but each unit has a focus on one or two specific standards. Students will perform in the semester dance concerts or will be expected to attend and an alternate assessment will be given. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
MUSIC

JAZZ ENSEMBLE
Grade Level: 9-12
Length: 1 year
Prerequisite: Teacher approval by audition
Graduation: Fulfills Fine Arts Requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better

This select group of instrumentalists is our premiere ensemble in instrumental music performance. Membership in Jazz Ensemble determined by audition and is available to saxophone, trumpet, trombone, guitar, keyboard, bass and percussion players. This course provides opportunities for the performance of outstanding jazz literature and the study of jazz styles, history, and improvisation. This band performs in numerous concerts throughout the year. The Jazz Ensemble combines with the Wind Ensemble and Symphonic Band to form the Irish Guard Marching Band, which during the fall semester appears at home varsity football games and competes in field show competitions. After school rehearsals and performances are required. Participation in all marching band events, including rehearsals, football games, and competitions is required regardless of choice of instrument. This class meets daily and may be repeated for credit. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

SYMPHONIC BAND
Grade Level: 9-12
Length: 1 year
Prerequisite: High School band director approval or recommendation from middle school band director
Graduation: Fulfills Fine Arts Requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better (Pending UC Approval)

This group of wind and percussion instrumentalists is the intermediate ensemble in wind and percussion music performance and is available to all students who have studied a wind or percussion instrument in middle or elementary school for a minimum of two years. The Symphonic Band curriculum teaches technical, rhythmic, listening, translative, analytical, and performance skills through advanced literature in the band repertoire in a historical and multi-cultural context. This course provides development of the fundamentals in tone production, articulation, music reading and scales. Symphonic Band provides all interested students who play wind and percussion instruments an opportunity to study and perform a variety of music. Performances are a logical outgrowth of the integrated instrumental music curriculum, which may include concerts, festivals, solos, ensembles, recitals and appearances within the community when appropriate. The Symphonic Band combines with the Wind Ensemble and Jazz Bands to form the Irish Guard Marching Band, which during the fall semester appears at home varsity football games and competes in field show competitions. After school rehearsals and performances are required. Participation in all marching band events, including rehearsals, football games, and competitions is required regardless of choice of instrument. This class meets daily and may be repeated for credit. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

WIND ENSEMBLE
Grade Level: 9-12
Length: 1 year
Prerequisite: Audition with band director
Graduation: Fulfills Fine Arts Requirement
College Prep: Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better (Pending A-G Approval)
The Dublin High School Wind Ensemble is the advanced course in wind and percussion music performance. Membership is contingent upon audition and is available only to students who have studied a wind or percussion instrument in middle or elementary school for a minimum of two years. The Wind Ensemble curriculum teaches technical, rhythmic, listening, transitive, analytical, and performance skills through advanced literature in the band repertoire in a historical and multi-cultural context. This course provides development of the fundamentals in tone production, articulation, music reading and scales, as well as an opportunity to study and perform a variety of music. Performances are a logical outgrowth of the integrated instrumental music curriculum, which may include concerts, festivals, solos, ensembles, recitals and appearances within the community when appropriate. The Wind Ensemble combines with the Symphonic and Jazz Bands to form the Irish Guard Marching Band, which during the fall semester appears at home varsity football games and competes in field show competitions. After school rehearsals and performances are required. Participation in all marching band events, including rehearsals, football games, and competitions is required regardless of choice of instrument. This class meets daily and may be repeated for credit. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**ORCHESTRA**

**Grade Level:** 9-12  
**Length:** 1 year  
**Prerequisite:** Two years of musical instrument experience or approval of instructor  
**Graduation:** Fulfills Fine Arts graduation requirement,  
**College Prep:** Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better  

The Dublin High School Orchestra is an advanced strings course. Membership is contingent upon audition and is available only to students who have studied a string instrument in middle or elementary school for a minimum of two years. The Orchestra curriculum teaches technical, rhythmic, listening, transitive, analytical, and performance skills through advanced literature in a historical and multi-cultural context. Performances are a logical outgrowth of the integrated instrumental music curriculum, which may include concerts, festivals, solos, ensembles, recitals and appearances within the community when appropriate. Music literacy is a prerequisite. Orchestra may combine with the wind instrumentalists and percussionists from Wind Ensemble and Symphonic Band to form Full Orchestra. All performances are required. Some after-school or Saturday rehearsals may be necessary, and will be scheduled as far in advance as possible. This class meets daily and may be repeated for credit. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**CONCERT CHOIR**

**Grade Level:** 9-12  
**Course Length:** 1 year  
**Prerequisite:** None  
**Graduation:** Fulfills Fine Arts Requirement  
**College Prep:** Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better  

Concert Choir is an open course offered to students who are interested in beginning singing. This course is designed to increase the vocal skills and performance levels of each student. Students will develop a working knowledge of beginning singing techniques, music theory and music history, and be introduced to the ability to independently rehearse, evaluate and refine and perform their stage performance skills. Students will sing a wide range of literature from various periods such as European Renaissance, Baroque, Classical and Romantic as well as a variety of American genres. i.e. Spirituals, Jazz, Folk and Pop. From the study of these various styles, students will attain enhanced awareness of the history and events surrounding the development of choral literature. Students are required to participate in performances outside the regular school day throughout the academic year. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
## ADVANCED CONCERT CHOIR

- **Grade Level:** 9-12
- **Course Length:** 1 year-10 credits
- **Prerequisite:** Audition or Approval of Director
- **Graduation:** Fulfills Fine Arts Requirement
- **College Prep:** Pending Approval UC/CSU Visual/Performing Arts “f” credit

Advanced Treble Choir is an open course offered to students who qualify for advanced music instruction through audition. Students must show proficiency in reading music, playing an instrument and/or singing with proper choral tone. This course is designed to increase the vocal skills and performance levels of each student by presenting a rigorous repertoire from various historical periods and cultures. Students will sing a wide range of literature from various periods such as European Renaissance, Baroque, Classical and Romantic as well as a variety of American genres, i.e., Spirituals, Jazz, Folk and Pop. From the study of these various styles, students will attain enhanced awareness of the history and events surrounding the development of choral literature.

## CHAMBER VOCAL ENSEMBLE

- **Grade Level:** 10-12
- **Course Length:** 1 year
- **Prerequisite:** Audition or Approval of Director
- **Graduation:** Fulfills Fine Arts Requirement
- **College Prep:** Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better

Chamber Vocal Ensemble is a small mixed voice open course offered to students who qualify for advanced music instruction through audition. Students must show proficiency in reading music, and singing with proper choral tone. This course is designed to increase the vocal skills and performance levels of each student by presenting a rigorous repertoire from various historical periods and cultures. Students will sing a wide range of literature from various periods such as European Renaissance, Baroque, Classical and Romantic as well as a variety of American genres, i.e., Spirituals, Jazz, Folk and Pop. From the study of these various styles, students will attain enhanced awareness of the history and events surrounding the development of choral literature. Students are required to participate in performances outside the regular school day throughout the academic year. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

## INTRO TO MUSICAL THEATRE

- **Grade Level:** 9-12
- **Course Length:** 1 year
- **Prerequisite:** None
- **Graduation Requirements:** Fulfills Fine Arts Requirement
- **College Prep:** Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better

In this class we will be investigating the term “Triple Threat”. Along with developing your performance skills of singing, acting, and dancing (which are needed to become a dynamic musical theatre performer) you will also analyze a variety of iconic performers and productions in this genre. Throughout the semester you will participate in group performances, duets, and solos. This is a practical class and, while every level of singer and dancer will be respected and accommodated, you will be expected to sing and move everyday. There will also be some recommended but not mandatory public performance opportunities. An interest in music, theatre, and performance is recommended for success in this course.

Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for performance preparation.

## SHOW CHOIR

- **Grade Level:** 9-12
- **Course Length:** 1 year
- **Prerequisite:** None
Show Choir is an open course offered to students who qualify for show choir music, theatre and dance instruction through audition. Students must show proficiency in reading music, playing an instrument and/or singing with proper choral tone. Students must demonstrate ability to move/dance. This course is designed to increase the vocal skills and performance levels of each student by presenting a rigorous repertoire from various historical periods and cultures. Students will sing a wide range of literature such as Musical Theatre, Pop, Jazz, and Folk. From the study of these various styles, students will attain enhanced awareness of the history and events surrounding the development of choral literature. Correct stylistic performance and interpretation of the different repertoires will be emphasized. Students are required to participate in performances outside the regular school day throughout the academic year. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**AP MUSIC THEORY**

**Grade Level:** 10-12  
**Length:** 1 year  
**Prerequisite:** Ability to read music is essential. Ensemble experience is highly recommended. Recommendation from previous music instructor or approval of AP Music Theory teacher required.  
**Graduation:** Fulfills Fine Arts requirement  
**College Prep:** Fulfills CSU/UC Visual/Performing Arts “F” requirement with a grade of “C” or better, weighted grade

This course is designed to give the student an understanding of music theory, sight reading, and aural skills that is equivalent to that of a first-year college music student. They will study the fundamental building blocks of musical notation, chord structures, harmonics, composers and stylistic nuances. It is also designed with the explicit purpose of preparing the student for the AP Exam in Music Theory. The course content and presentation will adhere to the guidelines set forth by the College Board in the Music Theory course description.
FAMILY AND CONSUMER STUDIES

CHILD GROWTH AND DEVELOPMENT
Grade Level: 10-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills Applied Arts requirement
College Prep: Fulfills CSU/UC "G" area elective requirement with a grade of “C” or better
This course is a study of the developmental stages of children from conception through adolescence. The course will provide the student with knowledge of the principal theories of child growth and development and their applications. First semester topics include individual personality and learning styles, interpersonal relationships, functions of the family, life cycles and aging. Second semester topics focus on the rewards and responsibilities of parenting, pregnancy, childbirth, child development, education and learning activities for children and exploration of careers involving children. Students in this class will be a part of the “Buddies Mentorship Program” with Frederiksen Elementary School students. The mentorship program requires a behavior contract, and has high expectations of professionalism in their field work as a mentor, and excellent attendance. This course is part of the Home Economics Careers & Technology Career pathway for Child Development and Education. This course has a light amount of homework. The purpose of this homework is for practice or review of concepts covered in class, or to prepare for class in the upcoming day or week. Students may have homework if completing work missed during an absence. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

CULINARY ARTS
Grade Level: 9-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills Applied Arts requirement
College Prep: Fulfills CSU/UC "G" area elective requirement with a grade of “C” or better
This basic foods course covers kitchen principles, recipe skills, guidelines for good nutrition, and mealtime customs as well as to develop skills in the kitchen. Students learn the principles of preparing quick breads, cookies, salads, soups, sandwiches, casseroles, dairy products, and eggs. Emphasis is on making healthy food choices and safeguarding the family’s health. Areas of food preparation in the second semester also include meat, poultry, pasta, fruits and vegetables, breads, cakes, and candies. Careers opportunities are explored. Food preparation and service is a very important part of this class. As students study food preparation, they explore careers in the food industry. This is a hands-on class. There is a $50 suggested donation per year for consumable materials. This course does not have homework unless student is completing work due to an absence or work not completed during class.

INTERNATIONAL CUISINE
Grade Level: 9-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills Applied Arts requirement
College Prep: Fulfills CSU/UC "G" area elective requirement with a grade of “C” or better
This is a comprehensive course in International Cookery. The purpose of this course is to link the culinary/technical skills of regional and world cuisines with social and cultural heritage behind them and to provide students with historical and cultural context. This course focuses on understanding the differences and commonalities we have with other cultures around the world. This course provides the student with an explanation of the development of cuisines, as well as a historical background and recipes from the cookery of Europe, Africa, the Middle East, Asia, Australia, and Latin America.
The course also requires multiple research opportunities for students to explore cuisine of the world. Students will acquire a greater understanding of their world and the cultural diversity that exists in their own community. This course provides a technical education in the instruction of traditional culinary skills. In a lab environment students will learn and demonstrate culinary skills in use by an ethnic population, based on traditions, techniques, culinary tools, and ingredients used by an indigenous people. There is a $50 suggested donation per year for consumable materials. This course does not have homework unless student is completing work due to an absence or work not completed during class.

### BAKING AND PASTRY

<table>
<thead>
<tr>
<th>Grade Level:</th>
<th>9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length:</td>
<td>1 year</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>none</td>
</tr>
<tr>
<td>Graduation:</td>
<td>Fulfills Applied Arts requirement</td>
</tr>
<tr>
<td>College Prep:</td>
<td>Fulfills CSU/UC &quot;G&quot; elective requirement with a grade of “C” or better</td>
</tr>
</tbody>
</table>

This course focuses on the fundamentals of baking; including the process of understanding ingredients, weights and measurements, formula conversion and costing of recipes. Students use equipment associated with baking, learn bakeshop ingredients, substitutions, mise en place, quick and yeast breads, laminate doughs such as croissant and puff dough, pies and tarts, pastries, cake and frosting, custards and sauces, & candy making. Careers opportunities are explored. Food preparation and professionalism is a very important part of this class. As students study food preparation, they explore careers in the food industry. This is a hands-on class. There is a $50 suggested donation per year for consumable materials. This course does not have homework unless student is completing work due to an absence or work not completed during class.

### CATERING

<table>
<thead>
<tr>
<th>Grade Level:</th>
<th>10-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length:</td>
<td>1 year</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>A grade of C or better in a previous culinary arts class; teacher recommendation required</td>
</tr>
<tr>
<td>Graduation:</td>
<td>Fulfills Applied Arts requirement</td>
</tr>
<tr>
<td>College Prep:</td>
<td>Fulfills UC/CSU &quot;G&quot; elective credit with a grade of “C” or better</td>
</tr>
</tbody>
</table>

In this advanced Foods class, students become participants in a catering company. Food preparation techniques learned in previous Foods courses are utilized along with exploring speed and quantity food preparation skills. This course focuses on food and various aspects pertaining to its science, preparation, economics, government, business, and hospitality sectors and emphasizing on, but not limited to: overall cooking knowledge, methods, and skills; utilizing heat/cold transfers; nutritional science; culinary organization, food and nutritional science, culinary careers and professionalism; recipe development and costing; menu research and development; and business research and development. All aspects of setting up and operating a catering company, including advertising, promotion, long-range planning, food sourcing and basic principles are covered. There is an emphasis on developing teamwork, leadership skills, creativity and professionalism. This course is designed for students who are interested in the culinary arts and hospitality industry (caterer, chef, sports nutrition, food writer, restaurant/hotel manager, baker, health inspector, food service director, food technologist) as well as for students who want to explore the realities of small business ownership. Students who receive a grade "B" or higher in this class and on the DVC administered exam will receive college units and class credit. There is a $15 fee for chef coat. This course does not have homework unless student is completing work due to an absence or work not completed during class.

### ADVANCED CATERING

<table>
<thead>
<tr>
<th>Grade Level:</th>
<th>11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length:</td>
<td>1 year</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>Teacher recommendation</td>
</tr>
<tr>
<td>Graduation:</td>
<td>Fulfills Applied Arts requirement</td>
</tr>
<tr>
<td>College Prep:</td>
<td>Fulfills UC/CSU &quot;G&quot; elective credit (pending) with a grade of “C” or better</td>
</tr>
</tbody>
</table>
In this advanced Foods class, students become participants in a catering company. Food preparation techniques learned in previous Foods courses are utilized along with exploring speed and quantity food preparation skills. This course focuses on food and various aspects pertaining to its science, preparation, economics, government, business, and hospitality sectors and emphasizing on, but not limited to: overall cooking knowledge, methods, and skills; utilizing heat/cold transfers; nutritional science; culinary organization, food and nutritional science, culinary careers and professionalism; recipe development and costing; menu research and development; and business research and development. All aspects of setting up and operating a catering company, including advertising, promotion, long-range planning, food sourcing and basic principles are covered. There is an emphasis on developing teamwork, leadership skills, creativity and professionalism. This course is designed for students who are interested in the culinary arts and hospitality industry (caterer, chef, sports nutrition, food writer, restaurant/hotel manager, baker, health inspector, food service director, food technologist) as well as for students who want to explore the realities of small business ownership. Students who receive a grade "B" or higher in this class and on the DVC administered exam will receive college units and class credit. There is a $15 fee for chef coat. This course does not have homework unless student is completing work due to an absence or work not completed during class.

FUNDAMENTALS OF FASHION AND INTERIOR DESIGN
Grade Level: 9-12  
Length: 1 year  
Prerequisite: none  
Graduation: Fulfills Applied Arts requirement  
College Prep: Fulfills CSU/UC "G" elective requirement with a grade of “C” or better

Students will learn design concepts involving interior design, home construction, household furnishings and apparel. Students will study the history of design in fashion and interiors and architectural styles. Students will design rooms and homes through design boards and construct garments and home furnishing accessories. There will be an emphasis on building skills and confidence in reading and following directions, as well as clothing construction techniques. Careers in housing, interior design, and fashion design will also be investigated. This course has a light amount of homework. The purpose of this homework is for practice or review of concepts covered in class. Student may have homework if completing work missed during an absence.

HEALTH
Grade Level: 9  
Length: 1 semester  
Prerequisite: None  
Graduation: Fulfills health requirement for graduation  
College Prep: Fulfills CSU/UC "G" elective requirement with a grade of “C” or better

This course is designed to assist students with obtaining accurate information, develop lifelong positive health-related attitudes and behaviors, and make wise decisions related to their personal health. Study will include personal and community health; mental, emotional, and social health; nutrition and physical activity; alcohol, tobacco, and other drugs; growth, development, and sexual health; and injury prevention and safety. Central themes are the acceptance of personal responsibility for lifelong health, respect for and promotion of the health of others, an understanding of the process of growth and development, and informed use of health-related information, products, and services. This course has a light amount of homework. The purpose of this homework is for practice, extension, or review of concepts covered in class. Student may have homework if completing work missed during an absence or work not completed during class. Note students who fail this course will have to repeat it on Odysseyware.

HOME ECONOMICS 101
Grade Level: 10-12  
Length: 1 semester or 1 year, may be repeated for credit  
Prerequisite: Teacher approval
Graduation: Fulfills elective requirement
Students may choose to study any of the seven areas of Home Economics in greater depth on an independent study basis. The teacher and student complete an independent study contract. This course does not have homework.

ENGLISH

ENGLISH 1 – FRESHMAN ENGLISH
Grade Level: 9
Length: 1 year
Prerequisite: none
Graduation: Fulfills one year of the four-year English requirement
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better
This literary survey course covers multiple types of writing and reading. Teachers emphasize development of advanced literary skills including inference and annotation of plays, short stories, poems, novels and non-fiction articles. Students refine the multi-paragraph essay using textual support and work on several shorter writings. Students engage in both small group and whole class discussion, developing skills to work well with others. Students also present informal and formal projects. Students will be required to read outside of class to prepare for the next day’s lesson. They will complete both essays and short responses to literature to expand on their understanding, which may require more time than given within the class period. Students will also be required to study outside of class to prepare for quizzes and exams. Vocabulary development is a regular part of the course and students will have a weekly assignment and exam. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ENGLISH 1 ADV -- FRESHMAN ENGLISH ADVANCED
Grade Level: 9
Length: 1 year
Prerequisite: Grade of “A” in previous English class and 8th grade teacher recommendation and a strong readiness assessment
Graduation: Fulfills one year of the four-year English requirement
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better.
This course is not weighted.
This course offers the additional challenge of an advanced English course in reading, writing, critical thinking, and listening and speaking. It is structured for students who already excel in reading a variety of text genres for literal understanding and who are able to write clearly and sufficiently. The units are designed for students to read and understand the texts independently and come to each unit prepared to examine it deeply for its significance and how the writer has crafted it to accomplish its purpose. Students will study texts through: literary analysis, including the lenses of different Literary Critical Theories; assignments requiring deep critical thinking, collaborative investigations, independent and team research, Socratic seminars, and individual/group presentations. Daily assignments for this course are designed to practice ideas, concepts, and skills currently under study and are important for the immediacy of learning. Most often, it is finishing an assignment begun during class. Although an honors-level course, the time spent on assignments at home on a daily basis should be reasonable and not significantly more or less than the college prep English 1 course. It is the depth and quality of the assignments, not the number of or time spent on assignments, that determines the rigor of the class.

ENGLISH 2 – SOPHOMORE ENGLISH
Grade Level: 10
Length: 1 year
Prerequisite: English 1
ENGLISH 2 ADVANCED -- SOPHOMORE ENGLISH ADVANCED

Grade Level: 10
Length: 1 year
Prerequisite: Consideration for the course placement will be focused on: 1) Achieving an A- or better in their freshman English class. 2) Current teacher recommendation. 3) Strong score on comprehension/skill test given to all freshman students

Graduation: Fulfills one year of the four-year English requirement
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better.

This course is not weighted.

English 2 Advanced is a literature-based course that focuses on fiction, non-fiction, drama, and writing. Students read closely, participate in class discussions, make prepared presentations, and write essays. Student’s focus their reading on literary patterns such as Joseph Campbell’s “A Hero’s Journey” and examine major themes found in novels such as Lord of the Flies, Kaffir Boy, Siddhartha, and Brave New World. Socratic seminars are a vital part of the course and are graded as such. The purpose of homework is to practice and review, to master learning objectives, to prepare for assessment, and to read for next day's discussion. The class is conducted much like a college class, and as such, it is important that students are self-motivated. Students must be willing and able to complete all reading outside of class time. Long-term and group assignments are an integral part of the coursework.

ENGLISH 3 -- AMERICAN LITERATURE

Grade Level: 11
Length: 1 year
Prerequisite: English 2
Graduation: Fulfills one year of the four-year English requirement
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better

Students engage in an extensive survey of the American literary movements: Puritans, Rationalists, Romantics, Realists, and Modernists. Some of the texts include The Great Gatsby and excerpts from the Holt Literature and Language Arts textbook. Students learn analytical and creative thinking skills to look at the world more critically. This class is designed to stimulate and improve students’ critical thinking, reading, writing, vocabulary, language usage, and communication skills in order to help students be college and career ready. Students also prepare to take the state SBAC (Smarter Balanced Assessment Consortium) exam in May. Homework in this course serves multiple purposes and follows district policy regarding homework and grading. Students complete homework to finish work started in class and engage further in material covered in class. Assignments include reading novels, analyzing texts, practicing reading comprehension skills and writing, and preparing for projects, seminars, and other class activities. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ENGLISH 3H – HONORS AMERICAN LITERATURE

Grade Level: 11
Length: 1 year
The honors course in American Literature is a chronological and thematic approach to major writers and literary movements from the 17th through the 21st centuries—Puritan, Rationalist, Romantic (first semester), Realist, Modernist, and Post-Modernist (second semester). This course focuses on both fiction and nonfiction while building proficiency in deep analysis of both rhetorical and literary strategies used by writers as we examine the development of the “American Identity.” Students explore a variety of writing genres with emphasis on short and long analytical essays; give succinct, analytical presentations; work on collaborative and individual research projects; and delve deeply into texts through Socratic Seminars. Speaking in small groups and with the entire class is a common occurrence and is mandatory for success. Homework is designed to practice concepts, ideas, and skills from class, to give time for independent reading to prepare for class, and to work on longer-term assignments like essays and presentations. It should not take significantly more or less time at home than the English 3 American Literature Course, depending upon the student’s reading rate and overall preparation for the course, but students will be expected to perform with very high levels of engagement with course material.

**AP ENGLISH LANGUAGE AND COMPOSITION**

Grade Level: 11
Length: 1 year
Prerequisite: A or B in English 2 Advanced or A in English 2 and current English teacher recommendation as well as a strong readiness assessment score in spring of sophomore year
Graduation: Fulfills one year of the four-year English requirement
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better.
This is a weighted course.

This college level course is designed for students motivated to challenge themselves through extensive reading and writing. The curriculum follows American Literature selections, and highlights classic and contemporary non-fiction. Students read independently, keep notes, write essays, analyze the use of rhetorical devices, and engage in frequent Socratic seminars. Homework will primarily focus on intensive reading of college-level texts and on writing assignment designed to develop sophisticated analysis and argument skills. Each spring, students have the option to take the Advanced Placement exam in English Language and Composition. If students pass, they earn college credit.

**ENGLISH 4 – WORLD LITERATURE**

Grade Level: 12
Length: 1 year
Prerequisite: English 3
Graduation: Fulfills one year of the four-year English requirement
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better

World Literature at the senior level focuses on multi-cultural subject matter, both fiction and non-fiction. Students read the works of a variety of world writers dealing with universal themes in poetry, short stories, plays, and novels. Teachers expect students to complete an extensive amount of reading outside of class. In preparation for college, students write both a Personal Statement and expository responses to argument, as well as timed essays. Homework includes reading, questions, writing, vocabulary, and preparing for class discussion. This homework has the purpose of ensuring complex class discussion on a multitude of subjects. Students should expect to have homework, in some form, every night. Amount
of time spent on homework will vary depending on the subject at hand. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**AP ENGLISH LITERATURE AND COMPOSITION**

Grade Level: 12  
Length: 1 year  
Prerequisite: A or B in English 3 Honors or AP English Language or A in English 3, current English teacher recommendation and a strong score on readiness assessment.  
Graduation: Fulfills one year of the four-year English requirement  
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better.

This intensive college-level course is designed for the student who has demonstrated exceptional interest and ability in English. Students are challenged to read independently from a variety of genres, analyze the works, keep notes, write in-class essays and longer papers, and engage in small and large group discussions. Summer reading is assigned and students may earn college credit when they take the required Advanced Placement exam in English Literature.

**EXPOSITORY READING AND WRITING**

Grade Level: 12  
Length: 1 year  
Prerequisite: English 3; not recommended for students who earn an A or B in AP English Language  
Graduation: Fulfills one year of the four-year English or elective requirement  
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better.

This course invites students to consider and debate provocative contemporary issues. Its emphasis fosters the students’ ability to argue from informed perspectives and to extend understanding of complex reading material in writing. Essential to the curriculum is the deepening of students’ critical reading, writing, and thinking skills as they deal with expository prose. Based on the CSU’s 12th Grade Expository Reading and Writing Course, this rhetoric and composition course for seniors enables them to meet college-level literacy demands. The course is built around in-depth studies of expository, analytical, and argumentative writing on controversial topics taken from news journals and magazines. Any homework assigned will be work designed to assist students with foundational knowledge they will need in order to be successful in class. As this is a course designed to prepare students for college, it is important that they arrive with self-motivation and a strong desire to hone skills necessary at the collegiate level. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**SCIENCE FICTION LITERATURE**

Grade Level: 12  
Length: 1 year  
Graduation: Fulfills one year of the four-year English or elective requirement  
College Prep: Fulfills CSU/UC English requirement with a grade of “C” or better.

Science Fiction focuses on the reading, analysis, interpretation, and evaluation of science fiction literature in conjunction with current technological and scientific issues. Students also study science fiction film in relation to the texts read in class. The class is organized chronologically, following the history of science fiction and technology. Everything from Galileo to Virtual Reality is covered to stimulate interest in technology, fantasy, global thinking, and the future. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**ENGLISH ELECTIVES:**

**PHILOSOPHY**

Grade Level: 11-12
This semester course introduces students to the tools of philosophical argumentation (syllogism, logical consistency, logical possibility, deductive and inductive arguments, etc...) and to questions important to the Western philosophical tradition: What is knowledge? What is personal identity? What is ethically right? Do we have free will? Does God exist? With a semester long class, however, covering all these questions might not be realistic. Which questions covered may vary semester to semester. Students will explore various answers to these questions through readings, lectures, seminars, and writing mini-essays. The central text for this course will be *Ultimate Questions*, an introductory philosophy text from Prentice Hall. This text will be supplemented by primary sources. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**SPEECH AND DEBATE**
Grade Level: 10-12
Length: 1 year
Prerequisite: Teacher recommendation
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC elective "G" requirement with a grade of “C” or better

Students challenge themselves in this presentation course as they develop a full range of speaking skills. The active learning environment requires students to prepare for life beyond high school by researching, organizing, and delivering informative and persuasive speeches, debates, and panel discussions. Structures provided enable students to transfer skills to writing construction and critical thinking in all disciplines. As a year long course, the above skills are honed in the first semester as students work on speech. These skills transition into the second semester as the course begins the debate portion of the curriculum. During the second semester, students will debate in a variety of formats, both formally as well as informally, with judges from around the school and community coming in to gauge and score their presentations. Students should expect to work diligently in groups as well as individually to complete assignments and presentations. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**FILM AS LITERATURE**
Grade Level: 11-12
Length: One semester
Prerequisite: Teacher recommendation
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC elective "G" requirement with a grade of “C” or better

Students will view and analyze a variety of quintessential films that have made a lasting impression on American society. Students will explore what literature and film mean in the context of multicultural society, studying canonical pieces, as well as new and rediscovered voices. Students will explore social, historical, economic, political, and artistic issues. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**CREATIVE WRITING**
Grade: 11-12
Length: One semester
Prerequisite: Successful completion of English 1 and 2
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC elective "G" requirement with a grade of “C” or better

This course is designed to provide students the opportunity to learn and practice the elements of creative writing which includes but are not limited to: the short story, poetry, and creative nonfiction. Daily writing will be required as well as
reading works within each genre to better understand their own authorial voice as a writer. Techniques and devices such as free writing, Show Not Tell, and the use of dialogue, will be implemented to help develop skills and bring their writing to life. Through the use of writing workshops, students will learn and develop the art and skill of critique. A portfolio of original work will be submitted at the end of the semester, and students will be expected to read an excerpt or entire piece in the author’s chair. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

JOURNALISM
Grade Level: 10-12
Length: 1 year
Prerequisite: Successful completion of English 1
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC elective requirement with a grade of “C” or better

Treated similarly to a job, this is a year-long course in which students participate in every aspect of producing a newspaper with the idea that the grade is “payment”. This class requires strong writing and time management skills; however, all students of various writing levels are encouraged to take this course to further develop their argumentative and expository writing in a realistic setting, as well as working on person-to-person interactions through interviews. Students will learn to research, conduct interviews, write articles, take photographs, and edit articles, developing each skill specific to the journalism profession. Students use various forms of technology, including Adobe InDesign, to lay out the newspaper in both a physical medium and electronic medium (online: www.thedublinshield.com) allowing for a real audience for student writing. Current events around the world will be discussed and their relevance to the Dublin High community will also be explored. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
ENGLISH LANGUAGE DEVELOPMENT (ELD) COURSES

ELD 1
Grade Level: 9-12
Length: 1 year: varies based on student performance in class and on ELPAC
Prerequisite: ELPAC scores of 0, 1
Graduation: Fulfills up to 10 credits of the 40 credit English graduation requirement.

Newcomer and Emerging
This class focuses on oral language proficiency in English for recently immigrated students. Oral communication and comprehension skills will be developed through the use of dialogues and other related drills to communicate effectively in all social settings. Students will be introduced to controlled writing. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ELD 2
Grade Level: 9-12
Length: 1 year: varies based on student performance in class and on ELPAC
Prerequisite: ELPAC scores of 2 or low level 3
Graduation: Fulfills up to 10 credits of the 40 credit English graduation requirement.

Emerging and Expanding
This class is designed to strengthen listening, speaking, reading and writing skills along with grammar concepts. Additional English language skills are developed through dialogues, drills, writing and oral presentations. This course will allow English learners to engage at an intermediate level using English language in a more complex and demanding situations. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ELD 3
Grade Level: 9-12
Length: 1 year: varies based on student performance in class and on ELPAC
Prerequisite: ELPAC scores of 3 or 4
Graduation: Fulfills up to 10 credits of the 40 credit English graduation requirement. CSU/UC “A” English Bridging
This class focuses on furthering and strengthening listening, speaking, reading and writing skills. Students will progress from the intermediate level of communication to being able to communicate in ways that are appropriate to different tasks, purposes and audiences in a variety of social and academic contexts. Students will refine their language skills in a broader range and context. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ELD Tutorial
Grade Level: 9-12
Length: 1 year: varies based on student performance in non-ELD classes
Prerequisite: ELD student status, GPA below 2.5, and/or D/F in core classes
Graduation: Fulfills elective requirement
This class focuses on providing support for students needing extra help in core academic courses in order to meet standard requirements with passing grades. Through this course ELD Specialist, Counselor and Instructional Assistant will meet regularly to review graded and other concerns. Instruction is given to develop necessary skills and understanding of concepts through the use of various ELD strategies. Class time is provided for students to work on current homework assignments. This class will offer an added opportunity for ELD students to meet reclassification criteria.
### MATHEMATICS

Sample 4 year schedules for students interested in studying
Math, Science and/or Engineering in college:

<table>
<thead>
<tr>
<th>Plan</th>
<th>Freshman Year</th>
<th>Sophomore Year</th>
<th>Junior Year</th>
<th>Senior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Plan 1</td>
<td>Algebra I</td>
<td>Geometry</td>
<td>Algebra II</td>
<td>Trigonometry</td>
</tr>
<tr>
<td>Sample Plan 2</td>
<td>Geometry</td>
<td>Advanced Algebra II</td>
<td>Pre-calculus</td>
<td>AP Calculus (AB) or AP Statistics</td>
</tr>
<tr>
<td>Sample Plan 3</td>
<td>Advanced Algebra II (Geometry completed in Grade 8 or summer)</td>
<td>Precalculus</td>
<td>AP Calculus (AB)</td>
<td>AP Calculus (BC) or AP Statistics</td>
</tr>
</tbody>
</table>

Sample 4 year schedules for students interested in studying Liberal Arts in college:

<table>
<thead>
<tr>
<th>Plan</th>
<th>Freshman Year</th>
<th>Sophomore Year</th>
<th>Junior Year</th>
<th>Senior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Plan 1</td>
<td>Algebra I</td>
<td>Geometry</td>
<td>Algebra II</td>
<td>Trig or Stats</td>
</tr>
<tr>
<td>Sample Plan 2</td>
<td>Geometry</td>
<td>Algebra II</td>
<td>Trigonometry</td>
<td>non- AP Calculus</td>
</tr>
<tr>
<td>Sample Plan 3</td>
<td>Geometry</td>
<td>Advanced Algebra II</td>
<td>Precalculus</td>
<td>AP Statistics or non-AP Calculus</td>
</tr>
</tbody>
</table>

To enroll in the next level of mathematics requires successful passing of current math course and teacher approval. There is no Credit by Exam to move to the next level of math (or any other subject.) Courses must be taken sequentially. Counselors and Math Department must pre-approve any student’s request to accelerate in an approved venue in summer. No credit will be given for courses taken where prior approval was not obtained for any course.
Please note that students may not accelerate two Algebra-based math courses; only one Algebra-based math course may be accelerated with prior Math Department approval, which is based upon grades earned in previous math courses.

### DHS Math Department Course Progression

**Student/Parent Notes:**
Courses that students may take concurrently with approval:
- Algebra and Geometry (based on an Algebra Readiness Placement Test and Math Grades)
- Geometry and Advanced Algebra 2 (based on an Algebra 2 Placement Test and Math Grades)
- AP Statistics and PreCalculus (Math grades in prerequisite courses and teacher recommendation)
- AP Statistics and Calculus, AP Calculus AB or AP Calculus BC (Math grades in prerequisite courses and teacher recommendation)
- Students meeting the requirements may opt to accelerate through concurrent enrollment during the school year or through an approved summer program (such as DPIE) but **may not do both** in succession.
- Students who earn As in both semesters of Algebra 2 may take PreCalculus.
- Students who earn As in both semesters of Statistics and Trigonometry may take AP Statistics.
ALGEBRA I
Grade Level: 9-10
Length: 1 year
Graduation: Fulfills one of three math requirements.
College Prep: Fulfills CSU/UC math requirement with a grade of “C” or better.
This course is a State of California graduation requirement. Topics covered include graphing and writing linear equations and inequalities, systems of equations and inequalities, exponential expressions, operations with polynomials and radicals, quadratic equations, graphing functions including exponential, cubic, and absolute value functions. Students must pass both semesters of this course to meet the state high school graduation requirements and move on to Geometry. **Daily time commitment:** ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ALGEBRA IB
Grade level: 9-10
Length: 1 year
Prerequisite: Dublin High School Math Department teacher recommendation
Graduation: Fulfills one of three math requirements
College Prep: Fulfills CSU/UC math requirement with grade of “C” or better.
This course is a State of California graduation requirement. Topics covered include graphing and writing linear equations and inequalities, systems of equations and inequalities, exponential expressions, operations with polynomials and radicals, quadratic equations, graphing functions including exponential, cubic, and absolute value functions. Students must pass both semesters of this course to meet the state high school graduation requirements and move on to Geometry. **Daily time commitment:** ~30 minutes per day, 5 days per week, plus additional time for test preparation.

GEOMETRY
Grade Level: 9-11
Length: 1 year
Prerequisite: Successful completion of Algebra 1 or with Math Department approval, concurrent enrollment in Algebra 1 or Advanced Algebra II as well as readiness assessment and past math grades.
Graduation: Fulfills one of three math requirements.
College Prep: Fulfills CSU/UC math requirement with “C” or better.
This course is a Dublin High School math graduation requirement. Understanding and applying geometry theorems and definitions is expected. All California Standards for Geometry are included in the curriculum. Students will learn the basics of geometry and its language, reasoning skills and methods of proof, shapes of two and three dimensions and their properties and size measurements, similarity, geometric probability and transformations. **Daily time commitment:** 30-45 minutes per day, plus additional time for test preparation.

GEOMETRY 1B
Grade Level: 10-11
Length: 1 year
Prerequisite: Successful completion of Algebra 1 or Algebra 1B
Graduation: Fulfills one of three math requirements
College Prep: Fulfills CSU/UC math requirement with “C” or better.
This course is a Dublin High School math graduation requirement. Understanding and applying geometry theorems and definitions is expected. All California Standards for Geometry are included in the curriculum. Students will learn the basics of geometry and its language, reasoning skills and methods of proof, shapes of two and three dimensions and their
properties and size measurements, similarity, geometric probability and transformations. **Daily time commitment:** 30-45 minutes per day, plus additional time for test preparation.

**ALGEBRA II SEMESTER 1**
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Geometry or Geometry 1B
Graduation: Fulfills one of three math requirements.
College Prep: Does NOT fulfill CSU/UC math requirement

This course covers the material of the first semester from an Algebra II course with an introduction to second semester material. This course is for students who work hard, but need stronger Algebra skills before going into a full year Algebra II course. Some topics covered include graphing and solving linear and quadratic functions, logarithms, and finding critical points of higher order polynomials. **Daily time commitment:** 15 minutes per day, plus additional time for test preparation.

**ALGEBRA II**
Grade Level: 10-12
Length: 1 year
Prerequisite: Successful completion of Geometry or Geometry 1B
Graduation: Fulfills one of three math requirements
College Prep: Fulfills CSU/UC math requirement with a grade of “C” or better.

This course is a Dublin High School math graduation requirement. This course teaches the California standards for Algebra II. Topics studied include solving equations, graphing of parent functions, probability, trigonometric functions, logarithmic function and exponential along with other algebraic concepts. **Daily time commitment:** 30-45 minutes per day, plus additional time for test preparation. **If a student plans on enrolling in Physics the following year, s/he MUST take Advanced Algebra II and be recommended for Precalculus, to be taken concurrently with Physics.**

**ADVANCED ALGEBRA II**
Grade Level: 9-12
Length: 1 year
Prerequisite: Recommended B+ or higher in Algebra 1 and Geometry
Graduation: Fulfills one of three math requirements.
College Prep: Fulfills CSU/UC math requirement with “C” or better. **This is not a weighted course.**

This course is a Dublin High School math graduation requirement, and is an accelerated and rigorous course designed for students interested in pursuing STEM studies. This course goes into greater depth and application of concepts than Algebra II. Topics of study include equations, inequalities, functions, transformations of functions, system of complex numbers, polynomials, inverses, radical functions, rational functions, exponential and logarithmic functions, conic sections, and non-linear systems, sequences and series, linear regression, statistics, data analysis, and probability. Graphing and applications of these topics are included throughout the course. This course is required by the Science department if the student plans to take Physics the following year. **Daily time commitment:** 1 hour per day, 5 days per week. Students should spend about 1 hour per week, in addition to one hour per day studying the concepts.

**STATISTICS**
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Algebra II or Advanced Algebra II
Graduation: Fulfills one year of math requirement.
College Prep: Fulfills CSU/UC math requirement with “C” or better

This course is designed for college bound students who have completed Algebra II. Students will collect and describe data in words and graphs, plan a study including what and how to measure, apply probability laws, study distributions, and apply statistical tests to make inferences. This course is intended to explain the uses of statistics and its role in processing
information contained in reports, scientific journals, political coverage, and the daily newspaper. **Daily time commitment:** 20-30 minutes per day, 5 days per week, plus additional time for test preparation.

**AP STATISTICS**

Grade Level: 10-12  
Length: 1 year  
Prerequisite: Successful completion of Pre-Calculus OR students doubling in Precalculus and AP Statistics must complete Advanced Algebra II with an A.  
Graduation: Fulfills one year of math requirement.  
College Prep: Fulfills CSU/UC math requirement with “C” or better. This course is weighted. This course is designed for college bound students who have completed Pre-Calculus. AP Statistics is designed to prepare students for the AP Exam in May. The AP Syllabus directs the course curriculum. Students are required to use their TI 84 (83) (Plus) calculator. This is an analysis course that requires students to produce data, describe and interpret that data, use probability, make inferences about the data and write about the results. Mature study habits, math ability, and writing skills are necessary for success. **Daily time commitment:** 1-1.5 hours a day, plus additional time for test preparation.

**TRIGONOMETRY AND OTHER FUNCTIONS**

Grade Level: 11-12  
Length: 1 year  
Prerequisite: Successful completion of Algebra II or Advanced Algebra II and teacher recommendation.  
Graduation: Fulfills one year of math requirement.  
College Prep: Fulfills CSU/UC math requirement with a “C” or better  
Students will learn the definitions of the trigonometric ratios, the trigonometric functions and their graphs, the applications of trigonometry in solving both right triangle and acute triangle problems, the application of trigonometry in polar equations, and to find the model of sinusoidal data using both manual techniques and the regression function on the TI graphing calculator. Students will also study the exponential functions, logarithmic functions, the conic sections and their applications in the real world. Graphing will play a major role in completion of the homework and classwork. Students need to have a strong foundation in graphing complex functions. **Daily time commitment:** Homework will be assigned nightly and will take a half hour at minimum, weekly commitment of not less than 2.5 hours.

**PRECALCULUS**

Grade Level: 10-12  
Length: 1 year  
Prerequisite: Successful completion of Advanced Algebra II, teacher recommendation  
Graduation: Fulfills one year of math requirement.  
College Prep: Fulfills CSU/UC math requirement with a “C” or better  
A detailed and comprehensive study of Trigonometry, advanced functions, conics, and discrete mathematics. This is a rigorous course that prepares students for advanced levels of mathematics. This class is a “flipped” class. Students watch teacher prepared videos outside of class and take notes. In class the following day, students do Warm Up problems to ensure they understood the video presentation and during the remaining time in class students work on a problem set assigned by the teacher. During this time, students can ask for help from the classroom teacher, and/or other students in their group or class. Most new topics are covered in one day. Students must do daily videos, assignments and study in order to understand and master topics as the class progresses. Students should have a strong math background and very good study skills. **Daily time commitment:** 1 Hour per day, 5 days per week. In addition, students should spend at least 1 hour per week studying/mastering the concepts presented.

**SINGLE VARIABLE CALCULUS**

Grade Level: 12  
Length: 1 year  
Prerequisite: Successful completion of Trigonometry or Precalculus and teacher recommendation  
Graduation: Fulfills one year of math requirement
College prep: Fulfills CSU/UC math requirement with a grade of “C” or better
Although this course is not an Advanced Placement course, it covers the same topics that the AP calculus AB course covers. Students who are not prepared for the rigor of AP Calculus but have excellent algebra skills meet the requirements of this course.. Students will study the basic calculus concepts of a first semester college Calculus course. These topics will include derivatives and derivative rules, related rates, optimization, integration, and volumes of solids. Since the course is not AP, the pace of this Calculus course will be slower and this should allow students the opportunity to be successful in this introductory course. The course will support the standards listed above. Students taking this class should plan on at least 45 minutes of homework nightly, weekly time not less than about 3 hours and 45 minutes. Specific algebra skills that are critical to success in this class include factoring, solving systems of equations, graphing rational and polynomial functions, graphical analysis of complex functions, and composition of functions. Geometry topics (area and volume formulas) and trigonometric identities are also used on a regular basis.

AP CALCULUS AB
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Pre-Calculus and teacher recommendation
Graduation: Fulfills one year of math requirement.
College Prep: Fulfills CSU/UC math requirement with a grade of “C” or better, weighted course
Students learn the basic Calculus concepts presented in AB. This course covers the topics of the AB exam, and will prepare students for the more rigorous second level of Calculus. Topics of study include but are not limited to analysis of graphs, limits, continuity, derivatives and their applications, definite and indefinite integrals and their applications, and the Fundamental Theorem of Calculus. This course meets the Advanced Placement curriculum requirements. In this class students explore and understand Calculus concepts graphically, numerically, analytically, and verbally. The goal of this course is to give students a deeper and more thorough understanding of mathematics based on Calculus. This goal of this course should better prepare students for the rigorous mathematics courses of college. Students will take the AP Calculus AB test at the end of the year and may earn college credit. Daily time commitment: Homework is assigned each day and requires one hour each night.

AP CALCULUS BC
Grade Level: 12
Length: 1 year
Prerequisite: Successful completion of AP Calculus AB. Recommended B- or higher in AP Calculus AB
Graduation: Fulfills one year of math requirement.
College Prep: Fulfills CSU/UC math requirement with a grade of “C” or better, weighted course
This is a continuation course of Calculus AB. Students learn the basic Calculus concepts presented in AB in a condensed and intensified level and then learn additional concepts such as parametric, polar, and vector functions; power, Taylor, and Maclaurin series; and analysis of the different series. This course covers the topics on the BC exam, and will prepare students for the third level of Calculus offered at a university. This is an extremely rigorous course meeting the Advanced Placement curriculum requirements. Students continue to explore and understand Calculus concepts graphically, numerically, analytically, and verbally. The goal of this course is to continue to give students a deeper and more thorough understanding of mathematics based on Calculus. This goal of this course should better prepare students for the rigorous mathematics courses of college. The students will take the AP Calculus BC test at the end of the year and may earn college credit. Daily time commitment: Homework is assigned each day and requires one hour each night.
NON-DEPARTMENTAL

AVID 9
Grade Level: 9
Length: 1 year
Prerequisite: Teacher recommendation, application, interview, GPA verification, and contract signed by both student and parent/guardian. All students in the program must be on track for four-year college eligibility and maintain excellent attendance and behavior. To continue participation in the program, students must meet contractual obligations, which include but are not limited to maintaining a minimum GPA of 2.5 and staying on a college preparatory track. Students who do not meet the requirements are dismissed from the program. Potential 9th grade AVID students will be confirmed at the end of their 8th grade year pending final grades.
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" elective requirement with a grade of “C” or better
Advancement Via Individual Determination (AVID) is an academic elective course that prepares students for college readiness and success. Each week, students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, including tutor-facilitated and inquiry-based study groups, analytical reading and writing, communication skills, and academic success skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, organization and reading to support their academic growth. AVID 9 students will learn about college requirements, hear from various college representatives, prepare for college entrance exams, and complete two college research projects. Students will also refine their time management, study skills, test-taking, note-taking and research techniques, and perform 10 hours of community service per semester. Time commitment: ~20 minutes, 2 days per week to prepare for study groups. Students are also expected to develop their note-taking and study habits for their other courses throughout the week.

AVID 10
Grade Level: 10
Length: 1 year
Prerequisite: Successful completion of AVID 9 or teacher recommendation, application, interview, GPA verification, and contract signed by both student and parent/guardian. Program expectations are the same as those listed for AVID 9 (see above). Students who do not meet the requirements are dismissed from the program.
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" elective requirement with a grade of “C” or better
This course is a continuation of the Advancement Via Individual Determination (AVID) program. AVID 10 students will continue to develop their academic learning plans, goals, and skills that were introduced in AVID 9 and are expected to perform 10 hours of community service per semester. Students will visit college campuses, hear from various college representatives, prepare for college entrance exams, and complete two college research projects. Lastly, students will begin to narrow down their colleges and careers of interest, based on personal interests and goals. Time commitment: ~20 minutes, 2 days per week to prepare for study groups. Students are also expected to develop their note-taking and study habits for their other courses throughout the week.

AVID 11
Grade Level: 11
Length: 1 year
Prerequisite: Successful completion of AVID 10 or teacher recommendation, application, interview, GPA verification, and contract signed by both student and parent/guardian. Program expectations are the same as those listed for AVID 9 (see above). Students who do not meet the requirements are dismissed from the program.
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" elective requirement with a grade of “C” or better

This course is a continuation of the Advancement Via Individual Determination (AVID) program. AVID 11 students will continue to refine all the academic skills and techniques that were presented in AVID 10 and are expected to perform 10 hours of community service per semester. The course emphasizes rhetorical reading, analytical writing, collaborative discussion strategies, preparation for college entrance and placement exams, and college study skills. There will continue to be opportunities to visit college campuses and hear from various college representatives. Students will work towards completing a final project that narrows down their college choices to prepare for the application process the following year.

Time commitment: ~20 minutes, 2 days per week to prepare for study groups. Students are also expected to develop their note-taking and study habits for their other courses throughout the week.

AVID 12/Senior Seminar
Grade Level: 12
Length: 1 year
Prerequisite: Successful completion of AVID 11. Program expectations are the same as those listed for AVID 9 (see above). Students who do not meet the requirements are dismissed from the program.
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" elective requirement with a grade of “C” or better

This course is the culmination of a student’s years in the AVID program. AVID 12 students will continue to refine all the academic skills and strategies that were presented in AVID 11 and develop an increased ability to self-monitor, self-regulate, and manage time. Students will spend time in class completing college, financial assistance, and scholarship applications with the assistance of the instructor and designated counselor. Lastly, students will prepare for college through the use of inquiry based collaborative study groups utilizing higher order thinking questioning techniques and produce a culminating research project organized around a exceptional leader or service learning. Students are expected to complete 10 hours of community service per semester. Time commitment: ~20 minutes, 2 days per week to prepare for study groups. Students are also expected to develop their note-taking and study habits for their other courses throughout the week.

AVID TUTOR
Grade Level: 11-12
Length: 1 or 2 Semesters
Prerequisite: Approval of AVID Coordinator, strong college preparatory classes/advanced level, excellent communication skills
Graduation: Fulfills elective credit

Students are expected to facilitate groups of five to six AVID students two times per week and help to evaluate binders and planners once a week. Tutors will receive instruction in how to guide the students using the inquiry method that encourages higher level thinking by the AVID students. There is no nightly homework commitment.

STUDENT ASSISTANT
Grade Level: 11-12
Length: 1 year or 1 semester
Prerequisite: Teacher recommendation, minimum 2.5 GPA prior semester, excellent attendance and behavior
Graduation: Fulfills elective requirement

Limited to one Student Assistant class per semester. Students who have special skills in typing, filing, tutoring, or specific subjects may apply for positions with teachers, secretaries and other school personnel provided they first have their
counselor’s approval. All Student Assistant positions must be confirmed in writing on a specific form secured from the counselor.

**STUDENT LEADERSHIP**

**Grade Level:** 10-12  
**Length:** 1 year  
**Prerequisite:** Application and interview, excellent behavior and attendance  
**Graduation:** Fulfills elective requirement  

The Student Leadership class is designed as an activity class in which students plan and execute all co-curricular activities, with the exception of athletics, for the Dublin High School student body. Students meet as the executive council to discuss, vote on, and implement special projects throughout the school year, as well as perform the specific duties of their elected or appointed office. This class meets before school, from 7:15 a.m. to 7:50 a.m., five days per week for class officers. (Note: for 2019-2020 school year, this class is held during the school day for students who are not elected class officers.) In addition, students are expected to perform a substantial amount of school and community service outside the regular school day.

**FRESHMAN LEADERSHIP**

**Grade Level:** 9  
**Length:** 1 year  
**Prerequisite:** Minimum 2.0 GPA prior semester, application and interview, excellent behavior/attendance  
**Graduation:** Fulfills elective requirement  

The Freshman Leadership class is designed to teach freshman effective leadership skills that will help them be successful throughout high school and beyond. Members of this class will be involved in all facets of campus life, and will be expected to help involve their peers in positive activities on campus. In addition to teaching students to be effective leaders and leading the freshman class, this activity-based course allows students to plan and conduct extra-curricular activities for the entire DHS student body. Students discuss, vote on, and implement special projects throughout the school year. Students are expected to perform a substantial amount of school and community service outside of the regular school day. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**PHILOSOPHY**

**Grade Level:** 11-12  
**Length:** 1 Semester  
**Prerequisite:** Successful completion of English 2 or 3  
**Graduation:** Fulfills CSU/UC "G" elective requirement with a grade of “C” or better  

This semester course introduces students to the tools of philosophical argumentation (syllogism, logical consistency, logical possibility, deductive and inductive arguments, etc.) and central questions of the Western philosophical tradition: How do we know we know anything? How do we know ourselves? How do we know what is ethically right? Do we have free will? Does God exist? With a semester long class, however, covering all these questions might not be realistic. Which questions covered may vary semester to semester. Students will explore various answers to these questions through readings, lectures, seminars, and writing mini-essays. At the end of the course, students will choose one of their mini-essays to expand into a larger project that involves some outside research. The central text for this course will be *Ultimate Questions*, an introductory philosophy text from Prentice Hall. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**ADVANCED PLACEMENT SEMINAR (AP Capstone year 1)**

**Grade Level:** 9-12  
**Length:** 1 Year  
**Prerequisite:** 3.5 GPA for Dublin High School students and strong grades in English; for incoming 9th graders, “A” in English 8 and 3.5 GPA. Academy honesty and integrity are expected.  
**Graduation:** Fulfills CSU/UC "G" elective requirement with a grade of “C” or better - **weighted grade in grades** 10 -
This course will equip students with the skills to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. Students will have the opportunity to explore real-world issues from multiple perspectives and consider varied points of view to develop deep understanding of complex issues and topics in order to make connections between these issues. Students gain a rich appreciation and understanding of issues by reading articles, listening to speeches or broadcasts, and experiencing artistic and literary works. Students complete research papers, speeches, and group presentations. Participation in class discussions is imperative. Note: if students wish to take the corresponding AP exam, College Board charges higher fees for this exam.

**ADVANCED PLACEMENT RESEARCH (AP Capstone year 2)**
Grade Level: 10-12  
Length: 1 Year  
Prerequisite: Successful Completion of AP Seminar  
Graduation: Fulfills CSU/UC "G" elective requirement with a grade of “C” or better - weighted grade

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense. Note: if students wish to take the corresponding AP exam, College Board charges higher fees for this exam.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate. AP Seminar may also be taken as a stand-alone option.

**COMPUTER SUPPORT SPECIALIST (SWAT)**
Grade Level: 9-12  
Length: 1 Year  
Prerequisite: Student behavior and dark web activity will be reviewed prior to acceptance in the for security reasons.  
Graduation: Fulfills elective requirement

As a Career Technical Education course, Computer Support Specialist (IT Essentials) introduces students to advanced applications of various programs, to digital citizenship expectations and the ethical implications of technology, and to the practical skills demanded of information and communication technology professionals. Students will become familiar with helpdesk technician requirements, internet tools, and networking. Students will experience hands-on training and virtual simulation labs for PC installation, internet/wireless connectivity, network security, file and print sharing, and software installation. The course will prepare students for careers as network and help desk technicians. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences by partnering with DUSD IT Services and DPIE. Students will apply training and skill development in the DHS HUB during class. In addition, volunteer time before/after school, during lunch, and/or during GAEL periods in the HUB or off-site will be required.

**FRESHMAN SEMINAR**
Grade Level: 9  
Length: 1 semester  
Prerequisite: none  
Graduation: Fulfills CSU/UC "G" elective requirement with a grade of “C” or better

Freshman Seminar is a one-semester course designed to help students learn and practice valuable skills to help them to be career and college ready. Students will demonstrate their understanding of career paths through a variety of assessments, projects, job simulations, research assignments, online portfolio, and a budget project. Students will identify academic
interests, skills, values and personality types, research employers and industries, gain experience with public speaking and interview skills, familiarize themselves with college and job search tools, strengthen writing skills, and learn goal setting techniques that are monitored by the instructor. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
PHYSICAL EDUCATION

9TH GRADE PHYSICAL EDUCATION
Grade Level: 9
Length: 1 year
Prerequisite: none
Graduation: Fulfills 1 year of PE requirement
PE is required in Grade 9. Components of Nutrition, Fitness and Safety from the California Physical Health Standards are included in the curriculum. All freshmen will take the California Physical Performance and Health Related Test during the third quarter. Also covered are: team sports, individual sports, aquatics, body development and the introduction to weight-lifting. This is a required course for graduation, as students must pass the FitnessGram.

TEAM SPORTS
Grade Level: 10-12
Length: 1 year or 1 semester
Prerequisite: Successfully completed 9th grade PE, teacher recommendation
Graduation: Fulfills 1 year/semester of PE requirement
This course builds on the basic foundation of the ninth grade core program. The goal of this course is to provide students with an opportunity to choose life-time activities and increase their skill proficiency, strength, flexibility and conceptual learning specific to each instructional unit. These activities include football, ultimate frisbee, soccer, softball, basketball, volleyball, hockey, and lacrosse.

WEIGHT LIFTING
Grade Level: 10-12
Length: 1 year or 1 semester
Prerequisite: Teacher recommendation, successfully completed 9th grade PE
Graduation: Fulfills 1 year/semester of PE requirement
This course gives students an introduction to how to lift weights properly while continuing to maintain, build and develop body muscles. This class is designed to structure body development which can last a lifetime. Strength, flexibility and cardiovascular health are maintained.

WALKING FOR FITNESS
Grade Level: 10-12
Length: 1 year or 1 semester
Prerequisite: Successfully completed 9th grade PE
Graduation: Fulfills 1 year/semester of PE requirement
This course introduces students to the performance of fitness walking as a lifelong activity for physical and psychological well being. It will provide the information that the student needs to understand, organize, plan, and implement a physical fitness program with walking as the primary activity. The centerpiece of the course is a series of small group and individual walks of varying lengths that are conducted over various terrains.

SPEED AND STRENGTH TRAINING
Grade level: 10-12
Length: 1 year or 1 semester
Prerequisite: Coach or Lead Teacher placement, successfully completed 9th grade PE
Graduation: Fulfills 1 year/semester of PE requirement
This class is designed to provide an opportunity for Dublin High School Athletes to participate in strength and conditioning. This class is geared toward students who show above average interest and ability in physical education.
through participation on an athletic team. This class will prepare athletes for the fitness, strength, agility, proprioception, and speed that they will need to be a successful Dublin High School athlete. Course will specifically work on sport specific fitness drills to better prepare our Dublin High School athletes to compete at the highest level.

**FOOTBALL WEIGHTS**
Grade level: 10-12
Length: 1 year or 1 semester (for seniors only)
Prerequisite: Coach or Lead Teacher placement, member of football team
Graduation: Fulfills 1 year/semester of PE requirement

This course is designed for students on the football team who will be participating in team workouts/conditioning. All football players are highly encouraged to take this class to prepare them for the season and keep them in condition. This class will prepare athletes for the fitness, strength, agility, proprioception, and speed that they will need to be a successful Dublin High School athlete.

**DANCE 1**
Grade Level: 10-12
Length: 1 year or 1 semester
Prerequisite: Successfully completed 9th grade PE, teacher placement
Graduation: Fulfills 1 year/semester of PE requirement

This course is designed as a two semester, introductory course that provides students with a foundation in dance. Students will begin to develop technical strength through the basic skills of ballet, tap, jazz, folk-ethnic and creative (modern) movement. Elements of dance history, genre, terminology, critical analysis and performance will be covered.

**YOGA: STRETCH AND STRENGTH**
Grade Level: 10-12
Length: 1 year or 1 semester
Prerequisite: Successfully completed 9th grade PE, teacher placement
Graduation: Fulfills 1 year/semester of PE requirement

This class can help students reduce stress and find balance both physically and mentally while learning the foundations of yoga which includes a series of postures and breathing exercises.

**FUNDAMENTALS OF TRACK AND FIELD**
Grade level: 10 - 12
Length: 1 year or 1 semester
Prerequisite: Successfully completed 9th grade PE, teacher placement
Graduation: Fulfills 1 year/semester of PE requirement

This course builds on the basic foundation of the ninth grade core physical education program and provides the opportunity to do activities similar to those done in the area of track and field activities. The goal of this course is to improve students overall physical fitness while placing a concentration on improving speed and power. The focus of these activities include Olympic lifting techniques: power cleans, deadlifts, bench press, and squats.

**RUNNING FOR FITNESS**
Grade Level: 10 - 12
Length: 1 year or 1 semester
Prerequisite: Successfully completed 9th grade PE
Graduation: Fulfills 1 year/semester of PE requirement

This course builds on the basic foundation of the ninth grade core physical education program and to provide an opportunity for students who love to run to have a course tailored to that interest. The goal of this course is to provide students with an opportunity to choose running and other life-time activities and increase their skill
proficiency, strength, flexibility and conceptual learning specific to each instructional unit. These activities include stretching, static drills, dynamic drills, running, strength building and general conditioning.

**COOPERATIVE PHYSICAL EDUCATION**

Grade Level: 10-12  
Length: 1 year or 1 semester  
Prerequisite: Successfully completed 9th grade PE, teacher placement  
Graduation: Fulfills 1 year/semester of PE requirement

This course is designed for students who want to work with developmentally delayed students in the area of physical education. Students will develop knowledge in the areas of special education history, education, practices and disabilities, while working with Dublin students.
# SCIENCE

Dublin High School Graduation Pathways for the Next Generation Science Standards***

<table>
<thead>
<tr>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th Optional Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Earth Science</strong></td>
<td><strong>Conceptual Physics</strong></td>
<td><strong>Chemistry</strong></td>
<td><strong>State Testing if enrolled in a fourth year by the spring of junior year</strong></td>
</tr>
<tr>
<td><strong>Conceptual Physics</strong>*</td>
<td><strong>Requires concurrent enrollment in Algebra I/Algebra IB or higher</strong></td>
<td><strong>Requires enrollment in Algebra II or higher</strong></td>
<td><strong>Earth Science</strong></td>
</tr>
<tr>
<td><strong>Honors Chemistry</strong></td>
<td><strong>Required enrollment in Algebra II or higher.</strong></td>
<td></td>
<td><strong>Marine Science</strong></td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td><strong>Requires enrollment in Algebra II or higher.</strong></td>
<td></td>
<td><strong>Forensics</strong></td>
</tr>
<tr>
<td><strong>Human Anatomy</strong></td>
<td><strong>Marine Science</strong></td>
<td><strong>Biomedical Innovations Honors,</strong></td>
<td><strong>Biology</strong></td>
</tr>
<tr>
<td><strong>Earth Science</strong></td>
<td><strong>Requires enrollment in Algebra II or higher.</strong></td>
<td><strong>requires prerequisite of Honors Chem or other weighted science course</strong></td>
<td><strong>Chemistry</strong></td>
</tr>
<tr>
<td><strong>Conceptual Physics</strong></td>
<td><strong>Requires concurrent enrollment in Algebra I/Algebra IB or higher</strong></td>
<td></td>
<td><strong>AP Biology</strong></td>
</tr>
<tr>
<td><strong>Honors Chemistry</strong></td>
<td><strong>Required enrollment in Algebra II or higher.</strong></td>
<td></td>
<td><strong>AP Chemistry</strong></td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td><strong>Requires enrollment in Algebra II or higher.</strong></td>
<td></td>
<td><strong>Required enrollment in Trigonometry or higher</strong></td>
</tr>
<tr>
<td><strong>Honors Chemistry</strong></td>
<td><strong>Required enrollment in Algebra II or higher.</strong></td>
<td></td>
<td><strong>AP Environmental Science</strong></td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td><strong>Requires enrollment in Algebra II or higher.</strong></td>
<td></td>
<td><strong>Requires enrollment in Algebra II or higher</strong></td>
</tr>
<tr>
<td><strong>AP Biology</strong></td>
<td></td>
<td><strong>AP Physics</strong></td>
<td><strong>Requires concurrent enrollment in Calculus or higher</strong></td>
</tr>
<tr>
<td><strong>AP Chemistry</strong></td>
<td></td>
<td><strong>Physics</strong></td>
<td><strong>AP Environmental Science</strong></td>
</tr>
<tr>
<td><strong>Required enrollment in Trigonometry or higher</strong></td>
<td></td>
<td><strong>Required enrollment in PreCalculus or higher</strong></td>
<td><strong>Requires concurrent enrollment in Calculus or higher</strong></td>
</tr>
<tr>
<td><strong>AP Environmental Science</strong></td>
<td></td>
<td><strong>Conceptual Physics</strong></td>
<td><strong>Earth Science</strong></td>
</tr>
<tr>
<td><strong>AP Physics</strong></td>
<td></td>
<td><strong>AP Chemistry</strong></td>
<td><strong>Marine Science</strong></td>
</tr>
<tr>
<td><strong>Requires concurrent enrollment in Calculus or higher</strong></td>
<td></td>
<td><strong>Required enrollment in Trigonometry or higher</strong></td>
<td><strong>Forensics</strong></td>
</tr>
<tr>
<td><strong>Earth Science</strong></td>
<td></td>
<td><strong>AP Environmental Science</strong></td>
<td><strong>Human Anatomy</strong></td>
</tr>
<tr>
<td><strong>Marine Science</strong></td>
<td></td>
<td><strong>Honors Environmental Science</strong></td>
<td><strong>Hon. Human Anatomy</strong></td>
</tr>
<tr>
<td><strong>Forensics</strong></td>
<td></td>
<td><strong>AP Physics</strong></td>
<td><strong>Biology</strong></td>
</tr>
<tr>
<td><strong>Biomedical Innovations Honors,</strong></td>
<td></td>
<td><strong>Physics</strong></td>
<td><strong>Chemistry</strong></td>
</tr>
<tr>
<td><strong>requires prerequisite of Honors Chem or other weighted science course</strong></td>
<td></td>
<td><strong>Required enrollment in PreCalculus or higher</strong></td>
<td><strong>AP Biology</strong></td>
</tr>
<tr>
<td><strong>Earth Science</strong></td>
<td></td>
<td><strong>Conceptual Physics</strong></td>
<td><strong>AP Chemistry</strong></td>
</tr>
<tr>
<td><strong>Marine Science</strong></td>
<td></td>
<td><strong>AP Environmental Science</strong></td>
<td><strong>Required enrollment in Trigonometry or higher</strong></td>
</tr>
<tr>
<td><strong>Forensics</strong></td>
<td></td>
<td><strong>AP Physics</strong></td>
<td><strong>AP Environmental Science</strong></td>
</tr>
<tr>
<td><strong>Biomedical Innovations Honors,</strong></td>
<td></td>
<td><strong>Requires concurrent enrollment in Calculus or higher</strong></td>
<td><strong>Requires enrollment in Algebra II or higher</strong></td>
</tr>
</tbody>
</table>

* Required concurrent enrollment in Algebra I/Algebra IB or higher

**Requires enrollment in Algebra II or higher**

***Please note that the information provided is an overview of the pathways and requirements. For detailed information, please refer to the official high school curriculum guide.
<table>
<thead>
<tr>
<th>Course</th>
<th>Prerequisites/Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Physics</td>
<td>Requires prerequisite of Honors Chem or other weighted science course</td>
</tr>
<tr>
<td></td>
<td>Forensics</td>
</tr>
<tr>
<td></td>
<td>Human Anatomy</td>
</tr>
<tr>
<td></td>
<td>Hon. Human Anatomy</td>
</tr>
<tr>
<td></td>
<td>Earth Science</td>
</tr>
<tr>
<td></td>
<td>Biotechnology</td>
</tr>
<tr>
<td></td>
<td>AP Biology</td>
</tr>
<tr>
<td></td>
<td>AP Chemistry</td>
</tr>
<tr>
<td></td>
<td>AP Environmental Science</td>
</tr>
<tr>
<td></td>
<td>Marine Science</td>
</tr>
<tr>
<td></td>
<td>Biomedical Innovations Honors, requires prerequisite of honors chem or other weighted science course</td>
</tr>
</tbody>
</table>

**BIOLOGY**

Grade Level: 9-12  
Length: 1 year  
Prerequisite: None  
Homework: 60-120 min/week (Will include previewing, reviewing, and/or practicing skills & concepts as well as lab reports and project work.)  
Graduation: Fulfills life science requirement  
College Prep: Fulfills CSU/UC biological lab science “D” requirement with a grade of “C” or better  

Biology introduces students to the study of life. During the first semester students learn about life on a cellular level; in the second semester emphasis is placed on the interaction of organisms with each other and the environment. Students will be expected to read at or above grade level and to be capable of independent work. Critical thinking, lab work and reporting are emphasized.

**BIOLOGY WITH RESEARCH**

Grade Level: 9-10  
Length: 1 year  
Prerequisite: Teacher recommendation and commitment to complete science fair project  
Homework: Science fair prep (preview), studying (review), and, some extension activities (varies approx 75 min/week)  
Graduation: Fulfills life science requirement  
College Prep: Fulfills CSU/UC biological lab science “D” requirement with a grade of “C” or better  

Students in Biology with Research are challenged with more hands on learning and focus on the Biology standards as they participate in research of their own design as well as national scientific studies. The focus on labs helps prepare students for future scientific endeavors. In order to receive Biology with Research credit you must participate in the Dublin High or Alameda County Science and Engineering Fair in March. Biology with Research introduces students to the study of life. During the first semester students learn about life on a cellular level; in the second semester emphasis is placed on the interaction of organisms with each other and the environment. Students will be expected to read at or above grade level and to be capable of independent work. Critical thinking, lab work and reporting are emphasized.

**CONCEPTUAL PHYSICS** (Algebra-based Physics)  
Grade Level: 10-12
Length: 1 year
Prerequisite: enrolled in Algebra I or above
Homework: 20 to 40 minutes each night (Will include previewing, reviewing, and/or practicing skills & concepts as well as lab reports and project work.)
Graduation: Fulfills physical science requirement. Note: a Physics-based course is required for graduation for students in the Class of 2021 and later.

College Prep: Fulfills CSU/UC physical lab science “D” requirement with a grade of “C” or better

Conceptual Physics in the Universe is a one-year interactive and dynamic science course designed to help students understand the scientific principles behind phenomena in their everyday lives. We will use topics such as vehicular motion, electric power production and use, communication technologies, space exploration, and natural disasters to cover physics material including forces, motion, momentum, energy, electromagnetism, waves, & gravity. Students are expected to actively participate in class discussions, lab explorations, group projects, and other activities to develop and demonstrate their mastery of the NGSS standards. Inherent curiosity, willingness to try, and a basic understanding of 1st-year Algebra is required to successfully participate in this course.

CHEMISTRY
Grade Level: 10-12
Length: 1 year
Prerequisite: Successful completion of Biology, enrolled in Alg II or higher, and teacher recommendation
Homework: 30-45 minutes per night, 3 x per week, mostly practice. Possible additional review work necessary for exams and semester finals.
Graduation: Fulfills physical science requirement
College Prep: Fulfills CSU/UC physical lab science “D” requirement with a grade of “C” or better

Chemistry deals with the nature of materials in our world and how they change and combine to form new substances. This course is for students intending on attending a 4-year college or university. Topics include: the atomic model of matter; bulk properties of materials, bonding and molecular structure, chemical reactions; chemical equilibrium. Students should expect to spend time outside of class, in practice problem sets, reading and the preparation of lab reports. The course material supports the physical science and earth science core standards of the Next Generation Science Standards (NGSS). Use of a scientific calculator in class and outside of the class is required for this course. Chemistry students typically spend approximately 30-45 minutes 3 times per week on homework assignments. Most (~80%) of the homework is practice of chemistry concepts and quantitative problem solving skills.

HONORS CHEMISTRY
Grade Level: 10-12
Length: 1 year
Prerequisite: Grade of A in Biology or Biology with Research, Grade of A in Alg I and Geometry, enrolled in Alg II or higher, and teacher recommendation along with successful grade on Chemistry Readiness Test.
Homework: 4-5 hours over a one week period. Homework is mostly centered around labs and students should expect to spend 4-5 hours over a week completing laboratory work, working through practices and checking their work online. Formal laboratory notebooks and typed abstracts are required along with comprehensive project-based first and third quarter assessments.
Graduation: Fulfills physical science requirement
College Prep: Fulfills CSU/UC lab science “D” requirement with a grade of “C” or better, weighted course (weighted in grade 10 and above on the college prep GPA, weighted in cumulative GPA if taken in grade 9 or summer after grade 9.)

Honors Chemistry is a rigorous college prep class meant for students who have demonstrated success in mathematics and previous STEM courses, and who intend to go onto higher level science courses such as AP Chemistry, AP Biology,
Honors Anatomy, AP Physics/Physics, AP Environmental. This class requires that students be self-motivated and will work both independently and collaboratively on specific assignments. In order for students to be successful in Honors Chemistry, students must complete non-graded practices and homework in a timely manner. Honors chemistry is concerned with the chemical properties of substances. Topics include: properties of matter; atomic theory, electron clouds and probability, periodic trends, chemical formulas, chemical reactions, chemical bonding kinetic theory, the gas laws, properties of solutions, reaction rates, acids and bases, oxidation-reduction and entropy. In addition, the course material supports the physical science and earth science core standards of the Next Generation Science Standards (NGSS).

EARTH and SPACE SCIENCE (NGSS)
Grade Level: 11-12
Length: 1 year
Prerequisite: Teacher recommendation
Homework: An average of 20 minutes, three days a week; consisting of reading assignments, conclusion of activities and additional practice or review of concepts.
Graduation: Fulfills physical science requirement
College Prep: Fulfills CSU/UC physical lab science “D” requirement with a grade of “C” or better
Note: due to the labs and activities in this course, excellent attendance is expected. Earth Science is an elective course intended for students with an interest in astronomy, geology, meteorology, and/or oceanography. The 1st semester is an introduction to astronomy consisting of the characteristics and life cycle of the Sun and stars, the origin and structure of our solar system, asteroid impacts, extrasolar planets, the earth-moon system, and the origin and structure of the universe. The 2nd semester covers California hazards: earthquakes, volcanoes, landslides, tsunamis, tornadoes, thunderstorms, lightning, and floods. Students investigate the processes that concentrate energy, the ways in which energy is released, and the accompanying hazards. Coursework involves hands on activities, computer simulations, creating and interpreting graphs, and projects.

ANATOMY & PHYSIOLOGY
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Biology and teacher recommendation
Homework: This class uses review and extension at home for about 15-20 minutes a day. That totals up to about 1-2 hours a week.
Graduation: Fulfills life science requirement
College Prep: Fulfills CSU/UC biological lab science “D” requirement with a grade of “C” or better
Students will study natural and chemical functions of the body and will be prepared for further work in fields related to health careers. Topics for study will include the major systems of the body-digestive, circulatory, nervous, reproductive. Individual projects/laboratory work will be emphasized. Students will conduct animal and organ dissections.

HONORS ANATOMY & PHYSIOLOGY
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Biology and Chemistry and teacher recommendation
Homework: This class uses review and extension at home for about 15-20 minutes a day. That totals up to about 1-2 hours a week.
Graduation: Fulfills life science requirement
College Prep: Fulfills CSU/UC biological lab science “D” requirement with a grade of “C” or better, weighted grade
Honors Human Anatomy and Physiology explores the systems comprising the human body by emphasizing physiological mechanisms and a thorough understanding of human anatomy. Physiology of body systems is covered in much more depth and the course moves at a faster pace than regular Human Anatomy and Physiology. It will include literature review,
research, and a substantial laboratory component, which includes fetal pig and cat dissection, in addition to several organ dissections. This course is recommended for those pursuing a career in the Health Science field.

**FORENSIC SCIENCE**
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Biology
Homework: This course only uses practice during class, with review and extension at home for the assessments of each unit. There is one large project for extension of knowledge which is assigned in the first semester and due in the second.
Graduation: Fulfills physical science requirement
College Prep: Fulfills CSU/UC “D” physical lab science requirement with a grade of “C” or better

Forensic Science is a lab based investigative course that teaches students the how and why of evidence collection. Forensic science is important in many careers from the legal system to the medical field. This course fits with both Dublin High School’s emerging Biomedical Pathway and its existing ROP Criminal Justice course. Our Forensic Science course focuses on three main strands: the Inquiry Process, the History and Nature of Science, and, Science in Personal and Societal Perspectives. Forensic science may include some sensitive content and labs.

**MARINE SCIENCE**
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Biology
Homework: 15-20 minutes of extension/practice per day, totalling to about 1-2 hours per week.
Graduation: Fulfills 3rd year elective credit (science elective)
College Prep: Fulfills “G” area elective requirement with a grade of “C” or better

This year-long course is designed to introduce students to the scientific concepts and laboratory research techniques currently used in the field of Marine Biology and Oceanography. Students will learn about the features of various marine environments such as tide pools, reefs, vents and the oceanic zone, the organisms found in them, and general ecological concepts influencing marine populations and communities. Students will explore a wide range of relevant issues facing contemporary marine biology at local, state, and global scales.

**PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW)**
Grade level: 9-12
Length: 1 year
Prerequisite: Concurrent enrollment or completion of Biology with Research and membership in PLTW Biomedical Academy
Homework: 1-2 hours per week for the purpose of review and extension, especially Internet research and analysis of concepts learned. A detailed lab notebook will be kept.
Graduation: Fulfills the 3rd year elective science requirement
College Prep: Fulfills CSU/UC “D” lab science requirement with a grade of “C” or better

Students investigate various health conditions including heart disease, diabetes, sickle-cell anemia, hypercholesterolemia, and infectious diseases. Students determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person’s life. The activities and projects introduce students to human physiology, medicine, and research processes. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses.

**HUMAN BODY SYSTEMS (PLTW)**
Grade level: 10-12
Length: 1 year
**Prerequisite:** Successful completion of Biology with Research, membership in PLTW Biomedical Academy and have an interest in the medical field

**Homework:** 1-2 hours per week for the purpose of review and extension, especially Internet research and analysis of concepts learned. A detailed lab notebook will be kept.

**Graduation:** Fulfills life science requirement

**College Prep:** Fulfills CSU/UC “D” lab science requirement with a grade of “C” or better

Students will examine the interactions of human body systems as they explore identity, power, movement, protection, and homoeostasis. Students will design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflexes, voluntary action and respiration. Exploring science in action, students build organs and tissues on a mannequin, work through interesting real world cases and often play the roles of biomedical professionals to solve medical mysteries.

**MEDICAL INTERVENTIONS HONORS (PLTW)**

<table>
<thead>
<tr>
<th>Grade level:</th>
<th>11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length:</td>
<td>1 year</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>Successful completion of PBS, HBS, or other AP/Honors science course, membership in PLTW Biomedical Academy and have an interest in the medical field.</td>
</tr>
<tr>
<td>Homework:</td>
<td>3-5 hours per week for the purpose of preview, review, and extension, especially Internet research, lab report writing, and analysis of concepts learned. Further time outside of class may be required for the unit projects and independent community service project. Many multi-day complex biotechnology labs will be performed and a detailed lab notebook will be kept with several formal lab reports.</td>
</tr>
<tr>
<td>Graduation:</td>
<td>Fulfills life science requirement</td>
</tr>
<tr>
<td>College Prep:</td>
<td>Fulfills CSU/UC “D” lab science requirement with a grade of “C” or better, weighted grade</td>
</tr>
</tbody>
</table>

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. They will learn about various biomedical careers through case studies, and will even be asked to research and play the role of these biomedical professionals in many instances. They will also interact with actual biomedical professionals in our community through guest speaker visits and unit projects. The four main units are Infectious Disease, Genetic Screening, Cancer, and Organ Failure. Within these, students will explore how to detect and fight infection, screen and evaluate the code in human DNA, evaluate cancer treatment options, and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario will introduce multiple types of interventions, reinforce concepts learned in the previous two courses, and present new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders through cutting edge innovations. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role that scientific thinking and engineering design play in the development of interventions of the future. Students practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Students will also be required to conduct their own independent “Connect to the Community” project in which they will design a community service project aimed at bettering the health of people on campus or in their local community.

**PLTW BIOMEDICAL INNOVATIONS HONORS**

<table>
<thead>
<tr>
<th>Grade Level:</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length:</td>
<td>1 year</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>C or better in Biology and Chemistry as well as C or better in an Honors or AP Science course.</td>
</tr>
<tr>
<td>Homework:</td>
<td>1 hour per night</td>
</tr>
<tr>
<td>Graduation:</td>
<td>Fulfills 10 credits of elective credit</td>
</tr>
</tbody>
</table>
College Prep: UC/CSU “G” area elective course, weighted if student earns a “C” or better PLTW Biomedical Innovations Honors is a UC “G” elective Honors course. Senior students apply their knowledge and skills to answer questions and solve problems related to biomedical sciences. Problems include: Designing an effective emergency room, Exploring human physiology through direct testing, Designing a medical innovation, Investigating environmental health, Combating a public health issue, and, an Independent project of their choice. Much of this work requires a strong background in Biology and Chemistry and strong interest in Medicine. Students must have a good work ethic and be able to work independently to meet deadlines and prepare presentations. There is a cumulative final exam at the end of the second semester that tests knowledge from both semesters. Priority enrollment is given to seniors in the PLTW Biomedical Academy, as this serves as the Capstone course for the program, but, other qualified students are welcome.

BIOTECHNOLOGY
Grade level: 11-12
Length: 1 year
Prerequisite: Successful completion of both semesters of both Biology and Chemistry
Homework: 3-5 hours per week for the purpose of preview, review, and extension. Further time may be spent perfecting solution concentration calculations as homework, as well as lab techniques and understanding the various functions of a biotechnology laboratory. After school hours may be required to master certain lab practical skills and concepts.
Graduation: Fulfills the 3rd year elective science requirement
College Prep: Fulfills CSU/UC“D” lab science requirement with a grade of “C” or better

Biotechnology is a lab-intensive course designed to combine molecular biology with practical applications. Beginning in the 2018-19 school year, credit will be offered from Ohlone College upon successful mastery of biotechnology skills and content. Because this is a college course, students are expected to treat it as such, including time commitments involved. Students should already have a mastery of solution-making calculations and significant figures from their previous chemistry course. Chemistry is heavily emphasized. The main goals of the course are gaining a deeper understanding of: molecular genetics, proteins, lab protocols and techniques, and an introduction to Biotechnology in the world today. Students will be exposed to DNA fingerprinting, gene mapping, electrophoresis and PCR, as well as activities that relate biotechnology to daily life. Students will also have the opportunity to experience the basics of microbiology, human genetics, and exploration of bioethical issues. This course will prepare students for future science coursework in college as well as introduce the area of Biotechnology as a possible future career. At the conclusion of the course, students will receive college credit and/or proceed to the next course in the biotechnology major.

PHYSICS (Trigonometry-based Physics)
Grade Level: 11-12
Length: 1 year
Prerequisite: Concurrent enrollment in Precalculus or above; successful completion of all semesters of previous math (including Advanced Algebra II or Trigonometry) and science classes (including Chemistry); permission of the instructor
Homework: At least ½ hour every night (mostly practice and review - exploring & reinforcing concepts, problem-solving, test prep)
Graduation: Fulfills physical science requirement. Note: a Physics-based course is required for graduation for students in the Class of 2021 and later.
College Prep: Fulfills CSU/UC physical lab science “D” requirement with a grade of “C” or better

Physics is concerned with describing the relationship between matter and energy. Topics include: motion and the relationship between force and motion, conservation of energy and momentum, heat and thermodynamics, wave behavior (light, sound, etc.), electric and magnetic phenomena, astronomy and some “modern” physics. The course is aligned with both the older CA Physics standards and the newer NGSS standards. Critical thinking and lab work and reporting are emphasized. Trigonometry is an integral part of this course, and a TI-84 graphing calculator is required. The 2nd semester final covers topics from the whole year of Physics. This course is recommended for students intending to
pursue a college major in a STEM field, particularly the physical sciences and/or engineering. **AP Physics may NOT be taken for duplicate credit after Trigonometry-based college-preparatory Physics.**

**AP BIOLOGY**
Grade Level: 11-12
Length: 1 year
Prerequisite: Grade of A in Biology with Research and a B in Honors Chemistry or C in AP Chemistry, and teacher recommendation. Candidates for this course are strongly suggested to be concurrently enrolled in Precalculus; students in Trigonometry with strong prior math grades will be considered with the consent of instructor. Homework: Successful students should expect five to eight hours of homework assignments each week. Much of the (70%) nightly/weekend homework falls in the “preview” and “practice” category designed to support conceptual knowledge, critical thinking, and communicating scientific topics in writing. “Extension” assignments may be required to analyze and communicate laboratory exercises (15%). Finally, students will be assigned review problems to strengthen biology topics covered in previous courses (15%). **Note:** There are a significant number of homework assignments due weekly in both June and July.

Graduation: Fulfills life science requirement
College Prep: Fulfills CSU/UC lab science “D” requirement with a grade of “C” or better; colleges may award credit upon passing the national AP Exam in May. Weighted course.

AP Biology is a rigorous college-level course, requiring self-motivated and independent learners. This course extends and deepens those concepts developed in the first year Biology course, preparing the student to take the AP Biology Exam in May. The content is predicated around the Four Big Ideas of AP Biology as defined by College Board including Evolution, Energy and Homeostasis, Information Transfer, and System Interactions. Critical thinking, lab work, and scientific writing are emphasized. There are weekly quizzes, frequent multi-day labs, and unit tests monthly. Unit tests are modeled after the AP exam, and require application of concepts and strong scientific reasoning, rather than memorization of content. Students will conduct a personally designed “Making Connections” project to connect the principles of biology to their own lives. Significant time outside of class is required for assignments, project work, test corrections, and test preparation. To ensure that the class may complete all units of study prior to mid-April, there is a significant summer homework assignment due weekly during June, July, and August. Due to the rigorous nature of the course, only students with a true interest in the subject of Biology should undertake this class. All students are expected to prepare for and take the Advanced Placement Biology Exam.

**AP CHEMISTRY**
Grade Level: 11-12
Length: 1 year
Prerequisite: Grade of A in Biology with Research and a B in Honors Chemistry or C in AP Chemistry, and teacher recommendation. Grade of A in Biology with Research and a B in Honors Chemistry, and teacher recommendation. Candidates for this course are strongly suggested to be concurrently enrolled in Precalculus; students in Trigonometry with strong prior math grades will be considered with the consent of instructor. Homework: Approximately one hour 5 nights per week. Most (~ 80%) nightly homework falls in the “practice” category designed to support conceptual knowledge, quantitative problems solving, and communicating scientific topics orally and in writing. Occasionally (~5 %) students may be asked to “preview” topics to be covered in subsequent lab sessions. “Extension” assignments may be required to analyze and communicate laboratory exercises (~10%). Finally, students may be assigned problems to strengthen and review...
chemistry topics covered in previous courses (15%). Note: There are a significant number of homework assignments due weekly in both June and July.

Graduation: Fulfills physical science requirement
College Prep: Fulfills CSU/UC lab science “D” requirement with a grade of “C” or better; colleges may award credit upon passing the national exam in May; this is a weighted course.

AP Chemistry is a rigorous lab-based college-level course, requiring self-motivated and independent learners. This course will extend and deepen concepts acquired in the first year Chemistry course, preparing the student to take the AP Chemistry Exam in May. The content supports the Six Big Ideas of AP Chemistry as defined by the College Board including the structure of matter, properties of matter, chemical reactions, kinetics, chemical thermodynamics, and equilibrium. Use of a graphing calculator is required. Critical thinking and lab work and reporting are emphasized. Significant time outside of class is necessary for tests, lab activities, and preparation for the AP Chemistry exam. There are 16 required in-depth guided inquiry labs, and a unit test approximately every 2 weeks. Students will write high-quality lab reports in a lab notebook. Tests are based on questions similar to those found on the actual AP Chemistry exam. To ensure that students join the class with recent practice in chemistry skills, and so that the class may complete all units of study prior to mid-April, there is a significant summer homework assignment due weekly during June and July.

Following the AP Chemistry exam offered in May, the teacher may conduct a survey of common chemistry topics not normally included in the College Board AP Chemistry Course description (example: nuclear chemistry, organic chemistry, biochemistry, qualitative analysis). Due to the nature of the course, only students with a very strong interest in Chemistry should take the class.

AP PHYSICS - Mechanics (Calculus-based Physics)
Grade Level: 11-12
Length: 1 year
Prerequisite: Concurrent enrollment in AP Calculus or above; successful completion of all semesters of previous math (including Precalculus) and science classes (including Chemistry); permission of the instructor
Homework: At least 1 hour every night, often more (intense, college-level problem-solving)
Graduation: Fulfills physical science requirement. Note: a Physics-based course is required for graduation for students in the Class of 2021 and later.

College Prep: Fulfills CSU/UC lab science “D” requirement with a grade of “C” or better; colleges may award credit upon passing the national exam in May; this is a weighted course.

This course is a rigorous college-level course, requiring self-motivated and independent learners; it is designed for students planning to specialize in a science or engineering major. The course focuses on topics of Mechanics, such as: kinematics; Newton’s laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; oscillations; and gravitation. (After the AP test, students may also explore other topics such as heat and thermodynamics, wave behavior (light, sound, etc.), electric and magnetic phenomena, astronomy and some “modern” physics. AP Physics students must: (a) develop a deep understanding of foundational principles of physics in classical mechanics by applying these principles to complex physical situations that combine multiple aspects of physics rather than present concepts in isolation; (b) design and conduct inquiry-based laboratory investigations to solve problems through first-hand observations, data collection, analysis and interpretation, and document these experiences; (c) develop critical thinking skills through applying methods of differential and integral calculus to formulate physical principles and solve complex physical problems. Use of a TI-graphing calculator is required for this course. There is extensive summer homework due each week during the summer, with the first unit exam the first week of school. At this time, if too many students are enrolled in the course, some may be reassigned into trigonometry-based college-preparatory Physics based on teacher assessment and performance on the first exam. **This course may NOT be taken for duplicate credit after Trigonometry-based college-preparatory Physics.

AP ENVIRONMENTAL SCIENCE
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Algebra II, plus successful completion (B or better) of at least one other Laboratory science course, and teacher recommendation.

Homework: 4-6 hours over a one week period. Students should expect a significant homework assignment at least 5 nights per week. Most (~80%) nightly homework falls in the “practice” category designed to support conceptual knowledge, qualitative and quantitative problems solving, and communicating scientific environmental topics orally and in writing. Occasionally (~5%) students may be asked to “preview” topics to be covered in subsequent lab sessions. The last (~15%) is required homework which will be collected and graded.

Graduation: Fulfills Physical Science and Life Science requirements

College Prep: Fulfills CSU/UC lab science “D” requirement with a grade of “C” or better; colleges may award credit upon passing the national exam in May; this is a weighted course.

Students gain the knowledge and skills to understand cause and management of environmental issues and interactions. Learn basic laboratory and field techniques including specimen sampling and processing, site monitoring, documentation, inspection and emergency response. Become familiar with the Geographic Information Systems (GIS). Incorporate academic rigor with practical application by exploring the links between environment, politics, and economics. Gain a broad awareness of environmental science and technological career opportunities through involvement with local environmental businesses, educational research institutes, and national labs. Students should be prepared to participate in outdoor field work requiring some physical activity and willingness to get dirty. In addition to the core requirements outlined above, study and expectations are designed to provide students with an academic experience parallel to that of the college level, while promoting critical thinking skills involved in independent research studies. A significant amount of reading and research is required. All students are expected to prepare for and take the Advanced Placement Environmental Science Exam.

**BIOMEDICAL SCIENCE ACADEMY CLASSES**

**PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW)**
Grade level: 9-12
Length: 1 year
Prerequisite: Concurrent enrollment or completion of Biology with Research and membership in PLTW Biomedical Academy
Homework: 1-2 hours per week for the purpose of review and extension, especially Internet research and analysis of concepts learned. A detailed lab notebook will be kept.
Graduation: Fulfills the 3rd year elective science requirement
College Prep: Fulfills CSU/UC “d” lab science requirement with a grade of “C” or better

Students investigate various health conditions including heart disease, diabetes, sickle-cell anemia, hypercholesterolemia, and infectious diseases. Students determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person’s life. The activities and projects introduce students to human physiology, medicine, and research processes. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses.

**HUMAN BODY SYSTEMS (PLTW)**
Grade level: 10-12
Length: 1 year
Prerequisite: Successful completion of Biology with Research, membership in PLTW Biomedical Academy and have an interest in the medical field
Homework: 1-2 hours per week for the purpose of review and extension, especially Internet research and analysis of concepts learned. A detailed lab notebook will be kept.
Students will examine the interactions of human body systems as they explore identity, power, movement, protection, and homoeostasis. Students will design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflexes, voluntary action and respiration. Exploring science in action, students build organs and tissues on a mannequin, work through interesting real world cases and often play the roles of biomedical professionals to solve medical mysteries.

**MEDICAL INTERVENTIONS HONORS (PLTW)**

**Grade level:** 11-12  
**Length:** 1 year  
**Prerequisite:** Successful completion of PBS, HBS, or other AP/Honors science course, membership in PLTW Biomedical Academy and have an interest in the medical field.  
**Homework:** 3-5 hours per week for the purpose of preview, review, and extension, especially Internet research, lab report writing, and analysis of concepts learned. Further time outside of class may be required for the unit projects and independent community service project. Many multi-day complex biotechnology labs will be performed and a detailed lab notebook will be kept with several formal lab reports.  
**Graduation:** Fulfills life science requirement  
**College Prep:** Fulfills CSU/UC “d” lab science requirement with a grade of “C” or better, weighted grade

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. They will learn about various biomedical careers through case studies, and will even be asked to research and play the role of these biomedical professionals in many instances. They will also interact with actual biomedical professionals in our community through guest speaker visits and unit projects. The four main units are Infectious Disease, Genetic Screening, Cancer, and Organ Failure. Within these, students will explore how to detect and fight infection, screen and evaluate the code in human DNA, evaluate cancer treatment options, and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario will introduce multiple types of interventions, reinforce concepts learned in the previous two courses, and present new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders through cutting edge innovations. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role that scientific thinking and engineering design play in the development of interventions of the future. Students practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Students will also be required to conduct their own independent “Connect to the Community” project in which they will design a community service project aimed at bettering the health of people on campus or in their local community.

**BIOMEDICAL INNOVATION HONORS (PLTW)**

**Grade Level:** 12  
**Length:** 1 year  
**Prerequisite:** C or better in Biology and Chemistry as well as C or better in an Honors or AP Science course.  
**Homework:** 1 hour per night  
**Graduation:** Fulfills 10 credits of elective credit  
**College Prep:** UC/CSU “G” area elective course, weighted if student earns a “C” or better  

PLTW Biomedical Innovation is a UC “G” elective Honors course. Senior students apply their knowledge and skills to answer questions and solve problems related to biomedical sciences. Problems include: designing an effective emergency
room, exploring human physiology through direct testing, designing a medical innovation, investigating environmental health, combating a public health issue and an independent project of their choice. Much of this work requires a strong background in Biology, Chemistry and Medicine. Students must have a good work ethic and be able to work independently to meet deadlines and prepare presentations. There is a cumulative final exam at the end of the second semester that tests knowledge from both semesters. Priority enrollment is given to seniors in the PLTW Biomedical Academy, as this serves as the Capstone course for the program.

SOCIAL SCIENCE

WORLD HISTORY
Grade Level: 10
Length: 1 year
Prerequisite: none
Graduation: Fulfills first year of Social Science requirement
College Prep: Fulfills CSU/UC World History requirement with a grade of “C” or better

Students examine major turning points in the shaping of the modern world. First semester is spent looking at the expansion of the West (Europe) and the growing interdependence of people and cultures throughout the world, including both world wars. Second semester continues the study of the 20th and 21st centuries. Current events, class activities, projects, historical writing, visual and auditory strategies are used to promote class discussions and critical thinking skills. Major areas to be studied are Rising Tide of Revolutions, Industrialization and Its Impact, Western Imperialism, World War II, Civilizations in Crisis (1882-1945) and the Contemporary World (1945 to present). Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is 30 minutes on average.

AP EUROPEAN HISTORY
Grade Level: 10
Length: 1 year
Prerequisite: "B" in Advanced English or "A" in college prep English, Read Chapter 11 and take online formative Chapter 11 test. The score does not count towards entrance; however, only students who take the exam will be considered for the course. The AP European History teachers will forward on the names of those students to the counseling staff.
Graduation: Fulfills first year of Social Science requirement
College Prep: Fulfills CSU/UC World History requirement with a grade of “C” or better, weighted course

Students gain knowledge of basic chronology and of major events and trends from 1300 to the present. They develop an understanding of principle themes in modern European history and develop their ability to analyze and synthesize historical events. Students express historical understanding through writing and discussion. As with all Advanced Placement courses, this is a demanding and rigorous class taught as a college-level course, designed to prepare students to successfully pass the Advanced Placement European History examination. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is approximately 60 minutes, with additional study time.

U.S. HISTORY
Grade Level: 11
Length: 1 year
Prerequisite: World History
United States History offers a broad curriculum with emphasis on vitalizing history as a link between past and present. Students examine the chronological background of significant events and critical turning points in U.S. history, identify individuals/groups who made major contributions to the political, economic, social, and cultural development in a given period; define the basic values and principles of our constitutional system and the pluralistic nature of our states and nation; recognize the historical development of the United States as a world power; and understand the social, political, and economic stance of the United States in the world community. Emphasis in U.S. History is on critical thinking skills attained through class lectures, discussions, activities, projects, historical writing and argumentative essays. Homework for this course is an invaluable tool used to preview, review, extend, and practice with comprehension with respect to course material. The nightly average of homework time in this class is approximately 30 minutes.

**AP UNITED STATES HISTORY**

**Grade Level:** 11  
**Length:** 1 year  
**Prerequisite:** World History teacher recommendation, A in World History or a C or better in AP European History  
**Graduation:** Fulfills second year of Social Science requirement  
**College Prep:** Fulfills CSU/UC United States History requirement with a grade of “C” or better, weighted course

Students build an understanding of the economic, political, and social changes that have occurred in United States history. This course encourages students to weigh evidence and interpret problems presented by historians. Through assessment and critical analysis of historical documents and interpretations of them, students learn to analyze data, form conclusions, and present well-reasoned, persuasive arguments in written form. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework time in this class is approximately 60 minutes.

**ECONOMICS**

**Grade Level:** 12  
**Length:** 1 semester  
**Prerequisite:** U.S. History  
**Graduation:** Fulfills Economics and third year Social Science graduation requirement  
**College Prep:** Fulfills CSU/UC elective requirement with a grade of “C” or better

In this course, students study fundamental economic concepts, appreciate how the principle concepts of economics relate to each other, and understand the structure of our nation's economic system. The goal of the course is to help students make reasoned judgements about economic policies which affect their lives. Focal points of this course include understanding terminology, interpreting tools of analysis, identifying economic indicators, personal finance, studying the use of goods and services, understanding the role of market and elements in the economy, identifying forms of business organizations, and analyzing the role of government. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is approximately 30 minutes.

**AP MICROECONOMICS**

**Grade Level:** 12  
**Length:** 1 semester  
**Prerequisite:** US History teacher recommendation and successful completion of Algebra II with a B or better or Advanced Algebra II with a C or better  
**Graduation:** Fulfills Economics and third year Social Science graduation requirement  
**College Prep:** Fulfills CSU/UC elective requirement with a grade of “C” or better, weighted course
Advanced Placement Microeconomics is a course designed to provide students with a challenging, thorough understanding of the specific principles of economics that apply to the individual decision makers, individual households and firms, which fuel our economic system. Students will examine the theory of consumer behavior, which includes opportunity cost and incentives. Emphasis will be placed on the nature and functions of product markets, where students will evaluate determinants of supply and demand, production and costs, and the theory of the firm. Students will also examine the behavior of factor markets, and will explore the role of government in promoting the economic goals of equity and efficiency. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is approximately 60 minutes.

CIVICS
Grade Level: 12
Length: 1 semester
Prerequisite: U.S. History
Graduation: Fulfills Civics Social Science and third year graduation requirement
College Prep: Fulfills CSU/UC Social Science requirement with a grade of “C” or better
This course affords an understanding of the American political system with particular emphasis on the importance of participation in a democracy. Critical political science concepts are explored along with the sociopolitical patterns evident in American society today. The framework of state government is also examined with a look at California government. Critical thinking skills are promoted through discussions, activities, projects, lectures, and simulations. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is approximately 30 minutes.

AP UNITED STATES GOVERNMENT AND POLITICS
Grade Level: 12
Length: 1 semester
Prerequisite: US History teacher recommendation, with a C or better in US History and English 3 course
Graduation: Fulfills Civics and third year Social Science graduation requirement
College Prep: Fulfills CSU/UC Social Science requirement with a grade of “C” or better, weighted course
This course serves as an introduction to the U.S. national government. The AP course will give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is approximately 60 minutes.

Social Studies elective courses:

AP PSYCHOLOGY
Grade level: 11-12
Length: 1 year
Prerequisite: Minimum 3.0 GPA, B grades in Biological Science (Biology or Biology with Research and B grade in Chemistry or C in Honors Chemistry; B grades in Social Studies and Social Studies teacher recommendation
Graduation: Fulfills elective credit
College prep: Fulfills CSU/UC "G" area college prep elective with a grade of “C” or better, weighted course
The purpose of the course is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with
each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their
science and practice. Homework for this course is an invaluable tool used to introduce, reinforce, and help with
comprehension with respect to course material. The nightly average of homework in this class is approximately 60 minutes.

ETHNIC AND CULTURAL DIVERSITY IN AMERICA
Grade Level: 10-12
Length: 1 semester
Prerequisite: none
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" area elective requirement with a grade of “C” or better
Students will have a broad understanding of the struggles, accomplishments and contributions of various ethnic and cultural
groups in America. Students develop an appreciation for the diversity in America and how it positively shapes our country.
Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to
course material. The nightly average of homework in this class is approximately 30 minutes.

AMERICA IN THE 1960’s
Grade level: 10 -12
Length: 1 semester
Prerequisite: Teacher recommendation
Graduation: Fulfills elective credit
College prep: Fulfills CSU/UC “G” area elective with a grade of “C” or better
No decade had as a greater impact on the culture of America than the 1960’s. This course will discuss it all....The Music,
Elvis-the Beatles-the Stones- the Beach Boys-Motown......The War in Vietnam....the protests of that war...JFK, LBJ, and
Nixon....Civil Rights-MLK, Malcolm X, Black Panthers and the Watts Riots......The first Super Bowls and the A’s arriving
in Oakland....Hippies, Yippies, Woodstock and the Altamont. Homework for this course is an invaluable tool used to
introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this
class is approximately 30 minutes.

LAW AND SOCIETY
Grade Level: 11-12
Length: 1 semester
Prerequisite: none
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC “G” area elective requirement with a grade of “C” or better
This course is designed to give the student a practical understanding of the law and legal system in the United States. The
course includes a study of the roles of lawyers, police officers, and courts in our legal system. Students learn about their
rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments. Class activities such as mock trials
and other simulated legal procedures, together with outside speakers, help students understand the United States legal
system. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with
respect to course material. The nightly average of homework in this class is approximately 30 minutes.

THE CIVIL WAR IN AMERICA
Grade Level: 10-12
Length: 1 semester
Prerequisite: Teacher recommendation
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" area college prep elective with a grade of “C” or better
The Civil War is the most important event in American History. The war that ends slavery will be the most costly ever in
America. Over 1.5 million casualties, 1% of our population will be killed or wounded. In today’s numbers that would
equal 3 million people. Students will learn how and why our nation is torn in half. This course will discuss the first
Modern War and the generals, such as Grant and Lee and Sherman and Stonewall that fight the great battles. Our greatest heroes and villains, bloodiest battles, most famous president and infamous assassination will come alive in this course. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is approximately 30 minutes.

**WORLD WAR II**
Grade Level: 10-12
Length: 1 semester
Prerequisite: None
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC elective requirement with a grade of “C” or better

With over 60 nations involved, and resulting in the deaths of more than 60 million people, no other war in the history of the world can be considered to be as catastrophic as World War II. This course will provide a chronological, in-depth look at how this war begins and progresses, and students will observe how simultaneous events occurring on all fronts make this war a truly global conflict. Through primary source analysis, critical writing, and study of military tactics, students will gain a deeper understanding of this cataclysmic event and respect for a generation of young men and women around the world that preserved freedom and changed the world forever. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework is 30 minutes.

**THE WILD WEST**
Grade Level: 10-12
Length: 1 semester
Prerequisite: None
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" area elective requirement with a grade of “C” or better

This class will discuss the Settling of the American West. All the big names including: Daniel Boone, Davy Crockett, Kit Carson, Wild Bill Hickok, Crazy Horse, Sitting Bull, Geronimo, and Billy the Kid will be there. All the Big Events including The Donner Party, The Alamo, The Plains Indians Wars, The Gold Rush, Custer's Last Stand, Range Wars and The Gunfight at the OK Corral. This class will have it all-Mountain Men, Trail Blazers, Cowboys, Prospectors, Sodbusters, Native Americans, Sheriffs, Gunfighters and Outlaws. This class will be everything American History should be and never is. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is approximately 30 minutes.

**AP HUMAN GEOGRAPHY**
Grade Level: 9-12
Length: One year
Prerequisites: A grades in 8th grade History and English (freshmen) and A in English (sophomores), A in History classes (juniors and seniors)
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC college prep elective with a grade of “C” or better, weighted course (weighted in grade 10 and above on the college prep GPA, weighted in cumulative GPA if taken in grade 9)

The purpose of the AP Human Geography course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Students also learn about the methods and tools geographers use in their science and practice. This course also has an emphasis on increasing geo-literacy, analyzing global issues, and approaching problem-solving geographically. Homework for this course is an invaluable tool used to introduce, reinforce, and help with comprehension with respect to course material. The nightly average of homework in this class is approximately 60 minutes.
SPECIAL EDUCATION CLASSES

The overall purpose of the program is to meet the individual needs of students with an Individual Education Plan (IEP) in the least restrictive environment. The two types of programs at Dublin High School are listed below. Additional services include: Adaptive PE, Workability, Speech/Language and Psychological Support Services. Special Education classes are not college preparatory.

RESOURCE SPECIALIST PROGRAM
The Resource Specialist Program provides students with an identified disability academic, compensatory instruction, and support necessary for success in high school. Tutorial and instructional assistance is given.

SPECIAL DAY CLASSES
The Special Day Classes offer an alternative to students with specific disabilities who require additional support. Direct instruction in the core curriculum is offered through Special Day Classes with modifications and adaptations to fulfill school requirements.

ENGLISH 1-2- RSP Freshman/Sophomore English
Grade Level: 9-10
Length: 1 year
Prerequisite: Current IEP
Homework: Practice skills, review study materials (averaging 10-20 mins/day)
Graduation: Fulfills 1-2 years of 4-year English requirement
This literary survey course covers multiple types of writing and reading. Teachers emphasize development of literary skills including inference and annotation of plays, short stories, poems, novels and non-fiction articles. Students develop skills for composing the multi-paragraph essay using textual support and work on several shorter writings. Students engage in both small group and whole class discussion, developing skills to work well with others. Students also present informal and formal projects/speech. Daily time commitment:

ENGLISH 3-4- American Literature
Grade Level: 11-12
Length: 1 year
Prerequisite: Current IEP
Homework: Practice skills, review student materials (averaging of 10-20 mins/day)
Graduation: Fulfills 1-2 years of 4-year English requirement
Students engage in an extensive survey course of American Literature from the 17th through the 21st century. Writing expectations include developed essays, including analyzing literature, developing strong arguments, and forming informational pieces. Students build skills in discussion and critical thinking. Students prepare for the state-required Common Core assessment (SBAC). Daily time commitment:

WORLD HISTORY
Grade Level: 9-12
Length: 1 year
Prerequisite: Current IEP
Homework: Extension and review of classwork (averaging 60 mins/weekly)
Graduation: Fulfills World History requirement
Students receive instruction that parallels the regular World History programs. Modified presentations include information on the geography, history, cultures, economics, and politics of the major world regions. Daily time commitment:
SKILLED-BASED ENGLISH
Grade Level: 9-12
Length: 1 year
Prerequisite: Current IEP
Homework: Extension and completion of classwork (15-30 mins/day)
Graduation: Fulfills 1-4 years of 4 year English requirement

Students receive instruction that focuses on developing students reading and written language skills. Basic skill remediation emphasizes the areas of reading, writing, spelling, speaking, and listening.

RSP ALGEBRA
Grade Level: 9-10
Length: 1 year
Prerequisite: Reserved for students with an IEP
Homework: Practice skills, review study materials, preview next unit (20-30 mins/day)
Graduation: Fulfills one year of the three year math requirement, fulfills Algebra requirement for graduation

This is a strong pre-algebra course taught for students with an IEP. The course includes remedial opportunities in computation, math facts, and numbers sense and integrates Algebra, Geometry, coordinate geometry, patterns and functions. Students work on problem solving techniques and real life modeling.

RSP GEOMETRY
Grade Level: 10-11
Length: 1 year
Prerequisite: Successful completion of Informal Algebra, RSP Algebra or Algebra, IEP and DHS teacher approval
Graduation: Fulfills the Geometry graduation requirement. Fulfills one of the three math requirements.
College Prep: Does NOT fulfill CSU/UC math requirement

This course is for students who need to continue to improve their algebra skills as they learn the basic standards for Geometry. Memorization of geometry theorems and definitions is expected. Students will learn the basics of geometry and its language, shapes of two and three dimensions and their properties and size measurements, similarity, and transformations. Students must pass both semesters of this course to fulfill graduation requirement. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

INFORMAL ALGEBRA
Grade Level: 9-10
Length: 1 year
Prerequisite: Current IEP and Case Manager approval
Graduation: Fulfills one year of math requirement
College Prep: Does NOT fulfill CSU/UC math requirement

Students receive instruction in introductory algebra concepts and skills using concrete rather than an abstract approach. Other topics include problem solving, measurement, and geometry, preparing the student for the next course of Informal Geometry. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

INFORMAL GEOMETRY
Grade Level: 10-11
Length: 1 year
Prerequisite: Successful completion of Informal Algebra or RSP Algebra and DHS teacher approval.
Graduation: Fulfills one of three math requirements.
College Prep: Does NOT fulfill CSU/UC math requirement
This course is for students who need to continue to improve their algebra skills as they learn the basic standards for Geometry. Memorization of geometry theorems and definitions is expected. Students will learn the basics of geometry and its language, shapes of two and three dimensions and their properties and size measurements, similarity, and transformations. Students must pass both semesters of this course to fulfill graduation requirement. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

SKILLED-BASED MATHEMATICS (SDC MATH)
Grade Level: 9-12
Length: 1 year
Prerequisite: Current IEP
Homework: Extension of skills and completion of classwork (15 mins/day)
Graduation: Fulfills 1-2 years of Math requirement

Students receive instruction in the fundamentals of mathematics and life skills mathematics. Instruction introduces and/or reviews basic whole number operations, fractions, decimals, percents, measurement, and practical applications. This course offers remediation for transition into the Algebra Skills class.

U.S. HISTORY
Grade Level: 11-12
Length: 1 year
Prerequisite: Current IEP
Homework: Extension and review (averaging 60 mins/week)
Graduation: Fulfills U.S. History requirement

Students receive instruction that parallels the regular U.S. History program. Modified instruction covers U.S. political, social, and economic history from the Colonial period through contemporary times.

ECONOMICS
Grade Level: 11-12
Length: 1 semester
Prerequisite: Current IEP
Homework: Extension and review (averaging 60 mins/week)
Graduation: Fulfills Economics requirement

Students receive instruction that parallels the regular Economics program. Modified presentations include information on the fundamental economic concepts, principles of economics as they relate to each other, and an understanding of the structure of our nation’s economic system.

CIVICS
Grade Level: 11-12
Length: 1 semester
Prerequisite: Current IEP
Homework: Extension and review (averaging 60 mins/week)
Graduation: Fulfills Civics requirement

Students receive instruction that parallels the regular Civics program. Modified presentations include the American political system, critical political science concepts, and the sociopolitical patterns evident in American society today.

SCIENCE 1-2-3
Grade Level: 9-12
Length: 1 year per level
Prerequisite: Current IEP
Homework: Bi-weekly assignments and review/prep for exams (averaging 30 mins/week)
Graduation: Each level fulfills one year of the 3 year science graduation requirement.
Students receive instruction that parallels the science curriculum. Modified instruction by level examines conceptual physics, biology, and earth science content.

**RSP ELECTIVE TUTORIAL**
Grade Level: 9 - 12
Length: Per the student’s IEP
Prerequisite: Reserved for students with an IEP
Homework: Weekly grade checks (10 mins/week)
Graduation: Fulfills elective credit requirement. Course can be taken multiple years.
The Resource Tutorial Program is designed to assist students in completing their high school education within the prescribed four-year period. This program structures time and instructional assistance for students with their academic classes. Additionally, teacher and student monitoring of academic progress is built into the program. Elective credit is earned by successfully completing this class.

**SDC ELECTIVE TUTORIAL**
Grade Level: 9-12
Length: 1 year
Prerequisite: Current IEP
Homework: None
Graduation: Fulfills 1 year elective credit requirement. Course can be taken multiple years.
Students receive tutorial and instructional assistance necessary for success in high school.

**COUNSELING ENRICHED SDC**
Grade Level: 9-12
Length: 1 year
Prerequisite: Current IEP
Homework: Extension and completion of classwork (15-60 mins/week)
Graduation: Fulfills specific academic requirements
Specific course selections and schedules are determined on an individual student basis and planned by the Individual Education Plan team.

**MODERATE/SEVERE SDC**
Grade Level: age range from 14-18
Length: 1 year
Prerequisite: Current IEP
Homework: Extension and practice of classroom taught skills (0-60 mins/week)
Graduation: Does not meet academic requirements
Specific student academic and life-skills are determined on an individual student basis and planned by the Individual Education Plan team.

**LIFESKILLS SDC**
Grade Level: 9-12
Length: 1 year
Prerequisite: Current IEP
Homework: Extension and practice of classroom taught skills (0-60 mins/week)
Graduation: Does not meet academic requirements
Special Day Class for Students with Moderate to Severe Disabilities: This class is geared toward addressing IEP goals and objectives that focus on functional academic skills, social skills, prevocational/vocational skills, community skills, and
independent living skills. This classroom and community-based instruction is designed to teach students to function as independently as they can in their community.

**DEVELOPMENTALLY DELAYED SDC**
Grade Level: through age 22  
Length: 1 year  
Prerequisite: Current IEP  
Homework: Extension and practice of classroom taught skills (0-60 mins/week)  
Graduation: Does not meet academic requirements  
Specific student academic and life-skills are determined on an individual student basis and planned by the Individual Education Plan (IEP) team.

**TRANSITION PROGRAM**
Grade Level: 18-22 years old  
Length: 4 years  
Prerequisite: Current IEP  
Homework: Extension and practice of classroom taught skills (0-60 mins/week)  
Graduation: Does not meet academic requirements  
The Transition Program is a post high school Special Day Class for students on the Certificate of Completion track. Life skills are taught using real world settings within the community as well as in the classroom. The primary goal is to establish greater independence within each individual student.
WORLD LANGUAGES

FRENCH 1
Grade Level: 9-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills World Language requirement
This course is designed to introduce the student to basic grammar, vocabulary and conversation in French. Material on the geography and culture of French-speaking countries is also included. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

FRENCH 2
Grade Level: 9-12
Length: 1 year
Prerequisite: A passing grade in French 1
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better
This course is a continuation of French 1 with emphasis on improving the student's ability to communicate through speaking, listening, reading and writing. Culture and geography will be explored in detail. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

FRENCH 3
Grade Level: 9-12
Length: 1 year
Prerequisite: A passing grade in French 2
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better
This course continues to teach the more advanced concepts in writing, reading, understanding and speaking French. Literature is introduced. The culture of francophone countries, including francophone Africa, is explored. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

FRENCH 4 HONORS
Grade Level: 10-12
Length: 1 year
Prerequisite: A passing grade in French 3
Graduation: Fulfills Foreign Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better, weighted grade with a “C” or better.
This course is designed to further improve the students' skills in reading, written, oral expression and comprehension. Long-term assignments and group projects allow students to showcase their knowledge of the language and culture of French. French literature will be read and discussed. Advanced concepts in grammar, writing and speaking are taught. Culture is also explored. This class is taught exclusively in the target language.

AP FRENCH LANGUAGE AND CULTURE
Grade Level: 11-12
Length: 1 year
Prerequisite: A passing grade in French 4 Honors
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better, weighted grade with a “C” or better

This course is comparable to a 3rd year college-level course. It consists of a thorough review of all the major French grammatical structures, reading and discussion of literature in French, in-depth discussion of news and current events, essay writing, practice in speaking, and frequent tests. It culminates in the taking of the Advanced Placement exam in French language. Students who pass the exam, may receive college credit. This class is taught exclusively in the target language.

SPANISH FOR HERITAGE SPEAKERS I
Grade Level: 9-12
Length: 1 year
Prerequisite: Spanish native speaker, heritage speaker or educated in a dual immersion program
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better

This class has been developed for native and heritage speakers who although raised in Spanish-speaking communities or households, are not fully proficient in Spanish. SPH courses take into account the experiences and influences of bilingual and bicultural upbringing. In addition, this class is open to students who have been educated in a dual immersion program and are sufficiently proficient. The study of themes, such as: individual and society, leisure and work, urban and rural environment will provide students the opportunity to build their speaking, listening, writing and reading skills in their heritage language. An appreciation of the various Hispanic cultures in the US, Latin America, Spain and the Caribbean will be explored through history, literature, art, as well as popular culture and lifestyle. This class is taught exclusively in the target language. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

SPANISH FOR HERITAGE SPEAKERS II
Grade Level: 9-12
Length: 1 year
Prerequisite: Spanish native speaker, heritage speaker or educated in a dual immersion program or completion of Spanish for Heritage Speakers 1 with a “C” or better or department assessment
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better (pending)

This class is taught exclusively in the target language. This course is a more in depth continuation of Spanish for Heritage Speakers 1. Spanish for Heritage Speakers 2 allows students to further explore their experiences and influences of their bilingual and bicultural upbringing. This course provides students the opportunity to continue to hone their academic Spanish communication skills through analytical reading, creative and informative writing, debating, formal presentations and discussions. This course also promotes global citizenship, intercultural understanding and an appreciation of the cultural riches of the Hispanic world through a wide range of text types and cultural material from around the world. This class is taught exclusively in the target language. Successful completion of this course qualifies students to pursue Advanced Placement courses in Spanish. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

SPANISH 1
Grade Level: 9-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better

This course introduces the student to basic vocabulary, grammar and conversation in Spanish. The geography and culture of Spanish-speaking countries will also be explored. This course is not designed for native speakers. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
SPANISH 2
Grade Level: 9-12
Length: 1 year
Prerequisite: Successful completion of Spanish 1 and teacher recommendation
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better
This course is a continuation of Spanish 1 with an emphasis on improving the student’s ability to communicate orally, in listening comprehension, and in reading and writing. Culture and geography are again studied. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

SPANISH 3
Grade Level: 9-12
Length: 1 year
Prerequisite: Successful completion of Spanish 2 and teacher recommendation.
Graduation: Fulfills Foreign Language requirement
College Prep: Fulfills CSU/UC Foreign Language requirement with a grade of “C” or better
This course teaches advanced concepts in writing, reading, listening, and speaking Spanish. Culture and geography are covered in detail. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

SPANISH 4 HONORS
Grade Level: 10-12
Length: 1 year
Prerequisite: Successful completion of Spanish 3 and teacher recommendation.
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better, weighted grade with “C” or better
This course is designed to further improve the student’s skills in written and oral expression, and in reading and writing. Art and literature are introduced. Advanced concepts in grammar, writing, and speaking are taught and reviewed. This class is taught exclusively in the target language.

AP SPANISH LANGUAGE AND CULTURE
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Spanish 3 or 4H and teacher recommendation.
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better, weighted grade with “C” or better
This course is comparable to a 3rd year college-level course. It consists of a thorough review of all of the major Spanish grammatical structures, reading and discussion of authentic resources in Spanish, essay writing, full immersion in the Spanish language, frequent tests, and in-depth study of Spanish speaking cultures. This course culminates in the taking of the Advanced Placement Exam in Spanish Language. (Note: if enrollment is not sufficient to offer a separate class, only those students who receive teacher approval will complete the above work independently or prepare independently for the Advanced Placement Exam in Spanish Language.) This class is taught exclusively in the target language.

AP SPANISH LITERATURE AND CULTURE
Grade Level: 11-12
Length: 1 year
Prerequisite: Successful completion of Spanish 4 or AP Spanish Language and teacher recommendation
Graduation: Fulfills World Language requirement
This course is designed to introduce students to the formal study of a representative body of literature, written in Spanish, from Spain, Latin America and the United States. It provides students with ongoing and varied opportunities to develop proficiency in Spanish across a full range of skills, with emphasis on critical reading and analytical writing. It also encourages students to reflect on the many voices and cultures included in the rich and diverse body of literature written in Spanish. This class is taught exclusively in the target language.

**CHINESE MANDARIN FOR HERITAGE SPEAKERS 1**

- **Grade Level:** 9-12
- **Length:** 1 year
- **Prerequisite:** Mandarin native speaker, heritage speaker or educated in a dual immersion program
- **Graduation:** Fulfills World Language requirement
- **College Prep:** Fulfills CSU/UC World Language requirement with a grade of “C” or better

This class has been developed for heritage speakers who although raised in Mandarin-speaking communities or households, are not fully proficient in Mandarin. CMPH courses take into account the experiences and influences of bilingual and bicultural upbringing. In addition, this class is open to students who have been educated in a dual immersion program. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**CHINESE MANDARIN 1**

- **Grade Level:** 9-12
- **Length:** 1 year
- **Prerequisite:** none
- **Graduation:** Fulfills World Language requirement
- **College Prep:** Fulfills CSU/UC World Language requirement with a grade of “C” or better

This is a beginning Mandarin Chinese course intended for students with no prior knowledge of any Chinese speaking or writing ability. This course will focus on the Chinese Hanyu Pinyin (phonetic) system: tones, rules of phonetic spelling, and pronunciation drill; and Chinese characters: creation and evolution, stroke order, structure, and the writing system. Reading and writing skills are introduced. Students will learn the basic sentence patterns, and develop the Chinese language skills in listening, speaking, reading, and writing. This course is not designed for native speakers. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**CHINESE MANDARIN 2**

- **Grade Level:** 9-12
- **Length:** 1 year
- **Prerequisite:** Successful completion of Chinese 1 and teacher recommendation.
- **Graduation:** Fulfills World Language requirement
- **College Prep:** Fulfills CSU/UC World Language requirement with a grade of “C” or better

This course is designed for students interested in a continuation of learning Mandarin Chinese. This course will focus on the review of grammar and a further development of reading, speaking, listening and writing skills. This course presupposes a basic knowledge of Chinese, characters, sentences, and grammar. Emphasis will be placed upon practical use of Chinese, so that students will experience the world of Communication among the Chinese language speaking people. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**CHINESE MANDARIN 3**

- **Grade Level:** 9-12
- **Length:** 1 Year
- **Prerequisite:** Successful completion of Mandarin 2 or teacher recommendation
- **Graduation:** Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better

This course is a continuation of the study of the Chinese language and culture. It will expand students’ ability to function in Mandarin developed in Mandarin I and Mandarin II. Students will develop fluency in understanding, speaking, reading, and writing Chinese. Selected readings about Chinese culture and literature will be explored. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

CHINESE MANDARIN 4 HONORS
Grade Level: 10-12
Length: 1 Year
Prerequisite: Successful completion of Mandarin 3 or teacher recommendation
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better

This course is a continuation of the study of the Chinese language and culture. It will expand students’ ability to function in Mandarin developed in levels 1, 2, 3. Students will develop fluency in understanding, speaking, reading, and writing Chinese. Selected readings about Chinese culture and literature will be explored. This class is taught exclusively in the target language.

AP CHINESE LANGUAGE AND CULTURE
Grade Level: 10-12
Length: 1 Year
Prerequisite: Successful completion of Mandarin 4H or teacher recommendation
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better

In this course, you will use authentic Chinese materials and sources to develop your language skills in multiple modes of communication, including two-way interactions in both writing and speaking; interpretation of audio, audiovisual, and print materials; and oral and written presentation of information and ideas. This course culminates in the taking of the Advanced Placement Exam in Chinese Language. This class is taught exclusively in the target language.

AMERICAN SIGN LANGUAGE 1
Grade Level: 9-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better

The American Sign Language (ASL) class provides an introduction to the language of the Deaf, the Deaf Community, and Deaf Culture. The classes emphasize ASL conversational skills in functional situations and provide students an opportunity to explore the language and culture of deafness. This class is full immersion program with no spoken word. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

AMERICAN SIGN LANGUAGE 2
Grade Level: 9-12
Length: 1 year
Prerequisite: Successful completion of ASL 1 and teacher recommendation
Graduation: Fulfills World Language requirement
College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better

Students will further develop the conversational and cultural behaviors necessary to hold a conversation with native ASL users. Along with in-class dialogue practice and homework, students will sign skits, children’s stories, and attend out-of-class functions to aid in awareness of and appreciation for the unique language and culture of the Deaf community.
This class is full immersion program with no spoken word. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**AMERICAN SIGN LANGUAGE 3**
- Grade Level: 10-12
- Length: 1 year
- Prerequisite: Teacher recommendation and grade of “C” or better in ASL 2
- Graduation: Fulfills World Language requirement
- College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better

Students will build on their current understandings of Deaf culture and the Deaf community through continued in-class practice, as well as out-of-class functions. Skits, stories, and songs will be performed to further students’ signing abilities as well as level of comfort signing in front of others. ASL is the mode of communication used in class to discuss Deaf culture as well as current events within the community. Careers in the fields of deaf education and interpreting will be examined as well as prospective volunteer opportunities in our local community. This class is full immersion program with no spoken word. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**AMERICAN SIGN LANGUAGE 4 HONORS**
- Grade Level: 10-12
- Length: 1 year
- Prerequisite: Successful completion of ASL 3 and teacher recommendation
- Graduation: Fulfills World Language requirement
- College Prep: Fulfills CSU/UC World Language requirement with a grade of “C” or better, weighted course if grade of “C” or better is earned

This course covers the in-depth exposure and comparative analysis of the Deaf social and linguistic experience using American Sign Language. ASL will be particularly useful to persons with interest in better, more effective communications with deaf individuals, and for those interested in eventual interpreting, teaching, and/or working with the deaf and hard of hearing communities. This is a full-immersion class, where instruction and discussions are conducted completely in American Sign Language. This class is full immersion program with no spoken word.
ENGINEERING COURSES

PLTW INTRODUCTION TO ENGINEERING DESIGN (IED)
Grade Level: 9-12
Length: 1 year
Prerequisite: None
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC “g” area elective credit,
In this course, students use 3D solid modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. 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. This is one of the two recommended first-year course for students interested in the Engineering & Computer Science Pathway. Homework is typically the completion of classwork or projects not completed within the class period that will need to be completed at home. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

PLTW COMPUTER SCIENCE PRINCIPLES (CSP)
Grade Level: 9-12
Length: 1 year
Prerequisite: None
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC “g” area elective credit
This is an introductory programming course which surveys a variety of computer science principles. Students will study units in computer science, web design and information technology, information science, and software engineering, while learning to use HTML, CSS, Javascript, Scratch, Python and SQL. Students will also use MIT’s AppInventor to develop an Android app. This is one of the two recommended first-year courses for students interested in the Engineering & Computer Science Pathway. This course covers topics aligned to the AP Computer Principles exam (Note: Additional preparation will be needed to successfully pass the AP test since this is an introductory course). Homework is typically assigned weekly with an end of week quiz to check understanding & learning. In addition, classwork or projects not completed within the class period will need to be completed at home. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

PLTW PRINCIPLES OF ENGINEERING HONORS (POE)
Grade Level: 10-12
Length: 1 year
Prerequisite: Must have Engineering teacher recommendation and completion of Algebra with a ‘B’ or higher, with completion of CSP or POE with a ‘C’ or higher
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC “g” elective credit, Weighted grade, Articulated to LPC ENG 10
This survey course of engineering exposes students to some of the major concepts they’ll encounter in a post-secondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. 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. Students also learn how to document their work and communicate their solutions to
peers and members of the professional community. This is a required course for all students in the Engineering Academy. Students earning a B or better in this course earn 2 units of college credit through Las Positas College. Homework is typically assigned weekly with daily check-offs and consists of 2-4 multi-step problems. In addition, classwork or projects not completed within the class period will need to be completed at home. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**PLTW CYBERSECURITY (CS)**
Grade Level: 10-12
Length: 1 year
Prerequisite: Must have Engineering teacher recommendation with completion of CSP or POE with a ‘C’ or higher
Graduation: Fulfills elective credit
College Prep: Fulfills CSU/UC “g” area elective credit

In this course, students learn many aspects of digital and information security, while discussing socially responsible choices and ethical behavior. CS uses the National Cybersecurity Workforce Framework to train students as cybersecurity experts do. Homework is typically assigned once per unit and consists of applications-based practice problems. In addition, classwork or projects not completed within the class period will need to be completed at home. Students will be expected to submit current events in class each week. Please note that there is another Cybersecurity course through the ROP (Regional Occupational Program.) Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**PLTW DIGITAL ELECTRONICS HONORS (DE)**
Grade Level: 10-12
Length: 1 year
Prerequisite: Must have Engineering teacher recommendation with completion of CSP or POE with a ‘C’ or higher
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC elective credit, weighted grade, articulated to DVC ELTRN 116

Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, while designing their own electronic circuits for design implementation. Students also continue to refine their communication skills through engineering standards and technical documentation. This course is a specialization-level course designed to follow the Project Lead the Way Engineering foundational courses. Additionally, students earning a C or better in this course earn 3 units of college credit through Diablo Valley College. Homework is typically assigned once per unit and consists of applications-based practice problems. In addition, classwork or projects not completed within the class period will need to be completed at home. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

**PLTW AP COMPUTER SCIENCE APPLICATIONS (CSA)**
Grade Level: 11-12
Length: 1 year
Prerequisite: Must have Engineering teacher recommendation with completion of CSP or POE with a ‘C’ or higher
Graduation: Fulfills elective credit
College Prep: Fulfills CSU/UC “g” area elective credit, Weighted grade.

Students will learn to design and implement computer programs using Java that solve problems relevant to today’s society, including art, media, and engineering. Students will also learn to apply programming tools and solve complex problems.
through hands-on experiences and examples. Computer Science A emphasizes object-oriented programming methodology with an emphasis on problem solving and algorithm development and is meant to be the equivalent of a first-semester college course in computer science. Homework is typically assigned once per unit and consists of applications-based practice problems. In addition, classwork or projects not completed within the class period will need to be completed at home. This course covers topics aligned to the AP Computer Science A exam. Summer homework is required. Students must take Computer Science Principles as a pre-requisite, taught at Dublin High School, in order to take this class.

ROP PLTW COMPUTER INTEGRATED MANUFACTURING (CIM)
School Site: Dublin High School
Grade Level: 11-12
Length: 1 year
Prerequisite: Must have Engineering teacher recommendation with completion of IED with a ‘C’ or higher or ACU/ACP Inventor Certification
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC elective credit

How are things made? What are current methods and what are future processes likely to be for fabricating products? How do you go from ideas and inventions to successful products? How do assembly lines work? How will computer aided design, robotics, and automation continue to revolutionize manufacturing? While students discover the answers to these questions, they’re learning about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems. Students learn to utilize 3D printing, laser cutting and engraving, and CNC machining to prototype their designs. This course is a specialization-level course designed to follow the Project Lead the Way Engineering foundation courses. Homework is typically the completion of classwork or projects not completed within the class period that will need to be completed at home. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ROP PLTW CIVIL ENGINEERING AND ARCHITECTURE (CEA)
School Site: Livermore HS
Grade Level: 11-12
Length: 1 year
Prerequisite: Completion of POE or IED
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC “g” area elective credit

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. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects. This course is a specialization-level course designed to follow the Project Lead the Way Engineering foundation courses. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
BIOMEDICAL SCIENCE ACADEMY CLASSES

PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW)
Grade level: 9-12
Length: 1 year
Prerequisite: Concurrent enrollment or completion of Biology with Research and membership in
PLTW Biomedical Academy
Homework: 1-2 hours per week for the purpose of review and extension, especially Internet research
and analysis of concepts learned. A detailed lab notebook will be kept.
Graduation: Fulfills the 3rd year elective science requirement
College Prep: Fulfills CSU/UC “d” lab science requirement with a grade of “C” or better
Students investigate various health conditions including heart disease, diabetes, sickle-cell anemia, hypercholesterolemia,
and infectious diseases. Students determine the factors that led to the death of a fictional person, and investigate lifestyle
choices and medical treatments that might have prolonged the person’s life. The activities and projects introduce students to
human physiology, medicine, and research processes. This course provides an overview of all the courses in the Biomedical
Sciences program and lays the scientific foundation for subsequent courses.

HUMAN BODY SYSTEMS (PLTW)
Grade level: 10-12
Length: 1 year
Prerequisite: Successful completion of Biology with Research, membership in PLTW Biomedical
Academy and have an interest in the medical field
Homework: 1-2 hours per week for the purpose of review and extension, especially Internet research
and analysis of concepts learned. A detailed lab notebook will be kept.
Graduation: Fulfills life science requirement
College Prep: Fulfills CSU/UC “d” lab science requirement with a grade of “C” or better
Students will examine the interactions of human body systems as they explore identity, power, movement, protection,
and homoeostasis. Students will design experiments, investigate the structures and functions of the human body, and use
data acquisition software to monitor body functions such as muscle movement, reflexes, voluntary action and respiration.
Exploring science in action, students build organs and tissues on a mannequin, work through interesting real world cases
and often play the roles of biomedical professionals to solve medical mysteries.

MEDICAL INTERVENTIONS HONORS (PLTW)
Grade level: 11-12
Length: 1 year
Prerequisite: Successful completion of PBS, HBS, or other AP/Honors science course, membership in
PLTW Biomedical Academy and have an interest in the medical field.
Homework: 3-5 hours per week for the purpose of preview, review, and extension, especially Internet
research, lab report writing, and analysis of concepts learned. Further time outside of class
may be required for the unit projects and independent community service project. Many
multi-day complex biotechnology labs will be performed and a detailed lab notebook will
be kept with several formal lab reports.
Graduation: Fulfills life science requirement
College Prep: Fulfills CSU/UC “d” lab science requirement with a grade of “C” or better, weighted
grade
Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. They will learn about various biomedical careers through case studies, and will even be asked to research and play the role of these biomedical professionals in many instances. They will also interact with actual biomedical professionals in our community through guest speaker visits and unit projects. The four main units are Infectious Disease, Genetic Screening, Cancer, and Organ Failure. Within these, students will explore how to detect and fight infection, screen and evaluate the code in human DNA, evaluate cancer treatment options, and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario will introduce multiple types of interventions, reinforce concepts learned in the previous two courses, and present new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders through cutting edge innovations. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role that scientific thinking and engineering design play in the development of interventions of the future. Students practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Students will also be required to conduct their own independent “Connect to the Community” project in which they will design a community service project aimed at bettering the health of people on campus or in their local community.

**BIOMEDICAL INNOVATION HONORS (PLTW)**

<table>
<thead>
<tr>
<th>Grade Level:</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length:</td>
<td>1 year</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>C or better in Biology and Chemistry as well as C or better in an Honors or AP Science course.</td>
</tr>
<tr>
<td>Homework:</td>
<td>1 hour per night</td>
</tr>
<tr>
<td>Graduation:</td>
<td>Fulfills 10 credits of elective credit</td>
</tr>
<tr>
<td>College Prep:</td>
<td>UC/CSU “G” area elective course, weighted if student earns a “C” or better</td>
</tr>
</tbody>
</table>

PLTW Biomedical Innovation is a UC “G” elective Honors course. Senior students apply their knowledge and skills to answer questions and solve problems related to biomedical sciences. Problems include: designing an effective emergency room, exploring human physiology through direct testing, designing a medical innovation, investigating environmental health, combating a public health issue and an independent project of their choice. Much of this work requires a strong background in Biology, Chemistry and Medicine. Students must have a good work ethic and be able to work independently to meet deadlines and prepare presentations. There is a cumulative final exam at the end of the second semester that tests knowledge from both semesters. Priority enrollment is given to seniors in the PLTW Biomedical Academy, as this serves as the Capstone course for the program.
CULINARY ACADEMY CLASSES

CULINARY ARTS
Grade Level: 9-12
Length: 1 semester
Prerequisite: none
Graduation: Fulfills Applied Arts requirement
College Prep: UC/CSU "G" Elective credit with grade of “C” or better
This basic foods course covers kitchen principles, recipe skills, guidelines for good nutrition, and mealtime customs. Students learn the principles of preparing quick breads, cookies, salads, soups, sandwiches, casseroles, dairy products, and eggs. As students study food preparation, they explore careers in the food industry. The basis of this course is to develop confidence in the kitchen. Emphasis is on making healthy food choices and safeguarding the family’s health. Areas of food preparation include meat, poultry, pasta, fruits and vegetables, breads, cakes, and candies. Careers opportunities are explored. Food preparation and service is a very important part of this class. This is a hands-on class. There is a $25 lab fee each semester for consumable materials. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

INTERNATIONAL CUISINE
Grade Level: 9-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills Applied Arts requirement
College Prep: UC/CSU "G" Elective credit with grade of “C” or better
This is a comprehensive course in International Cookery. The purpose of this course is to link the culinary/technical skills of regional and world cuisines with social and cultural heritage behind them and to provide students with historical and cultural context. This course focuses on understanding the differences and commonalities we have with other cultures around the world. This course provides the student with an explanation of the development of cuisines, as well as a historical background and recipes from the cookery of Europe, Africa, the Middle East, Asia, Australia, and Latin America. The course also requires multiple research opportunities for students to explore cuisine of the world. Students will acquire a greater understanding of their world and the cultural diversity that exists in their own community. This course provides a technical education in the instruction of traditional culinary skills. In a lab environment students will learn and demonstrate culinary skills in use by an ethnic population, based on traditions, techniques, culinary tools, and ingredients used by an indigenous people. There is a $25 lab fee each semester for consumable materials. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

BAKING AND PASTRY
Grade Level: 9-12
Length: 1 year
Prerequisite: none
Graduation: Fulfills Applied Arts requirement
College Prep: UC/CSU "G" Elective credit with grade of “C” or better
This course focuses on the fundamentals of basic baking; including the process of understanding ingredients, weights and measurements, formula conversion and costing of recipes. Students use equipment associated with baking, learn bakeshop ingredients, substitutions, mise en place, quick and yeast breads, pies and tarts, pastry, cake and icing, custards creams and sauces, and candy making. There is a $25 lab fee each semester for consumable materials. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
CATERING
Grade Level: 10-12
Length: 1 year
Prerequisite: A grade of C or better in a previous Foods class; teacher recommendation required
Graduation: Fulfills Applied Arts requirement
College Prep: UC/CSU "G" Elective credit with grade of “C” or better

In this advanced Foods class, students become participants in a catering company. Food preparation techniques learned in previous Foods courses are utilized along with exploring speed and quantity food preparation skills. This course focuses on food and various aspects pertaining to its science, preparation, economics, government, business, and hospitality sectors and emphasizing on, but not limited to: overall cooking knowledge, methods, and skills; utilizing heat/cold transfers; nutritional science; culinary organization, food and nutritional science, culinary careers and professionalism; recipe development and costing; menu research and development; and business research and development. All aspects of setting up and operating a catering company, including advertising, promotion, long-range planning, food sourcing and basic principles are covered. There is an emphasis on developing teamwork, leadership skills, creativity and professionalism. This course is designed for students who are interested in the culinary arts and hospitality industry (caterer, chef, sports nutrition, food writer, restaurant/hotel manager, baker, health inspector, food service director, food technologist) as well as for students who want to explore the realities of small business ownership. Students who receive a grade "B" or higher in this class and on the DVC administered exam will receive college units and class credit. There is a $15 fee for chef coat.

ADVANCED CATERING
Grade Level: 11-12
Length: 1 year
Prerequisite: Teacher recommendation
Graduation: Fulfills Applied Arts requirement
College Prep: Fulfills “G” area elective requirement with grade of “C” or better (pending)

In this advanced Foods class, students become participants in a catering company. Food preparation techniques learned in previous Foods courses are utilized along with exploring speed and quantity food preparation skills. This course focuses on food and various aspects pertaining to its science, preparation, economics, government, business, and hospitality sectors and emphasizing on, but not limited to: overall cooking knowledge, methods, and skills; utilizing heat/cold transfers; nutritional science; culinary organization, food and nutritional science, culinary careers and professionalism; recipe development and costing; menu research and development; and business research and development. All aspects of setting up and operating a catering company, including advertising, promotion, long-range planning, food sourcing and basic principles are covered. There is an emphasis on developing teamwork, leadership skills, creativity and professionalism. This course is designed for students who are interested in the culinary arts and hospitality industry (caterer, chef, sports nutrition, food writer, restaurant/hotel manager, baker, health inspector, food service director, food technologist) as well as for students who want to explore the realities of small business ownership. Students who receive a grade "B" or higher in this class and on the DVC administered exam will receive college units and class credit. There is a $15 fee for chef coat.

TRI-VALLEY ROP CLASSES

GENERAL INFORMATION
Tri-Valley Regional Occupational Program (ROP) offers college level classes to students that develop skills necessary for post secondary education or training following completion of high school or the ROP class, that sequence directly into business, industry and/or continuing education. Classes are offered at Amador, Dublin, Foothill, Granada, Livermore, Valley, and Village High Schools. ROP classes are college and career preparation classes which are credited in the same manner as other elective classes. Excellent attendance is required for all ROP classes.

TYPES OF ROP CLASSES
- **Classroom/Laboratory**: Learning environments for ROP classes include worksites, drafting lab, auto shop and graphics lab.

- **Community Classroom**: Combines classroom education and non-paid work-based training assignments. After six to nine weeks of classroom instruction, students are placed at a community business/work-site. Once a student is placed, he/she spends a minimum of two hours per day, two to four days per week, at his/her assignment.

- **Cooperative Vocational Education (CVE)**: Involves classroom learning and paid work-based training. The work-site training is similar to the Community Classroom program. However, in the CVE program the student earns wages and additional credits.

**COMMUNITY COLLEGE CREDIT BY EXAM**

This enables high school students to earn college credit. ROP classes, equivalent to introductory classes in approved community college programs in the same occupational area, may be granted college credit. Students who have completed the ROP articulation process for their class with a "B" or better do not need to repeat the class at the community college. Programs are articulated with community colleges to encourage students to continue advanced training in a 2-year certificate program.

All community college articulations refer to Las Positas and/or Chabot Colleges unless otherwise noted. See your counselor for clarification. These credits transfer to most 4 year universities at no cost to you.

**REGISTRATION/ELIGIBILITY**

While seniors have priority, juniors and sophomores are eligible to enroll in ROP classes, as well. High school students may enroll in classes with the College and Career Specialist or the counselor/scheduling administrator at the high school. ROP classes comply with all mandates of Public Law 101-476. Specific times of classes are determined as individual schools develop their master schedules and students are placed accordingly.

**REPEAT POLICY**

Credit is awarded for ROP classes in the same manner as all high school credit. ROP classes may not be repeated for credit. Non-credit repetition will be allowed for enrichment or to raise a letter grade. Some ROP subjects offer first and second year opportunities. ROP courses designated as I & II year programs allow students to receive credit in both years.

**HIGH SCHOOL CREDIT**

Credit for ROP courses is determined by the number of hours in which the student is enrolled:

- **Three hour program = 30 credits per year**
- **Two hour program = 20 credits per year**
- **One hour program = 10 credits per year**

Some ROP classes have been approved for High School graduation subject requirements. These classes are noted “Alternate Graduation Credit”.

**TRAVEL TIME**

Students traveling between schools are allowed adequate time to report to classes on a timely basis.

**TRANSPORTATION**

Public bus transportation (Wheels) tickets are available through the Career Center for students participating in ROP classes at sites other than their home school.

**ROP ANIMATION AND MOTION GRAPHICS**

School Site: Dublin High School
Grade Level: 11-12
Length: 1 year/2 periods per day
Graduation: Fulfills Visual/Performing Arts requirement
College Prep: Fulfills CSU/UC “F” requirement for Visual/Performing Arts with grade of “C” or better
Articulation: Up to 3 units with a grade of “B” or better
This is a college-level class. ROP Animation students develop their mastery of the skills required to be a professional digital graphic artist or animator. Animation and Motion Graphics combines theory, such as the 12 Principles of Animation, with the knowledge to expertly navigate and use the various digital design programs. Throughout the year, we will be using Adobe Photoshop for digital editing and pre-production, followed by ToonBoom Harmony for our 2D Animation or Autodesk Maya for our 3D work. Students learn the steps of working through a professional animation workflow, working on our new iMac workstations daily and with access to our assortment of Wacom drawing tablets. Projects from this class are shared through internet media such as YouTube, for purposes of leaving the class with a final portfolio of your work to show to possible employers or college institution. Students may also complete the Autodesk Certified User and Adobe Certified Associate certification exams. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
Certificate Earned: Prepares students for the Adobe Certified Associate and Autodesk Certified User (Dublin High School is a testing center for Certiport.)

ROP VIDEO GAME ART & DESIGN
School Site: Dublin High School
Grade Level: 11-12
Length: 1 year/1 period per day
Graduation: Fulfills Visual/Performing arts requirement
College Prep: Fulfills CSU/UC “F” requirement for Visual/Performing Arts with grade of “C” or better
Articulation: Up to 3 units with a grade of “B” or better
This is a college-level class. ROP Video Game Art & Design students get hands-on experience working in Autodesk Maya learning the skills to be a 3D Modeler. Students spend the majority of the year exploring the methods used to develop 3D models for games, including the ability to prepare and generate textures for their models in Adobe Photoshop. The class also touches on game engines, such as Unreal and Unity, as well as 3D sculpture tools Zbrush and Mudbox. While exploring the development of games, students learn about ludology, the theory of gameplay, in order to understand why people play games and their reaction to game mechanics. All students will develop a portfolio of their work, which can be used when seeking internships and/or to gain admission in post-secondary game design programs. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation. Students may also complete the Autodesk Certified User and Adobe Certified Associate certification exams.
Certificate Earned: Photoshop, MAYA Certification

ROP DEVELOPMENTAL PSYCHOLOGY OF CHILDREN I
School Site: Foothill High School
Grade Level: 11-12
Length: 1 year/2 periods per day
Fulfills a-g: "G" requirement - CSU/UC Elective Credit with grade of “C” or better
Graduation: Fulfills Applied Arts requirement
College Credit: Credit by exam at Las Positas College - CSU transferable elective
Articulation: Up to 6 units with a grade of “B” or better
This is a college-level class. Interested in a career involving children? Considering a career as a pediatrician, teacher, psychologist, or social worker? If so, the Developmental Psychology of Children (DPC) course is for you. DPC is a course that combines classroom instruction and off-campus internships. That means you learn about the development of children, while you actually get to work with them! Internships take place during the scheduled class time at local elementary schools, child care centers, or preschools. Opportunities for after-school paid internships are also available. Throughout the school year, you will study a variety of child growth and development topics, and you will learn how to work with children ages birth to adolescence. In addition, you will be trained in CPR. After successfully completing the course, you are eligible to receive transferable college credits (for free) from Las Positas College! Make a difference in a child’s life… enroll in Developmental Psychology of Children. Internship is a required component of the program. Proof of a current TB Test provided by the student to work in the community. Students in Co-op may earn up to five additional credits per high
school semester or trimester. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

NOTE: Must provide own transportation. Certificate Earned: California Commission on Teacher Credentialing (CCTC), Early Childhood Assistant, CPR Certification

**ROP DEVELOPMENTAL PSYCHOLOGY OF CHILDREN II**

School Site: Foothill High School  
Grade Level: 11-12  
Length: 1 year/2 periods per day  
Prerequisite: ROP Developmental Psychology of Children I  
Graduation: Fulfills Applied Arts requirement  
Fulfills a-g: "G" requirement - CSU/UC Elective Credit with grade of “C” or better  
College Credit: Credit by exam at LPC-CSU transferable elective  
Articulation: Up to 6 units with a grade of “B” or better  

This is a college-level class. This is an advanced course in child development and education. Students increase their knowledge, experience, and job skills at an internship placement. Advanced projects further develop skills. Students will focus on: observation of children and programs; communicating with children, staff, and parents; planning age-appropriate curriculum; and understanding the history, theories, philosophies, and legal aspects of careers related to children. Internship is a required component of the program. Proof of a current TB Test provided by the student to work in the community. Students in Co-op may earn up to five additional credits per high school semester or trimester.  
NOTE: Must provide own transportation. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.  
Certificate Earned: California Commission on Teacher Credentialing (CCTC), Early Childhood Assistant, CPR Certification.

**ROP AP ENVIRONMENTAL SCIENCE**

School Site: Amador Valley High School and Foothill High School  
Grade Level: 11-12  
Length: 1 year/2 periods per day  
Graduation: Fulfills “D” lab science requirement with grade of “C” or better  
College Credit: Fulfills CSU/UC “d” lab science requirement; colleges may award credit upon passing the AP exam in May; this is a weighted course.  
Articulation: Up to 3 units with a grade of “B” or better  

This is a college-level class. The ROP AP Environmental Science course is designed to be the equivalent of an introductory college course in environmental science. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationship 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 or preventing them. The following themes provide a foundation for the structure of the AP Environmental course.  
•Science is a process.  
•Energy conversions underlie all ecological processes.  
•The Earth itself is one interconnected system.  
•Humans alter natural systems.  
•Environmental problems have a culture and social context.  
•Human survival depends on developing practices that will achieve sustainable systems.

**ROP HONORS CIVIL ENGINEERING AND ARCHITECTURE**

School Site: Livermore High School and Amador Valley High School  
Grade Level: 11-12  
Length: 1 year/1 period per day
Prerequisite: Completion of POE or IED
Graduation: Fulfills elective requirement
College Credit: Fulfills CSU/UC "G" area elective credit with grade of “C” or better, weighted course

ROP Civil engineering has a significant role in the life of every human being, though one may not truly sense its importance in our daily routines. Architecture is the art / practice of designing and constructing buildings. To help student explore these career fields, 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. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects. This course is a specialization-level course designed to follow the Project Lead the Way Engineering foundation courses. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

NOTE: Must provide own transportation.

ROP PLTW COMPUTER INTEGRATED MANUFACTURING (CIM)
School Site: Dublin High School
Grade Level: 11-12
Length: 1 year
Prerequisite: Must have Engineering teacher recommendation with completion of IED with a ‘C’ or higher or ACU/ACP Inventor Certification
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC elective credit

How are things made? What are current methods and what are future processes likely to be for fabricating products? How do you go from ideas and inventions to successful products? How do assembly lines work? How will computer aided design, robotics, and automation continue to revolutionize manufacturing? While students discover the answers to these questions, they’re learning about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems. Students learn to utilize 3D printing, laser cutting and engraving, and CNC machining to prototype their designs. This course is a specialization-level course designed to follow the Project Lead the Way Engineering foundation courses. Homework is typically the completion of classwork or projects not completed within the class period that will need to be completed at home. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

ROP INTRODUCTION TO HEALTH CAREERS
School Site: Dublin High School
Grade Level: 9-12
Length: 1 year/1 period per day
Prerequisite: None
Graduation: Fulfills Applied Art requirement
College Prep: Fulfills CSU/UC elective "G" credit with grade of “C” or better
Articulation: Up to 4 units with a grade of “B” or better- LPC HSCI 55

This is a college-level class. This course is designed to expose students to the healthcare industry by surveying the wide spectrum of healthcare occupations and equipping them with the entry level knowledge and skills that apply to a variety of health occupations. Students who successfully complete this course will acquire the necessary knowledge and skills that will allow them to pursue an education and career in the healthcare industry. Students will be trained in hands on skills, taking vitals, etc. Students will earn their Basic Life Support CPR Certification. Students will develop a professional career portfolio, job shadow health care professionals and be required to earn volunteer service hours in the healthcare field and possibly qualify for the United Way Volunteer Service Award. This is highly desirable for college scholarship and entry level job applications. Immunizations and uniforms may be required for internship sites. The Intro to Health Careers course
requires 50 hours of volunteer service in a healthcare setting to be completed per year, ideally 25 hours per semester as a minimum, and if students want to receive a Voluntary Service award with the United Way it can be done with 148 hours of community service (optional, not required.) This would need to be completed during the current academic year, and all community service must be pre-approved by the instructor. Volunteer opportunities will be presented by the instructor at the start of the course. This course will emphasize working on the “soft skills” (interpersonal skills), essential to have in a healthcare field. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation. 
Certificate Earned:  BLS CPR Certification

**ROP MEDICAL OCCUPATIONS**

School Site: Foothill High School/Granada High School  
Grade level: 11-12  
Length: 1 year/2 periods per day  
Prerequisite: Must be 16 years old  
Graduation: Fulfills elective requirement and Applied Arts requirement  
College credit: CSU/UC "G" requirement with grade of “C” or better, Credit by Exam - Chabot College  
Articulation: Up to 8 units with a grade of “B” or better  

This is a college-level class. ROP Medical Occupations provides an introduction and broad exploration into several careers within the medical field including: Medical Assisting, Emergency Medicine, Veterinary Medicine, Dental Assisting/Hygienist, Geriatric Assistant, Pharmacy Technician, Physical Therapy, Surgical Technician and Nursing. Instruction is combined with a hands-on learning experience through instructor approved clinical internships at local medical facilities. After completion of the course, students are eligible to take the California certification exam for Medical Assistants and become a California Certified Medical Assistant-Administrative (CCMA-A). 
NOTE: Must provide own transportation. Spring orientation is required to become enrolled in the program and must be attended by the student and parent(s). 
Requirements for Clinical: 2 Step TB Clearance, Flu Shot, current immunization record, and CPR BLS Healthcare Provider training. These prerequisites must be completed prior to the first day of school with the exception of the flu shot (required for all students per hospital policy) administered in October. Clinical internships require that students provide their own transportation. Students must be available for internships daily. Uniforms Required. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation. 
Certificate Earned: •California Certified Medical Assistant Administrative (CCMA-A) (Must pass exam) BLS CPR Certification.

**ROP NURSING CAREERS**

School Site: Foothill High School  
Grade level: 11-12  
Length: 1 year/2 periods per day  
Prerequisite: Must be 16 years old  
Graduation: Fulfills elective req  
College credit: CSU/UC "G" requirement with grade of “C” or better, Credit by Exam - Las Positas and Chabot College/CSU Transferable articulation: up to 8 units with a grade of “B” or better  

This is a college-level class. ROP Nursing Careers offers a comprehensive introduction to the field of nursing while studying the care of patients and the role nurses provide in a variety of healthcare systems. Focus is given to the various specialties within the field and studies include a basic understanding of the systems of the body, medical terminology, diseases, basic patient care, taking vital signs, charting, medical ethics and understanding patient privacy laws. Instruction is combined with a hands-on learning experience through instructor approved internships at local hospitals, clinics and physician offices. 
NOTE: Must provide own transportation. Spring orientation is required to become enrolled in the program and must be attended by the student and parent(s). 
Requirements for Clinical: 2 Step TB Clearance, Flu Shot, current immunization record, and CPR BLS Healthcare Provider training. These prerequisites must be completed prior to the first day of school with the exception of the flu shot.
(required for all students per hospital policy) administered in October. Clinical internships require that students provide their own transportation. Students must be available for internships between 1:00 and 4:00 pm daily. Uniforms Required. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
Certificate Earned: BLS CPR Certification

**ROP SPORTS MEDICINE ATHLETIC TRAINER I**
School Site: Dublin High School
Grade level: 10-12
Length: 1 year/1 period per day
Graduation: Fulfills elective req
College credit: CSU/UC college prep "G" elective credit with grade of “C” or better
Articulation: Up to 8 units with a grade of “B” or better
This is a college-level class. ROP Sports Medicine - Athletic Trainer I is an exciting, growing field with employment opportunities in athletic training, sports medicine, and physical therapy. Instruction encompasses the study of Anatomy, Physiology, Nutrition, Biology and Kinesiology to understand the aspects of the field. Students are introduced to associated medical terminology and the practice of classification and assessment of injuries. Through internships students apply skills learned in class to the prevention of injuries, the understanding of human body modalities and rehabilitation, the procedures of training rooms and the safety factors related to sports medicine. Community Classroom (unpaid) Internship, outside of the school day, is a required component of the program and students must provide their own transportation as necessary. Up to 5 additional units may be earned – 1 unit for every 18 hours of internship beyond the **required 110 hours**. Required hours will differ based on semester/trimester schedules. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
Certificate Earned: CPR Certification

**ROP SPORTS MEDICINE II**
School Site: Livermore High School
Grade level: 11-12
Length: 1 year/1 periods per day
Prerequisite: Sports Medicine I
Graduation: Fulfills elective requirement
College credit: CSU/UC college prep "G" elective credit with grade of “C” or better
Articulation: Up to 4 units with a grade of “B” or better
This is a college-level class. ROP Sports Medicine II provides an excellent opportunity for students to continue exploring their interest in the fields of health science and medicine. This class provides a framework of advanced skills for understanding functional anatomy and kinesiology, building on the concepts of anatomy/physiology learned in Sports Medicine I. The lecture/lab format focuses on clinical hands-on learning, including evaluation, assessment treatment and events, assisting the Head Athletic Trainer or Team Physician, and working with other health care professionals. Integrated throughout the course are career technical education standards, which include basic academic skills, communication, career planning, technology, problem solving, safety, responsibility, ethics, teamwork and technical knowledge. Community Classroom (unpaid) Internship, outside of the school day, is a required component of the program and students must provide their own transportation as necessary. Up to 5 additional units may be earned – 1 unit for every 18 hours of internship **beyond the required 110 hours**. Required hours will differ based on semester/trimester schedules. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
NOTE: Must provide own transportation.
Certificate Earned: CPR Certification

**ROP CYBERSECURITY/ ICT ESSENTIALS I**
School Site: Dublin High School
Grade level: 10-12
Length: 1 year/1 period per day
Prerequisite: None
Graduation: Fulfills elective requirement
College Prep: UC/CSU approved “G” elective with grade of “C” or better
Articulation: Up to 4 units with a grade of “B” or better
This is a college-level class. An in-depth exposure to computer hardware and operating systems. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot problems. An introduction to computer networking is included. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

IMPORTANT! This is the first course in a series of three that prepares students for the Cisco CCNA Networking Certification and A+ industry certification. Certificate Earned: Prepares students for the A+ Certification Exam

ROP INTERNET ENGINEERING I (CCNA1)
School Site: Dublin High School
Grade level: 11-12
Length: 1 year/1 period per day
Prerequisite: ROP Cybersecurity/ICT Essentials I required
Graduation: Fulfills elective requirement
College Prep: UC/CSU approved “G” elective with grade of “C” or better
Articulation: Up to 3 units with a grade of “B” or better
This is a college-level class. ROP CCNA Routing and Switching curriculum is a gateway to entry-level networking jobs and IT Careers. The curriculum consists of 4, 70-hour courses: Introduction to Networks (Internet Engineering 1 (CCNA1) Routing and Switching Essentials (Internet Engineering 2 (CCNA2)). Internet Engineering 1 is an interdisciplinary course designed to prepare students for post-secondary success in the Information and Communication Technologies (ICT) field. The course engages students with studies of: the history and implications of network communications; the protocols which make the Internet possible; how networks provide access to services; and college and career preparation in the ICT field. This course integrates the theory and application of network communications, and exposes students to media that invites them to consider how Internet engineers think, design, and solve problems. Students have several opportunities to produce college-ready writing, collaborate, research, develop study skills, and develop 21st century skills in this course. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

IMPORTANT! This is the second course in a series of three that prepares students for the Cisco CCNA Networking Certification and A+ industry certification. Certificate Earned: Prepares students CCENT Certification.

ROP INTERNET ENGINEERING 2 (CCNA2)
School Site: Dublin High School
Grade level: 11-12
Length: 1 year/1 period per day
Prerequisite: ROP CCNA 1 Routing and Switching required
Graduation: Fulfills elective requirement
College Prep: UC/CSU approved “G” elective with grade of “C” or better
Articulation: Up to 3 units with a grade of “B” or better
This is a college-level class. ROP Internet Engineering 2 is a follow-up course to Internet Engineering 1. It is designed to prepare students for postsecondary success in the Information and Communication Technologies (ICT) field. The course engages students with studies of the network protocols which make the Internet possible; how networks communicate with one another; methods used to increase scalability, reliability, and security in the modern network; and college and career preparation in the ICT field. This course integrates the theory and application of network communications, exposing students to media that invites them to consider how Internet engineers think, design, and solve problems. Students will produce college-ready writing, collaborate with peers and mentors, research solutions to complex challenges, improve student skills and strategies, and develop a Personal Learning Network. Daily time commitment: ~30 minutes per day, 5
days per week, plus additional time for test preparation.

IMPORTANT! This is the third course in a series of three that prepares students for the Cisco CCNA Networking Certification and A+ industry certification. Certificate Earned: Prepares students for the CCENT Certification.

ROP INTEGRATED MARKETING COMMUNICATIONS

School Site: Dublin High School
Grade Level: 10-12
Length: 1 year (variable credit per employment)
Graduation: Fulfills elective requirement
College Prep: CSU/UC "G" elective credit with grade of “C” or better, Credit by Exam - Las Positas College
Articulation: Up to 7 units with a grade of “B” or better

This is a college-level class. Learn about the field of marketing and the vast career opportunities within this industry. Explore areas such as market research, product development, pricing, promotion, distribution, visual merchandising, presentation and project management through a variety of hands-on projects. Bring your ideas and creativity! Students receive training in constructing resumes, employment applications, cover letters and references, in addition to interviewing skills. Students will complete a career portfolio to prepare for entry into the job market with a competitive edge. Marketing concepts and leadership skills are reinforced through co-curricular participation in the Career and Technical Student Organization, DECA*. DECA is an integral component to this program and provides additional focus on developing written and oral presentation skills, as well as leadership and social and professional skills that will build self-confidence for college and career success.

* DECA, www.deca.org, prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management. DECA offers the opportunity for students to participate in competitive events throughout the year, in a variety of locations at local, state and international levels. Students have the opportunity to receive recognition, awards and scholarships. DECA is endorsed by the United States Department of Education and the California Department of Education.

** Students who are employed in a related field in which the course curriculum is directly associated to the students “on-the-job” experience are eligible to receive variable credits based on the number of hours worked. Students earn 1 credit for every 18 hours they work, up to 10-30 credits per year. Students are encouraged to work 10-15 hours per week at teacher approved sites in the Tri-Valley area with their current job, or employment leads and guidance provided. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

NOTE: Must provide own transportation
Certificate Earned: Mimic Pro (Social Media Marketing Certification)

ROP SPORTS ENTERTAINMENT MARKETING

School Site: Dublin High School
Grade Level: 10-12
Length: 1 year (variable credit per employment)
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" requirement with grade of “C” or better, and Credit by Exam - Chabot College
Articulation: Up to 4 units with a grade of “B” or better

This is a college-level class designed for students interested in the field of sports marketing (not necessarily athletes.) Learn what it takes to have a career in the field of sports and entertainment. Through focus instruction on the concepts and strategies of the sports and entertainment world students discover the elements of professional, college and amateur sports to their related sports products. Students will plan and utilize market research; develop promotion and marketing materials for sports and entertainment events; and improve leadership skills through co-curricular participation in the Career and Technical Student Organization, DECA*. DECA is an integral component to this program and provides additional focus on
developing written and oral presentation that will build self-confidence for college and career success. Students have the opportunity for internships with professional sports and entertainment organizations.

* DECA, www.deca.org, prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management. DECA offers the opportunity for students to participate in competitive events throughout the year, in a variety of locations at local, state and international levels. Students will also have the opportunity to receive recognition, awards and scholarships. DECA is endorsed by the United States Department of Education and the California Department of Education.

** Students who are employed in a related field in which the course curriculum is directly associated to the students “on-the-job” experience are eligible to receive variable credits based on the number of hours worked. Students earn 1 credit for every 18 hours they work, between 10-30 credits per semester. Students are encouraged to work 10-15 hours per week at teacher approved sites in the Tri-Valley area with their current job. NOTE: Must provide own transportation. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

Certificate Earned: Mimic Pro (Social Media Marketing Certification)

**ROP ECONOMICS OF BUSINESS OWNERSHIP**

School Site: Dublin High School
Grade Level: 10-12
Length: 1 year (variable credit per employment)
Graduation: Fulfills elective requirement
College Prep: Fulfills CSU/UC "G" requirement with grade of “C” or better, and Credit by Exam

This is a college-level class. Learn the process of starting and managing a business. Students with an entrepreneurial interest learn skills related to organization, effective decision making, and goal setting. Students develop comprehensive business plans including research and development of ideas, product planning, finance and marketing. Students research how marketing, management, ethics and communication play an important role in business success. Students gain practical experience by managing a student-run business and receive training in constructing resumes, employment applications, cover letters and references and interviewing skills. Students complete a career portfolio to prepare for entry into the job market with a competitive edge. Business concepts and leadership skills are reinforced through co-curricular participation in the Career and Technical Student Organization, DECA*. DECA is an integral component to this program and provides additional focus on developing written and oral presentation skills, as well as leadership and social and professional skills that will build self-confidence for college and career success.

* DECA, www.deca.org, prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management. DECA offers the opportunity for students to participate in competitive events throughout the year, in a variety of locations at local, state and international levels. Students have the opportunity to receive recognition, awards and scholarships. DECA is endorsed by the United States Department of Education and the California Department of Education.

** Students who are employed in a related field in which the course curriculum is directly associated to the students “on-the-job” experience are eligible to receive variable credits based on the number of hours worked. Students earn 1 credit for every 18 hours they work, up to 10-30 credits per year. Students are encouraged to work 10-15 hours per week at teacher approved sites in the Tri-Valley area with their current job. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

NOTE: Must provide own transportation.

Certificate Earned: Mimic Pro (Social Media Marketing Certification)

**ROP INTRODUCTION TO CRIMINAL JUSTICE (CJ/CSI)**

School Site: Dublin High School
Grade Level: 10-12

This is a college-level class. Learn the process of starting and managing a business. Students with an entrepreneurial interest learn skills related to organization, effective decision making, and goal setting. Students develop comprehensive business plans including research and development of ideas, product planning, finance and marketing. Students research how marketing, management, ethics and communication play an important role in business success. Students gain practical experience by managing a student-run business and receive training in constructing resumes, employment applications, cover letters and references and interviewing skills. Students complete a career portfolio to prepare for entry into the job market with a competitive edge. Business concepts and leadership skills are reinforced through co-curricular participation in the Career and Technical Student Organization, DECA*. DECA is an integral component to this program and provides additional focus on developing written and oral presentation skills, as well as leadership and social and professional skills that will build self-confidence for college and career success.

* DECA, www.deca.org, prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management. DECA offers the opportunity for students to participate in competitive events throughout the year, in a variety of locations at local, state and international levels. Students have the opportunity to receive recognition, awards and scholarships. DECA is endorsed by the United States Department of Education and the California Department of Education.

** Students who are employed in a related field in which the course curriculum is directly associated to the students “on-the-job” experience are eligible to receive variable credits based on the number of hours worked. Students earn 1 credit for every 18 hours they work, up to 10-30 credits per year. Students are encouraged to work 10-15 hours per week at teacher approved sites in the Tri-Valley area with their current job. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

NOTE: Must provide own transportation.

Certificate Earned: Mimic Pro (Social Media Marketing Certification)
This is a college-level class. This course provides students with a strong overview of law enforcement as a career. Each portion of the course helps students obtain a proficiency in understanding the different components of the criminal justice system. Students are provided with an overview of career opportunities, including but not limited to sworn personnel such as police officers, sheriffs, highway patrol, and non-sworn personnel such as dispatchers, evidence technicians, lab technicians, attorneys and correctional officers. Students study the connections between the criminal justice and court systems through laws and report writing. The course is tied together utilizing curriculum in crime scene investigation. Students employ skills learned with hands-on projects, including investigating a mock crime scene. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

Certificate Earned: CPR Certification

ROP CRIMINAL JUSTICE ACADEMY

School Site: Las Positas College
Grade Level: 11-12
Length: 1 year/2 periods per day
Graduation: Fulfills elective requirement, UC/CSU "G" elective with grade of “C” or better
College Prep: Credit by Exam - Las Positas College/CSU Transferable with grade of “C” or better
Articulation: Up to 16 units with a grade of “B” or better; four of those units are Fire Science Conditioning (KIN FSC 1, 2, 3 and 4, for a total of 13 high school PE credits.)

This is a college-level class. Students will have the unique opportunity to participate in a variety of exciting activities designed to enhance their learning. Activities include field trips, career exhibitions, leadership opportunities, mentoring, rides along, and academy competitions. Students will complete physical training at the RTC facility in the Alameda County Sheriff’s campus and have the opportunity to complete the confidence course just like a cadet! Each student will be assigned a law enforcement professional mentor to help them develop their professional skills. Students will learn the historical development, philosophy of law, and constitutional provisions of administrative justice. Students will explore the ethical, legal, and moral complexities of law enforcement in a democracy; they will examine the complex, dynamic relationship between communities and the justice system. Students will write investigative reports with an emphasis on accuracy and details necessary, including, arrest reports, incident reports, and miscellaneous field reports. Volunteer hours are a required component of this course. Academy cadets will have the opportunity to wear a law enforcement uniform (uniforms required) and show commitment to the principles of public service through volunteerism. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

NOTE: Must provide own transportation

Certificate Earned: CPR Certification

ROP EMERGENCY MEDICAL RESPONDER

School Site: Foothill High School
Grade Level: 11-12
Length: 10 weeks
Prerequisite: Must be 16 years old
Graduation: Fulfills elective requirement
College Prep: Credit by Exam - Las Positas College
Articulation: Up to 3 units with a grade of “B” or better

This is a college-level class. This course develops the knowledge and skills necessary for recognizing and caring for emergency situations, including CPR, prevention of disease transmission, and automated external defibrillation. Designed for first responders in an emergency. Successful completion of the skills test with an 80% or better qualifies students for the American Safety and Health Institute (ASHI) First Responder certificate and an American Heart Association Basic Life Support certification.
Support Healthcare Provider certificate. This will be offered in the evening both Fall and Spring semesters. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
Certificate Earned: EMR Certification, CPR Certification

ROP AUTO BODY REPAIR I
School Site: Livermore High School
Grade Level: 11-12
Length: 1 year/2 periods per day
Prerequisite: Must be 16 years old
Graduation: Fulfills elective requirement, Applied Arts requirement and CSU/UC elective "G" with grade of “C” or better
Examine the world of auto collision repair and refinishing by learning the industry skills necessary for a successful career in the field. Students explore trends and future technologies of the collision repair and refinishing industry and practice identifying auto body damage and the relationship to cost estimation. Instruction focuses on giving students a hands-on experience in learning the skills of the trade, including: how to straighten and repair auto bumper covers, replace panels, prep cars for paint, rebuild and repaint auto bodies, mig weld, and detail cars. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
NOTE: Must provide own transportation.
Certificate Earned: Automotive Service Excellence (ASE) Certification

ROP AUTO BODY REPAIR II
School Site: Livermore High School
Grade Level: 11-12
Length: 1 year/2 periods per day
Prerequisite: Must be 16 years old and completed Auto Body Repair I
Graduation: Fulfills elective requirement, Applied Arts requirement and UC elective "G" with grade of “C” or better
This course is for students interested in a career in auto collision repair and refinishing. Students study advanced topics and complete projects that include learning the skills required for color matching to industry specifications. Instruction focuses on students applying skills and knowledge learned to identify frame damage and methods of repair and measuring. Students will become proficient in shop management, team leadership, and business principles. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.
NOTE: Must provide own transportation.
Certificate Earned: Automotive Service Excellence (ASE) Certification

ROP AUTOMOTIVE TECHNOLOGY
School Site: Livermore High School
Grade Level: 11-12
Length: 1 year/2 periods per day
Prerequisite: Must be 16 years old
Graduation: Fulfills elective requirement and Applied Arts requirement
College Prep: Credit by Exam - Las Positas College, UC/CSU "G" credit with grade of “C” or better
Articulation: ROP Automotive Technology class is articulated with Las Positas with a grade of “B” or better. The course at Las Positas is Auto Intr: Automotive Service and Introduction worth 4 Units.
This is a college-level class. ROP Auto Specialist is a comprehensive, hands-on course that allows students to explore and practice the necessary skills needed to repair automobile systems as well as parts. Instruction includes: steering and suspension, brakes, electrical, maintenance, engine diagnostics and repair, rear axle, automatic transmissions, and emission controls. Students gain experience in tire repair, changing and high-speed tire balancing, brake and wheel bearing inspection, measuring and repairing, and front and four-wheel alignment. Desired business and shop practices are studied,
along with advanced automotive theory used in the industry. Students practice test preparation and procedures for the Automotive Service Excellence (ASE) certification and learn the benefits of gaining ASE certifications. Students may work on their own or family car with approval of instructor. Daily time commitment: ~30 minutes per day, 5 days per week, plus additional time for test preparation.

NOTE: Must provide own transportation.

Certificate Earned: Automotive Service Excellence (ASE) Certification