

# **ANDRADA POLYTECHNIC HIGH SCHOOL**

Course Descriptions  
2024-2025



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# Welcome to Andrada Polytechnic High School "Home of the Mavericks"



## **Administrative Staff**

Geoff Parks, Principal  
Rod Carrier, Assistant Principal  
Becky Johnson, Assistant Principal

## **Counselors**

Gloria Bernal  
Ryan Le  
Shauna Nordling  
Aaryn Townsend

## **Non-Discrimination Policy**

Vail Unified School District #20 does not discriminate on the basis of race, color, religion, national origin, sex, disability, age or sexual orientation in admission and access to its programs, services, activities, or in any aspect of their operations and provides equal access to the Boy Scouts and other designated youth groups. The Vail Unified School District #20 also does not discriminate in its hiring or employment practices. The following employees have been designated to handle inquiries regarding the nondiscrimination policies:

Title IX and Section 504/ADA Coordinator: Assistant Superintendent, Kevin Carney, at: [carneyk@vailschooldistrict.org](mailto:carneyk@vailschooldistrict.org), 520-879-2005, 13801 E Benson Hwy # B Vail, AZ 85641

To report any concerns regarding Special Education, please contact:  
Jordan Bernal, Andrada High School (520) 879-3332  
Michelle Wood, Vail School District (520) 879-2054

To report any concerns regarding 504 plans, please contact:  
Gloria Bernal, Student Support Specialist (520) 879-3324  
Aaryn Townsend, Andrada High School, Early Pathways/MAV Scholars (520) 879-3315  
Shauna Nordling, Andrada High School, Last Names A-K (520) 879-3314  
Ryan Le, Andrada High School, Last Names L-Z (520) 879-3306

## General Information

### **Class Offerings**

Class offerings at APHS are designed to meet graduation requirements, CTE pathway courses, as well as meet or exceed university admission requirements. The courses listed in this manual are the anticipated course offerings. Please be aware that there is a minimum enrollment requirement for each class. Courses with low enrollment may be canceled. Students need to register for academic courses, desired electives and alternative options to ensure continual progress in case of course cancellations.

### **Schedule Changes**

Students enrolled in full year courses are expected to take the course for the entire school year. Schedule changes are limited to the **first six school days** of the start of the class. **Schedule changes are not always granted, so students should register for classes carefully.** Students who request a schedule change must do so using a schedule change request form from counseling and must obtain all required signatures including parent/guardian and teachers. Students are expected to complete the problem-solving process with the counselor prior to schedule change consideration. Courses dropped after the six day window may appear on transcripts with a grade of W (Withdrawn), or WF (Withdrawn/Fail), which will affect the student's GPA, and will impact the student's future of taking honors or advanced courses. Submitting a request for a schedule change does not guarantee that a change will be made. Requests will be reviewed on a case-by-case basis and may require administrative approval.

Acceptable reasons for schedule changes are limited to:

- Required course needs to be added in order to graduate on time
- Medical reasons (requires a doctor's note)
- Previously failed course completed
- You already have that particular course credit.
- You do not have the prerequisite for the class.
- Your special education classification has changed.
- Teacher or Administrator initiated level change

Unacceptable reasons include, but are not limited to:

- Student prefers a different teacher
- Student prefers a class with a friend
- Student prefers classes in a different order
- Grade is lower than desired

When registering for year-long classes, students are strongly reminded to remember the year-long commitment they are making to those classes. Students must continue to attend

their scheduled classes until a new schedule has been processed by the counselor and issued to the student.

Administration reserves the right to change student schedules without parent permission in order to better balance class size, create a safer environment, or any other reason to improve the education of the student and educational climate of the school.

### **Withdraw Fail**

Students dropping a class after the six-day drop/add period will receive a grade of Withdraw Failing (WF), on their transcript if the student is currently failing the class. This grade will be reflected in the student's overall GPA.

### **Classes Failed**

If students fail classes needed for graduation, they should contact their School Counselor for options to make up the class. Credit Recovery is a self paced online course through Edmentum. There is no fee per semester class, and students have 8 weeks to complete the class. Credit recovery does not replace a failed grade, but is an opportunity to improve the grade. The credit recovery grade is an additional grade on the transcript showing credit received and grade earned. Students may take credit recovery to improve a grade (as both will show on student's transcripts) however, students should be working closely with their counselor as universities vary in their grade improvement policies.

### **Loss of Credit Due to Absences**

Regular school attendance promotes learning and achievement. As defined in AZ Education Code 15-803, "Absences may be considered excessive when the number of absent days exceeds ten percent of the number of required attendance days." Students who reach 12 non-school related absences in any one semester may fail or lose graduation credit in that class.

### **Middle School Algebra 1/Geometry/Algebra 2**

Many students take high school Algebra and Geometry in middle school. If a student earned a grade of **B or higher** in that middle school course, that grade is entered on the high school transcript. If the grade is C or lower, the class is retaken in 9th grade.

### **AzSCI**

AzSCI is the statewide achievement test for Arizona students. The AzSCI Test will be administered to 11th grade students in the spring.

### **Honors Class Requirements**

These courses provide a challenge for students who have reached a high level of competency

in a specific subject area. Students must have shown academic competency in order to be enrolled in any honors class. Students enrolled in any honors class **are expected to maintain a grade of “C” or higher** to remain in the class or the student may be dropped from the class. Decisions regarding removal will be made on an individual basis with the input of the parent/guardian, teacher and student. All honors enrollment classes will be awarded .03 added value for GPA.

### **Advanced Placement (AP) Class Requirements**

Students can take AP classes to improve their opportunities for success in college, to become more competitive for college and scholarship selection, and to test for college credit. Students who **pay for and pass the AP exam** receive college credit for AP classes. The credits do not all transfer the same to all colleges. See your counselor for more details. Students are advised to select AP courses carefully. **Students are expected to register for and take the AP exam (fee required; fee will be collected at the start of the school year). Summer work will be assigned.** Students enrolled in any AP class **must maintain a grade of “C” or higher** to remain in the class or the student may be dropped from the class. Teacher approval is required. All AP enrollment classes will be awarded .05 added value for GPA.

### **Dual Enrollment Classes (on campus)**

Select Pima Community College and University of Arizona classes are offered at Andrada as dual enrollment. Students will be able to earn both high school credit and college credit beginning in 11th grade. They provide one high school credit and three or four college credits, depending on the class. Pima fees vary based on class and textbook requirements. Successful completion of placement tests are required for enrollment. Teacher approval is required. Choose carefully and read all dual enrollment expectation information. Students enrolled in any honors class **must maintain a grade of “C” or higher** to remain in the class or the student may be dropped from the class. All dual enrollment classes will be awarded .05 added value for GPA.

### **Concurrent Enrollment (off-campus classes)**

Students who would like to take classes off-campus must complete the concurrent enrollment form prior to enrollment with your counselor. All classes must be approved by counseling and administration.

### **ACT, SAT, PSAT, ASVAB**

The ACT and SAT are nationally standardized tests offered at various locations and testing dates. All 11th grade students are required (Arizona Requirement) to take the ACT exam on campus during a school day in the Spring at no cost. These tests are used for merit based scholarships, admissions to honors colleges, and some universities use these in conjunction

with GPA, class rank, extracurricular activities, and other factors in determining university admission. If you qualify for free or reduced lunch, or have experienced hardship, please see your counselor for a waiver for the ACT or SAT.

The PSAT/NMSQT is offered to Andrada students on campus, the fee is \$20 and can be paid in the bookstore.

The Armed Services Vocational Aptitude Battery (ASVAB) is usually offered in the Spring for grades 10-12. The test is two fold. It is used for entrance into the military and as a career assessment tool. There is no fee for the exam.

### **Civics Exam Requirement**

As a graduation requirement from the State of Arizona, all graduating seniors will be required to pass the United States Civics Exam. This exam is administered in senior Government class in the Fall of student's senior year.

### **Senior Exit Project**

The Senior Exit Project is a graduation requirement for all students in the Vail School District. The district requirements for the SEP are shadowing/internship, a research paper, a portfolio, and a presentation. At Andrada, students may choose to job shadow or intern, which is counted toward SEP. The project will be completed during the student's senior year, and students must pass each semester totaling .50 credits for graduation.

### **ECAP and SchoolLinks**

Education and Career Action Plan (ECAP) is required by the state of Arizona. The Vail School District uses SchoolLinks, which both parents and students can log in with their Vail passwords using google authentication. Students are able to complete their ECAP requirements using a quality platform, as well as use it to research occupations, apply for colleges, search for scholarships, request transcripts, plan courses, track SEP shadowing/internship hours, and many other features. All students are required to complete the ECAP requirements, but are encouraged to use as many features as they would like.

### **Vail Internship Program**

The Vail Internship Program can be completed in conjunction with SEP. Students who apply and are accepted have an on site internship at a local business or organization, studying a career field they are interested in. Students must complete a total of 124 hours, and each semester is worth .5 elective credits.

## **Early Graduation**

Students interested in graduating early must decide by the start of sophomore year and complete a three-year graduation plan. Students must speak with their counselor for more information.

## **Early Pathways**

Before the start of Freshman year, students may choose to start their CTE Pathway classes one year early. In order to achieve this, students must complete the online health course during the summer before Freshman year. If students would like to pursue the Engineering/Cybersecurity pathway as part of the Early Pathways program, they must also complete Algebra 1 before the start of Freshman year, either during the summer before Freshman year or during 8th grade. In order to remain in the Early Pathways program, Freshmen must pass all of their classes during semester one, and maintain a grade of C or higher in their Pathway class.

## **Reduced Schedule for Seniors**

Seniors who have earned 18 or more credits and are on track to graduate, and maintain passing grades are eligible to have a reduced schedule at 5 credits rather than 6. Students may choose to have periods 1-5, or periods 0-4 and have the option to leave at lunch. Students and parents/ guardians must complete and sign the Reduced Schedule form. If a student is failing a class or behind on credits, they are no longer eligible to leave campus and will be enrolled in extra academic support. Reduced schedule is a privilege, not a right. Reduced Schedule forms can be obtained from Counseling.

## **Maverick Scholars**

Andrada's Maverick Scholars Program offers academically skilled and motivated students a pathway to rigorous academic courses, individualized college and career planning, access to workshops and webinars for students and parents, and a cohort of students that form a community within Andrada. Students must apply to the program, maintain a minimum of As and Bs in all classes, and take advanced coursework each year as set by your counselor.

## **Fine Arts Proficiency Diploma Seal**

The Fine Arts Seal is awarded to graduating high school students who complete an Arizona Fine Arts Pathway and complete with a final GPA of at least 3.0 in fine arts or career and technical education courses. Also mandatory is 80 hours of Fine Arts related extracurricular activities and community service, and the presentation of a Fine Arts Capstone Project.

Requirements for the APHS Fine Arts Diploma Seal

1. A final GPA of 3.0 or 4.0 in each of the qualifying arts/career and technical

education (CTE) courses.

2. 4 minimum credit requirements in one of the following ways:
  - a. A minimum of 2 credits in one artistic discipline: (dance, music, theater, visual arts, or media arts) AND
  - b. A minimum of 2 credits in creative industries CTE credit (Digital Photography, Yearbook, etc.
3. 80 hours of arts related extracurricular activities
4. A student capstone project
5. Complete the ASVAB Test for further Career Exploration

Please see the Fine Arts Pathway for more information on courses in the Pathway section.



**Andrada Polytechnic High School  
Graduation Requirements**

SUBJECT AREA	ANDRADA REQUIREMENTS	MAVERICK SCHOLARS REQUIREMENT	MINIMUM REQUIREMENTS FOR SELECTIVE UNIVERSITIES
ENGLISH	4 Credits	4 Credits	4 Credits
MATH	4 Credits*	4 Credits	4 Credits
SCIENCE	3 Credits***	4 Credits	4 Credits
SOCIAL STUDIES	3 Credits**	3 Credits	3 Credits
HEALTH	.5 Credit	Meet Andrada Requirements	Meet Andrada Requirements
ECONOMICS	.5 Credit	Meet Andrada Requirements	Meet Andrada Requirements
FINE ARTS and/or CTE	1 Credit	1 Credit in Fine art in addition to pathway recommended	1 Credit in Fine Arts
FOREIGN LANGUAGE	No Requirement	2 years in the same language	3-4 years in the same language
SENIOR EXIT PROJECT	.5 Credit	Meet Andrada Requirements	Meet Andrada Requirements
PATHWAY COURSES	3-4 Credits****	Meet Andrada Requirements	Meet Andrada Requirements
ELECTIVES	Additional Credits to = 22	Additional Credits to = 22***	Additional Credits to = 22***
TOTAL	22 Credits		

\*Math requirements include one credit of each: Algebra 1, Geometry, Algebra 2, and one upper-division math course.

\*\*Social Studies requirements include one credit of each: World History, US History, and Government

\*\*\*Science requirements include one credit in Physics 1, Biology and one credit in any other science

\*\*\*\*Andrada students are required to complete a pathway (must be in a consistent pathway from 10th–12th, or 9th-12th if early pathway)

### Four-Year Planning Guide

Suggested/example courses by year. This guide reflects a schedule that meets MINIMUM graduation requirements.

\*Economics required in 12th grade for class of 2023

\*SEP is scheduled in 12th grade for all seniors.

<p><b>9th Grade</b></p> <ol style="list-style-type: none"> <li>1. English 1 or Honors English 1</li> <li>2. Math (Algebra 1 or higher if taken in middle school)</li> <li>3. Physics or Honors Physics</li> <li>4. World History or AP Human Geography</li> <li>5. Health and Leadership/Pathway</li> <li>6. Elective</li> </ol>	<p><b>10th Grade</b></p> <ol style="list-style-type: none"> <li>1. English 2 or Honors English 2</li> <li>2. Math</li> <li>3. Biology or advanced option</li> <li>4. Pathway/CTE</li> <li>5. Elective</li> <li>6. Elective</li> </ol>
<p><b>11th Grade</b></p> <ol style="list-style-type: none"> <li>1. English 3 or advanced option</li> <li>2. Math</li> <li>3. Chemistry or advanced option</li> <li>4. US History or advanced option</li> <li>5. Pathway/CTE</li> <li>6. Elective</li> </ol>	<p><b>12th Grade</b></p> <ol style="list-style-type: none"> <li>1. English 4 or advanced option</li> <li>2. Math</li> <li>3. American Government or advanced option</li> <li>4. Pathway/CTE</li> <li>5. Elective</li> <li>6. Elective or Reduced Schedule or Internship</li> </ol>

## 2024/2025 Courses

Course offerings are subject to change based on interest level.

### ENGLISH

Four English credits are required for graduation.

COURSE	Grade Level	Credit	Maximum GPA Potential
English 1	9	1.0	4.00
English 1 Honors	9	1.0	4.03
English 2	10	1.0	4.00
English 2 Honors	10	1.0	4.03
English 3: American Literature	11	1.0	4.00
Dual Enrollment English 3 – Writing 101 (PCC)/ AP English Language and Composition	11	1.0 high school & 3 college credits	4.05
English 4: Composition	12	1.0	4.00
Dual Enrollment English 4 - Writing 102 (PCC)/ AP English Literature and Composition	12	1.0 high school & 3 college credits	4.05

#### **English 1**

This class includes narrative writing, essay writing, discussion skills, and the study of grammar, vocabulary, and the completion of a research paper. Students will become familiar with the elements of literature through reading and studying short stories, novels, Greek drama, and poetry.

*Grade: 9*

*Credit: 1 credit, 2 semesters*

#### **English 1 Honors**

This honors class includes the same standard content as the English 1 course. Honors students will be expected to complete additional reading and writing assignments and perform more complex analysis of literature. Students will be judged by a higher standard with regard to the complexity and accuracy of their writing than those in the standard English 1 course. Must

maintain a C throughout the entirety of the course.

*Grade: 9*

*Credit: 1 credit, 2 semesters*

## **English 2**

This class develops higher level thinking skills through a diverse cross section of literature. There will be a strong focus on the use of the writing process and the six-traits rubric. This course will also include grammar, vocabulary, and reading comprehension.

*Grade: 10*

*Credit: 1 credit, 2 semesters*

*Prerequisite: English 1*

## **English 2 Honors**

This honors class includes the same standard content as the English 2 class. This class is appropriate for the student who has the desire to be challenged and is willing to share ideas aloud. Honors students will be expected to complete additional reading and writing assignments and perform more complex analysis of literature. Students will be judged by a higher standard with regard to the complexity and accuracy of their writing than those in the standard English 2 course. Must maintain at least a C throughout the entirety of the class.

*Grade: 10*

*Credit: 1 credit, 2 semesters*

*Prerequisite: English 1*

## **English 3: American Literature**

Students will focus on American Literature exclusively and will refine their persuasive, narrative, and expository writing. Students will identify elements in literature that reflect social, economic, and/or political issues of the time period. Students will respond to American Literature in a critical, reflective and imaginative manner.

*Grade: 11*

*Credit: 1 credit, 2 semesters*

*Prerequisite: English 2*

## **Writing 101 (Pima Community College, Dual Enrollment, English 4)/AP English Language and Composition**

Learn about the elements of argument and composition as you develop your critical-reading and writing skills. You'll read and analyze nonfiction works from various periods and write essays with different aims: for example, to explain an idea, argue a point, or persuade your reader of something. AP English Language and Composition is an introductory college-level composition course. Students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation,

claims and evidence, reasoning and organization, and style. Advanced Placement students are expected to take the AP End of The Year Assessment. Recommended to have C or higher in English 1 or 1 Honors and/or English 2 or 2 Honors.

*Grade: 11*

*Credit: 1 credit, 2 semesters*

*Prerequisite: English 2 or English 2 Honors*

### **English 4: Senior Composition**

This class is a survey of world literature, from its beginnings to modern times. Emphasis is on the reinforcement of reading and writing skills, the cultures and history of the authors, the development of skills in serious literary analysis, and on students making personal connections to the literature. Essay requirements will increase and advanced reasoning will be expected.

*Grade: 12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: English 3*

### **Writing 102 (Pima Community College, Dual Enrollment, English 4)/ AP English Literature and Composition**

This dual enrolled class can be taken after completion of the dual enrolled class WRT 101. This course explores various types of research writing, with a focus on constructing essays, arguments, and research reports based on primary and secondary sources. AP English Literature and Composition is an introductory college-level literary analysis course. Students cultivate their understanding of literature through reading and analyzing texts as they explore concepts like character, setting, structure, perspective, figurative language, and literary analysis in the context of literary works. It is a writing-intensive course that will be tailored to meet state requirements for Senior English, as well. Must maintain a C throughout the entirety of the class.

*Grade: 12*

*Credit: 1 high school credit and 3 college credits*

*Prerequisite: Writing 101 or AP English Language and Composition*

## MATH

Four math credits are required for graduation. Algebra 1, Geometry, Algebra 2, and a fourth year of math are required for **all** students. If high school math courses are taken from an out-of-district middle school and **passed with a B or better**, an official transcript must be provided to receive high school credit.

<b>COURSE</b>	<b>Grade Level</b>	<b>Credit</b>	<b>Maximum GPA Potential</b>
Algebra 1	9-12	1.0	4.00
Geometry	9-10	1.0	4.00
Geometry Honors	9-10	1.0	4.03
Algebra 2	9-12	1.0	4.00
Algebra 2 Honors	9-12	1.0	4.03
Statistics	11-12	1.0	4.00
Pre-Calculus	9-12	1.0	4.00
Pre-Calculus Honors	9-12	1.0	4.03
AP Calculus AB	9-12	1.0	4.05
AP Calculus BC*	9-12	1.0	4.05

\*Course offered during Zero Hour at CHS.

### **Algebra 1**

In this course, students use the language of Algebra, its terms, symbols, and logic to solve problems and describe relationships. Students will use algebraic, numerical, and graphical representations to solve realistic problems and to acquire mathematical skills. A district-approved graphing calculator is required for this class.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Geometry**

In this class, students will learn how to use mathematical tools to investigate geometric principles and relationships. Topics covered are reasoning, proof, perpendicular and parallel lines, properties of triangles, quadrilaterals, transformations, circles, area of polygons and circles, surface area, and volumes. A district-approved graphing calculator is required for this course.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Algebra 1 (If taken in middle school must have earned a B or better)*

### **Geometry Honors**

This course offers a more in-depth experience in using mathematical tools to investigate geometric principles and relationships. Along with studying topics covered in the regular geometry course, students will encounter additional details on how geometry is used to solve real-life problems. Proofs will be used throughout the year to emphasize logical reasoning and build understanding of geometric postulates. Students should be motivated and capable of pursuing projects independently. Students must maintain at least a C average to remain in any honors course. A district-approved graphing calculator is required for this course.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Prerequisites: Algebra 1 (If taken in middle school must have earned a B or better)*

### **Algebra 2**

This is a standard course in advanced Algebra. Topics considered are linear, quadratic, and cubic equations, determinants, logarithms, exponents, the theory of function, applied problems, discrete mathematics, probability and statistics, systems of equations and inequalities, and right triangle trigonometry. A district-approved graphing calculator is required for this course.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Geometry (If taken in middle school must have earned a B or better)*

### **Algebra 2 Honors**

This is an honors class in advanced Algebra. This course will cover Algebra 2 topics in a more rigorous manner than the regular Algebra 2 class. Students should be motivated and capable of pursuing projects independently. A district-approved graphing calculator is required for this course. Must maintain a C throughout the class.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Geometry (If taken in middle school must have earned a B or better)*

### **Statistics**

Students will be able to describe a set of data by numerical and graphical methods. Describe the normal curve and use its properties to answer questions about sets of data that are assumed to be normally distributed. Determine correlation, regression, and make predictions for two quantitative variables. Demonstrate an understanding of sampling, surveying, and experimental design. Use experimental or theoretical probability (as appropriate) to represent

and solve problems involving uncertainty. Use sample data to infer knowledge about a population. A graphing calculator is required for this course.

*Grade: 11-12*

*Credit: 1 Credit, 1 Semesters*

*Prerequisite: Algebra 2 or Algebra 2 Honors*

### **Pre-Calculus**

This course reviews topics covered in Algebra I, Geometry, and Algebra II to prepare students to study Calculus. Topics considered are functions and their graphs: polynomial, rational, exponential and logarithmic functions. Additional concepts include sequences, trigonometry, vectors, parametrics, limits, and Analytic Geometry. A district-approved graphing calculator is required for this course

*Grade: 9-12*

*Credit: 1 credit; 2 Semesters*

*Prerequisite: Algebra 2 or Algebra 2 Honors*

### **Pre-Calculus Honors**

This honors level course covers college Algebra and Trigonometry concepts to prepare students to study Calculus. Topics considered are functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities, sequences and series, analytic geometry, periodic functions, properties of trigonometry, trigonometric identities, trigonometric co-functions, and applications of trigonometric functions. Students must maintain at least a C average. A district-approved graphing calculator is required for this course.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Algebra 2 or Algebra 2 Honors*

### **AP Calculus AB**

This is a class in single-variable Calculus that includes techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus. Algebraic, numerical, and graphical representations are emphasized throughout the class. This class is comparable to the first semester Calculus course taught at colleges and universities. Additional homework and reading requirements, including summer work assignments. Students are expected to take the AP Exam (fee required). A district-approved graphing calculator is required for this course.

*Grade: 9-12*

*Credit: 1 Credit, 2 semesters*

*Prerequisite: Pre-Calculus or Pre-Calculus Honors (recommended)*

*Fee: AP Exam*



### **AP Calculus BC (Zero Hour at Cienega High School)**

This course is the study of change through graphical, numerical, and algebraic methods. It is a blending of traditional calculus with the computer/visualization approach to mathematics, covering differentiation and integration of arithmetic, trigonometric, and transcendental functions. The class will use the TI-84 graphing calculator extensively. Additional concepts include vectors, parametrics, and sequences and series. This course is comparable to the second semester Calculus course taught at colleges and universities. A graphing calculator is required for this course. Students should maintain at least a C average to remain in any AP class. College credit may be earned with a passing score on the AP Exam. Check individual college websites for details.

*Grade: 9-12*

*Credit: 1 Credit, 2 Semesters*

*Prerequisite: AP Calculus AB*

*Additional Requirements: Additional homework. Summer work.*

*Fee: AP Exam*

## SCIENCE

Three lab science credits are required for graduation.

COURSE	Grade Level	Credit	Maximum GPA Potential
Physics 1	9	1.0	4.00
Physics 1 Honors	9	1.0	4.00
AP Physics	11-12	1.0	4.05
Biology	10	1.0	4.00
Biology 100	10	1.0	4.05
Chemistry	11-12	1.0	4.00
Chemistry 130	11-12	1.0	4.05
Chemistry 151	11-12	1.0	4.05
Forensic Science	9-12	1.0	4.00

### **Physics 1**

This course seeks to familiarize the students with the basic laws and forces that govern all physical events in the world around them. The course uses class and laboratory experience to aid discovery, inspire curiosity, and aid understanding of the basic principles of physics. This course involves mathematics at the algebra 1 level, using calculators, and graphing work. Emphasis is placed on conceptual physics: study of forces, laws of motion, momentum, energy, electricity, magnetism, heat, light, and atomic structure.

*Grade: 9*

*Credit: 1 credit, 2 semesters*

*Co-requisite: Algebra 1 or higher*

### **Physics 1 Honors**

This is a college preparatory course that seeks to familiarize the students with the basic laws and forces that govern all physical events in the world around them. The course uses class, laboratory experience, and experimental research to aid discovery, inspire curiosity, and deepen student understanding of the rules that govern the universe. Students will use inductive and deductive reasoning along with cause and effect relationships to solve real-world problems. This course involves mathematics at the algebra 1 level, using calculators, and graphing work. Emphasis is placed on conceptual physics: study of forces, laws of motion, momentum, energy, electricity, magnetism, sound, light, and atomic structure. Students must maintain at least a C average throughout the entirety of the course.

*Grade: 9*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Algebra 1*

### **AP Physics**

This course is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Additional homework and reading requirements, including summer work assignments. Students are expected to take the AP exam (fee required). Teacher placement required.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite or Corequisite: Pre-Calculus or Pre-Calculus Honors*

*Fee: AP Exam*

### **Biology**

This course is a beginning level introduction to the biological sciences. It includes a study of living organisms and vital processes. Themes that will be covered in this course include scientific skills, ecology, biochemistry, cellular processes, genetics, evolution, classification of organisms.

*Grade: 10*

*Credit: 1 credit, 2 semesters*

### **Biology 100: Pima Community College Dual Enrollment BIO 100**

This course is a college level introduction to the biological sciences. Basic principles and concepts of biology. Includes methods of scientific inquiry, cell structure and chemistry, metabolism, reproduction, genetics, molecular biology evolution, and ecology and current issues in biology.

*Grade: 10 (grade 9 for Mav Scholars only)*

*Credit: 1 credit, 2 semesters*

### **Chemistry**

This course is a general chemistry class. It requires a firm foundation in writing, math, lab, and study skills, and a commitment to self-motivation. This class covers some of the topics addressed during entry-level college chemistry, including stoichiometry, thermo-chemistry, the gas laws, kinetics, solutions, and acid-base chemistry.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Must have completed 2 years of high school science (physics & biology).*

### **Chemistry 130: Pima Community College Dual Enrollment CHM 130**

Inorganic Chemistry as a basis for the study of some life processes. Includes the classification, structure and general chemical behavior of inorganic matter. This course is adapted to the needs of students in allied health programs.

*Grade: 11-12 (10 for Mav Scholars only)*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Must have completed 2 years of high school science (physics & biology).*

### **Chemistry 151: Pima Community College Dual Enrollment CHM 151**

Introduction to the foundations of chemistry for upper-level sciences and engineering. Includes atomic structure, chemical bonding, reaction stoichiometry, behavior of gasses, and reactions in solutions. Also includes an introduction to thermochemistry.

Prerequisite(s) : CHM 080 with a grade of C or better or minimum score on CHM Assessment Test; and MAT 151 or 188 or higher with a grade of C or better, or required score on the mathematics placement test.

*Grade: 11-12*

*Credit: 1 high school and 4 college credits, 2 semesters*

*Prerequisite: Must have completed 2 years of high school science (physics & biology).*

### **Forensic Science**

Forensic Science has matured into a popular and engaging topic. TV shows such as the CSI franchise, NCIS, Criminal Minds and many others have propelled this subject into popular culture. Yet true forensic investigations are based on the reliable tenets of the scientific method. Students in this course will hone their observational and deductive skills in topics such as hair and fiber analysis, toxicology, blood and DNA analysis, forensic anthropology and ballistics. In addition, students will be required to maintain detailed and accurate records and notes. This course employs some algebra, geometry and chemistry. These skills will be taught alongside the forensic science content.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Biology or Biology Honors*

## SOCIAL STUDIES

3.5 social studies credits are required for graduation.

<b>COURSE</b>	<b>Grade Level</b>	<b>Credit</b>	<b>Maximum GPA Potential</b>
World History	9	1.0	4.00
World History Honors	9	1.0	4.03
AP Human Geography	10	1.0	4.05
US History	11	1.0	4.00
AP US History	11	1.0	4.05
History 141/142	11	1.0	4.05
American Government	12	1.0	4.00
AP United States Government and Politics	12	1.0	4.05
Economics	11-12	1.0	4.00

### **World History**

Students will study the history of the world's great civilizations, their geographic settings, political development, social life, and economic conditions. Special emphasis will be placed on the development of critical thinking skills and a better understanding of current world affairs through analysis of past events.

*Grade: 9*

*Credit: 1 credit, 2 semesters*

### **World History Honors**

This class is designed to teach students about major cultural, social, religious and political issues around the world. This honors course will go deeper into the concepts and will explore interrelated topics. Students will develop research, writing, and reasoning skills and will gain insight on world cultures and religions. Must maintain a C average throughout the entirety of the class.

*Grade: 9*

*Credit: 1 credit, 2 semesters*

### **AP Human Geography**

AP Human Geography is a college level geography course that will introduce students to the study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students will use spatial concepts to examine human social organization and

its environmental consequences. Emphasis is placed on the methods geographers use in their science and practice. Students should be interested in social issues, and be highly motivated. Students are expected to take the AP Human Geography exam and may be eligible for advanced placement and/or college credit. See university websites for the score needed to award college credit. Example: a 4 or 5 earns 3 semester hours at UofA. Fulfills World History requirement. Must maintain a C or higher throughout the course.

*Grade: 9-12*

*Credit: 1 credit, 2 Semesters*

*Fee: AP Exam*

### **US History**

Students will study the story of the United States and its people, places, and ideas from the Colonial Era to modern times. Arizona history will be a component of this course.

*Grade: 11*

*Credit: 1 credit, 2 semesters*

### **Dual Enrollment US History - History 141/142 (PCC)**

This is a dual enrollment college level history class for the highly-motivated students. This course provides an overview of political, economic, and cultural themes that shaped the United States from the Pre-Colonial period to the modern day.

*Grade: 11*

*Credit: 1 high school credit and 6 college credits; 2 semesters*

*Prerequisite: World History*

*Requirements: Pima College Admission*

### **American Government**

This course focuses on America's democratic principles, values, and practices. Students will demonstrate the ability to distinguish interactions among branches of government, describe how the Constitution strikes a balance between majority rule and minority rights, as well as compare and contrast divergent forms of government.

*Grade: 12*

*Credit: 1 credit, 2 semesters*

### **AP United States Government and Politics**

This class will challenge students to develop a college-level understanding of American politics and governmental systems; the importance of a constitutional form of government, the concepts, beliefs, ideals and development of constitution of the U.S.; the relations between our legal governmental and economic institutions and public policy at the local, state, national, and international level; and to develop as knowledgeable citizens. Students must maintain at least a C throughout the entirety of the class.

*Grade: 12*

*Credit: 1 credit, 2 Semesters*

### **Economics**

This course covers basic economic problems such as scarcity, choice, and effective use of resources. It also covers topics on a larger scale such as market structures and international trade. It particularly focuses on the US economy and analyzes the role of the government and the Federal Reserve System. This class must be completed online by the end of the junior year or must be taken senior year.

*Grade: 11-12*

*Credit: 1/2 Credit, 1 Semester*

## **SPECIAL EDUCATION**

The Special Education department offers courses for students who have an Individualized Education Plan (IEP). These courses are aligned to Arizona's academic standards and are designed to meet the needs of the student, as specified in the student's IEP.

<b>COURSE</b>	<b>Grade Level</b>	<b>Credit</b>	<b>Maximum GPA Potential</b>
Adaptive Algebra 1/2	9-12	1.0	4.00
Adaptive Geometry	9-12	1.0	4.00
Functional Language Arts	9-12	1.0	4.00
Functional Math	9-12	1.0	4.00
Financial Literacy	12	1.0	4.00

### **Functional Math and Language Arts**

These courses are designed based on a student's IEP. Math and English standards will be taught as well as community based instruction and pre-employment skills. Students will receive individualized instruction adapted to individual strengths and needs while facilitating growth and increased skills.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Students will be placed in this class based on their IEP. Teacher placement required.*

### **Financial Literacy**

This class is designed to educate students in the areas of financial responsibility, income and careers, spending and credit, and saving and investing. Students should leave this course with an understanding of the time value of money and have the basic skills needed to budget and manage all aspects of their financial future. Students in this course will apply their knowledge of linear, quadratic, exponential, rational, radical, and logarithmic functions from Algebra 1 and Algebra II; perimeter, area, volume, and transformations from Geometry; and organizing /analyzing data from Probability/Statistics to solve problems as they might be presented in life.



Students will acquire knowledge of using spreadsheets to organize and analyze data. Units are comprised of topics in Employment, Banking, Transportation, Housing, Taxes, Credit, Retirement, End of life planning, and a Household budget. Students will be expected to create and maintain a portfolio. This course is not approved by the NCAA. And it does not fulfill ABOR requirements as a fourth year of math.

*Grade: 12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Algebra 2 or Algebra 2 Honors*

## **PATHWAY (CTE) CLASSES**

### THESE PROGRAMS ARE CAREER AND TECHNICAL EDUCATION CLASSES

Introductory Pathway classes can also be taken as a general elective in addition to your pathway if there is space in the class, and also it fits within a student's schedule.

<b>COURSE</b>	<b>Grade Level</b>	<b>Credit</b>	<b>Maximum GPA Potential</b>
Healthcare Foundations	9-10	1.0	4.00
Medical Assisting 1	11	1.0	4.00
Medical Assisting 2	12	1.0	4.00
Veterinary Assisting 1	11	1.0	4.00
Veterinary Assisting 2	12	1.0	4.00
Psychology & Behavioral Health 1	11	1.0	4.00
Psychology & Behavioral Health 2	12	1.0	4.00
Introduction to Automotive Technologies	9-10	1.0	4.00
Automotive Technologies 2	10-11	1.0	4.00
Automotive Technologies 3/4	11-12	1.0	4.00
Automotive Collision Repair 2	10-11	1.0	4.00

Automotive Collision Repair 3/4	11-12	1.0	4.00
Introduction to Engineering & Computer Science Principles	9-10	1.0	4.00
Engineering 2	10-11	1.0	4.00
Engineering 3/ Engineering 102	12	1.0	4.00- 4.05
Cybersecurity 1	10-11	1.0	4.00
Cybersecurity 2	11-12	1.0	4.00
Fine Arts Pathway	9-12	1.0	4.00-4.05

### **Healthcare Foundations**

This foundational course provides first year JTED students exposure to a variety of health and medical careers, while providing each student with the tools for success in his/her chosen area. Students will learn about and gain exposure to the following healthcare career areas: Nursing, Pharmacy Support Service, Surgical Support Services, Laboratory Assisting, and Biomedical Research.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Medical Assisting 1**

This course introduces students to the field of healthcare. It will provide students with the knowledge to help gain employment in entry-level positions at outpatient treatment centers such as a physician's office. Students will learn the following skills in this course: medical terminology, telephone skills, appointment scheduling, vital signs, assisting with physical examinations, assisting with minor office surgeries and procedures, introduction to billing and coding, and first aid.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Healthcare Foundations*

### **Medical Assisting 2**

This senior level course will build on Medical Assisting 1, and add the following specialties: pharmacology, injection techniques, phlebotomy, specimen processing, EKG's, workplace professionalism, resume writing, and interviewing techniques.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Medical Assisting 1*

### **Veterinary Assisting 1**

Veterinary Assisting 1 is designed as an introduction to the basic skills needed to assist veterinary professionals in providing complete and quality care to their patients. Students will learn basic client interaction skills, record keeping, veterinary laws and ethics as well as proper office procedures. In addition, students will learn the necessary skills to provide routine care, appropriately restrain patients, dispense medications and collect diagnostic samples.

*Grade: 10-11*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Healthcare Foundations*

### **Veterinary Assisting 2**

Veterinary Assisting 2 provides students with the fundamental knowledge needed to directly enter the workforce at a veterinary clinic, animal shelter or other facility in need of specialized animal medical care. In this continuation of the Veterinary Assisting program, students will gain further knowledge of animal care, laboratory procedures and performing diagnostic procedures. In addition, special emphasis is made on surgical nursing, radiology and animal dentistry.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Veterinary Assisting 1*

### **Psychological and Behavioral Health 1**

This course is designed to enable students to gain vocational skills to prepare them for post-secondary training and/or careers in the allied health and human service fields. Students will learn the skills necessary to assist professionals in the field of mental and behavioral health services. We will explore the field of Psychology, from the early treatments to the techniques of today. Students learn therapeutic communication techniques, vital signs, documentation strategies, medication administration, crisis management, and how to manage difficult behaviors.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Healthcare Foundations*

### **Psychological and Behavioral Health 2**

Students will increase their knowledge gained in Psychological and Behavioral Health 1 and gain new skills that are important for promoting vocational readiness and client well-being. Upon successful course completion, students are eligible to sit for a national certification exam to become a Certified Mental Health Technician.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Psychological and Behavioral Health 1*

### **Introduction to Automotive Technologies / Automotive Collision Repair 1**

This course covers workplace safety, hazardous material and environmental regulations, use of hand tools, service information resources, basic concepts, systems and terms of automotive technology. Topics include familiarization with vehicle systems along with identification and proper use of various automotive hand and power tools. Upon completion, students should be able to describe safety and environmental procedures, terms associated with automobiles and identify and use basic tools and shop equipment.

*Grade: 9-10*

*Credit: 1 credit, 2 semesters*

### **Automotive Technologies 2**

This class is the study of an automobile. This will be a hands-on experience class involving activities that relate directly to maintenance, repair and service. The program of instruction may include: safety in the shop, care and use of tools, interpretation of parts books, parts handling, engine construction, ignition systems, fuel systems, charging systems, starting systems, electronic systems, chassis wiring and diagrams, brakes, lubrication and minor tune-up.

*Grade: 10-11*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Introduction to Automotive Technologies 1 / collision 1*

### **Automotive Technologies 3/4**

This class is a continuation of the Auto Mechanics II course with more advanced training and more skill required in the use of tools and equipment. This course is designed to give the students the opportunity to learn practical application along with the related material in the following areas: engine rebuilding, transmissions, clutch drive train, differentials, major tune-up, and electronic emission control systems.

*Grade: 11-12*

*Credit: 1 credit each class for a total of 2 credits, 2 semesters*

*Prerequisite: Introduction to Automotive Technologies 2 / collision 2*

### **Collision 2**

This class is the study of an automobile. This will be a hands-on experience class involving activities that relate directly to collision repair and service. The program of instruction may include: safety in the shop, care and use of tools, interpretation of parts books, parts handling, structural construction, welding, paint mixing, spraying systems, surface preparation.

*Grade: 10-11*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Introduction to Automotive Technologies 1 / collision 1*

### **Collision 3/4**

This class is a continuation of the collision II course with more advanced training and more skill required in the use of tools and equipment. This course is designed to give the students the opportunity to learn practical application along with the related material in the following areas: Non-structural repair, custom paint mixing/matching, paint defects/cause/cures, estimating.

*Grade: 11-12*

*Credit: 1 credit each class for a total of 2 credits, 2 semesters*

*Prerequisite: Introduction to Automotive Technologies 2 / collision 2*

### **Introduction to Engineering & Computer Science Principles**

Students dig deep into the engineering design process, applying math, science, and engineering and computer science standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, coding, and use an engineering notebook to document their work. This program develops student's understanding of engineering problem solving and design practices. It is about applying engineering, science, math, and technology to solve complex, open-ended, real-world problems in a real-world context.

*Grade: 9-10*

*Credit: 1 credit, 2 semesters*

### **Engineering 2**

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. They will apply what they know to take on challenges like designing a self-powered car. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

*Grade: 10-11*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Introduction to Engineering and Computer Science Principles*

### **Engineering 3/ Engineering 102**

The knowledge and skills students acquire throughout Engineering come together in Engineering 3 as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of professionals. Students apply the professional skills they have developed to document a design to process to standards, completing the Engineering pathway ready to take on any post-secondary program or career.

*Grade: 12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Engineering 2*

## **Introduction to Cybersecurity**

Cybersecurity is an exciting, complex, and diverse field that is critical to all industries. As our lives become more dependent on internet-based tools and services, the demand for cybersecurity experience continues to expand. . In this course, we will look at, and delve into, many of the major concepts required in the field of cybersecurity. This hands-on course provides much of the foundational technical knowledge required for cybersecurity such as programming, basics of computer networking, basics of web technology, computer hardware, cryptography, secure designs of systems. Students will harden operating systems and take part in the legal/ethical issues related to cybersecurity. Students will also assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices. They will learn systems, and procedures to protect the property and operation of private businesses and government agencies.

*Grade: 10-11*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Introduction to Engineering & Computer Science Principles*

## **Cybersecurity 2**

Cybersecurity II offers a comprehensive exploration of networking foundations, equipping students with essential knowledge and skills. Delving beyond basic concepts, the course not only introduces key elements of network administration but also imparts crucial Linux administration "survival skills." Participants will focus on mastering core administration tasks and gain proficiency in fundamental command-line concepts and enterprise-level tools. The curriculum covers a range of topics, including file systems, partitioning, logical volumes, SELinux, firewalls, and troubleshooting, laying a solid foundation for a thorough understanding of cybersecurity principles.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Cybersecurity 1*

## FINE ARTS PATHWAY

The Fine Arts Pathway leads to a Fine Arts seal on a student's diploma. Students must meet the required coursework.

Track	Track Required Courses	Additional Fine Arts Courses Courses for Fine Arts Seal
<b>Visual Arts (4 credits total)</b>	<b>2 of the following:</b>  Studio Art 1, Studio Art 2/3 , AP Art and Design <b>OR</b> Yearbook 1&2	<b>Must Complete technical Art Sequence (2 years):</b> Digital Photo 1&2, Audio Production 1&2, Film and TV Production 1&2, <b>OR</b> Broadcasting 1&2
<b>Performing Arts (4 credits total)</b>	<b>2 Dance Classes</b> (Dance 1,2 or 3) <b>OR</b> <b>2 Drama Classes</b> (Intro to Drama and Drama 2) <b>OR</b> Rock Band <b>and</b> Advanced Rock Band	<b>Must Complete Technical Art Sequence (2 years):</b> Digital Photo 1&2, Audio Production 1&2, Film and TV Production 1&2, <b>OR</b> Broadcasting 1&2
<b>Survey Arts (6 or more credits total)</b>	<b>2 Courses from each Track <u>and</u> Complete Technical Art Sequence</b>  <i>2 Performing Arts Course:</i> Dance (1,2, or 3), Drama, Drama 2, Marching Band (CHS), Rock Band  <i>2 Visual Arts Course:</i> Studio Art 1, Studio Art 2/3, AP Art and Design, Yearbook 1&2  <b>2 Technical Art Sequence Courses:</b> Digital Photo 1&2, Audio Production 1&2, OR Video Production 1&2	

### Additional Fine Arts Pathway Requirements

#### Required Service Hours Before Graduation

- 80 hours (spread out over 4 years)
- OR
- 120 internship hours (must be done Junior summer or Senior year in congruence with Senior Exit Project)

#### Capstone Project

- Completed Senior Year (Required for Fine Arts Seal)

### Other Requirements

- Complete FAFSA
- Take ASVAB Assessment
- Complete ABOR Requirements (includes 2 Years of Continuous Foreign Language)

## FINE ARTS

One Fine Art elective credit is required for most university admission.

COURSE	Grade Level	Credit	Maximum GPA Potential
Studio: Art 1	9-12	1.0	4.00
Studio: Art 2/3	10-12	1.0	4.00
AP 2-D Art and Design	10-12	1.0	4.05
Dance 1	9-12	1.0	4.00
Dance 2	9-12	1.0	4.00
Dance 3	9-12	1.0	4.00
Introduction to Drama and Theater	9-12	1.0	4.00
Drama & Theater 2	9-12	1.0	4.00
Beginning Choir	9-12	1.0	4.00
Audio Production 1	9-12	1.0	4.00
Audio Production 2	10-12	1.0	4.00
Film and TV Production 1	9-12	1.0	4.00
Film and TV Production 2	10-12	1.0	4.00
Digital Photography 1	9-12	1.0	4.00
Digital Photography 2	10-12	1.0	4.00
Digital Photography 3	11-12	1.0	4.00
Yearbook 1	9-12	1.0	4.00
Yearbook 2	10-12	1.0	4.00
Rock Band	9-12	1.0	4.00
Rock Band Advanced	10-12	1.0	4.00



Broadcasting	9-12	1.0	4.00
Marching Band*	9-12	1.0	4.00
Steel Drums**	9-12	1.0	4.00

\*Course offered during Zero Hour at CHS.

\*\*Course offered during Zero Hour at EHS.

### **Studio: Art 1**

This course will allow students to explore their creative talents with a variety of different art techniques including drawing, painting, digital media, ceramics, sculpture, and printmaking. Students will also be introduced to art history and aesthetic theory along with their studio explorations. This course is designed for those wanting to test the waters, as well as those who are interested in pursuing art further.

*Grade: 9 – 12*

*Credit: 1 credit, 2 semesters*

*Fee: There may be a materials fee required.*

### **Studio: Art 2/3**

This course will be a continuation of Art Studio 1. Students will explore their creative talents in a variety of media including drawing, painting, ceramics, sculpture, and printmaking. Studio work will be more challenging and independent, and studies of art history and aesthetics will be more in depth.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Art: Studio 1.*

*Fee: There may be a materials fee required.*

### **AP 2-D Art & Design**

Students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes, and ideas over the course of a year. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, students submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions. Students may choose to submit any or all of the AP Portfolio Exams. There may be a materials fee required.

*Grade: 9– 12*

*Credit: 1 credit, 2 semesters*

*Fee: AP Exam*

### **Dance 1**

This course explores basic/foundational elements and skills in the dance styles of: ballet, modern, contemporary/lyrical, jazz, musical theater, hip hop, and improvisation. This course is designed as a challenging introduction to dance and dance literacy for students with little or no prior dance experience. Topics include history, anatomy, terminology, technique and choreography. Student classwork/writing will reflect inquiry, review, and critique of various dance topics, dance figures, and live performances. There will be a public performance at the school. Students may be required to devote additional time outside of class for rehearsals and performances. A dance dress code is required. Fee required.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

## **Dance 2**

This course extends the skills and knowledge developed in Dance I and challenges students to further develop greater conceptual, technical, and performance skills. Student classwork/writing will reflect inquiry, review, and critique of various dance topics, dance figures, and live performances. There will be a public performance at the school and possibly in the community. Students may be required to devote additional time outside of class for rehearsals and performances. A dance dress code is required. Fee required.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Dance 1 or site approval*

## **Dance 3**

This course is designed for students with extensive dance training (a minimum of 3 years serious ballet training), which challenges students to develop greater conceptual, technical, and performance skills. Student classwork/writing will reflect inquiry, review, and critique of various dance topics, dance figures, and live performances. Students in Dance III will be expected to perform at community events such as Vail Pride Day, Mav Fest, and at the end of the year performance and act as student ambassadors for the APHS Dance Program. Students may be required to devote additional time outside of class for rehearsals and performances. A dance dress code is required. Fee required.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Dance 2 or site approval*

## **Introduction to Drama and Theater**

This course introduces and provides experience in all aspects of theater arts. Students study basic principles of theater including trust, stage/theater terminology and structure, observation, theater history, pantomime/movement, improvisation, character analysis, textual interpretation, voice, emotion, collaboration, and playwriting. Students explore the basic fundamentals of

drama through exercises and activities, in which they develop ensemble and individual performance skills culminating in a year-end performance. Fee required.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

## **Drama and Theater 2**

This course extends and builds upon Introduction to Drama and Theater and further challenges students to develop greater skills in the aspects of theater arts. These include conceptual, technical, and performance skills that align with the fundamental basics in theater and drama. Elements such as directing, play production, playwriting, monologues, duet scenes, technical design, and more will be explored in this class. Student classwork/participation will reflect understanding and demonstration of various theater topics. There will be a public performance at the school along with possible participation in the community. Students may be required to devote additional time outside of class for rehearsals and performances. Fee required.

*Grades 9-12*

*1 credit, 2 semesters*

*Prerequisite: Introduction to Drama and Theater or site approval*

## **Beginning Choir**

This is a non-audition choir class. Students will be singing music from many different genres. Some genres include classical, jazz, musical theater and pop. Basic theory and sight-singing skills are taught during this class. Students will be expected to perform in concerts during the year.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

## **Audio Production 1**

This course will involve a variety of aspects of music and audio production. Students will run live sound for concerts and music productions. They will also participate in sound production and engineering in a recording studio. Students will also participate in music writing and production for live and recorded sound.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

## **Audio Production 2**

This course will involve a variety of aspects of music and audio production, continuing from Audio Production 1. Students will build advanced skills needed for live sound for concerts and music productions. They will also continue to participate in sound production and engineering in a recording studio. Students will also participate in advanced music writing and production for live and recorded sound.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Audio Production 1*

### **Film and TV Production 1**

Have you ever wanted to learn to create professional quality videos for a variety of projects? This course teaches career exploration, script writing, and the foundation of media production including the use of digital movie cameras and equipment and editing techniques. Students learn to use a variety of computer editing applications but our primary focus is on Adobe Premiere Pro. Video Production 1 focuses on script writing, verbal communication and camera presence, basic camera operation and camera movements, shot sizes and editing files

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Film and TV Production 2**

Have you ever wanted to learn to create professional quality videos for a variety of projects? This course teaches career exploration, script writing, and the foundation of media production including the use of digital movie cameras and equipment and editing techniques. Students learn to use a variety of computer editing applications but our primary focus is on Adobe Premiere Pro. Video Production 2 focuses on advanced editing and audio techniques, promotion of school wide events, and takes a closer look at careers in the Film and TV industry.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisites: Video Production 1*

### **Digital Photography 1**

Students will learn the elements of design, copywriting, and the basics for photography through a variety of Adobe computer applications. This course is deadline- oriented, and may require time outside of class. This course requires organization, attention to detail, initiative, responsibility, motivation, and maturity. Our mission is to teach young people a skill/craft, and inform them of career opportunities. Our classroom aims to have industry standard equipment for a 1:1 ratio. We utilize Apple computers, Adobe software applications, and Canon DSLR cameras. The photography program has two tiers of learning. Photo 1 is a beginning to intermediate photography course that teaches the use of the camera, design and composition, incorporates career exploration, and helps students develop professional standards.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Digital Photography 2**

Students will learn various responsibilities consisting of digital and conventional photography,

copywriting, graphic design, and photo manipulation. This course is deadline oriented, and requires organization, initiative, responsibility, motivation, and maturity. Our mission is to teach young people a skill/craft, and inform them of career opportunities. Our classroom aims to have industry standard equipment for a 1:1 ratio. We utilize Apple computers, Adobe software applications, and Canon DSLR cameras. The photography program has two tiers of learning. Photo II focuses on intense professional skill development and prepares students to enter the workplace or entrepreneurialship.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisites: Digital Photography 1*

### **Digital Photography 3**

Digital Photography 3 is an advanced level course designed to further develop students' skills in the art and science of digital photography. Building upon the foundations established in Digital Photography 1 and 2, this course focuses on refining technical proficiency, fostering creative expression, and exploring advanced concepts in photographic composition and post-processing. You will work on building a portfolio as well as self assigned projects. Students will develop and design their own website as well as research internship possibilities. Level 3 Photography students will be responsible for overseeing the editing of the yearbook portraits as well as solicit local businesses for projects.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Prerequisites: Digital Photography 2*

### **Yearbook 1 (Digital Photography Documentary 1)**

This course focuses on the training of students in design layout, journalistic style and editing in order to prepare them for the creation of the Andrada High School Yearbook. Students will learn the elements of design, copyrighting, and the basics of photography. This course is deadline-oriented, and requires a lot of time outside of the class. The course requires organizational skills, initiative, responsibility, motivation and maturity. This is also a class that requires making contact with people and being social. This course is recommended for students who have previously had photography, graphic design or journalism.

*Grades: 9-12*

*Credit: 1 credit, 2 semesters*

### **Yearbook 2 (Digital Photography Documentary 2)**

This course focuses on the creation of the Andrada High School yearbook. Students will be developing a product that is to be sold. Responsibilities consist of digital and conventional

photography, copywriting, graphic design, and photo manipulation. This course is deadline oriented, and requires organization, initiative, responsibility, motivation, and maturity.

*Grades: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Yearbook 1*

### **Rock Band**

Students will learn a variety of music skills including training on guitar, drums, other various instruments, voice and stage presence. The goal of the class is to expose students to the concepts and ideas of entertainment and production, while gaining an appreciation for the art.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Rock Band: Advanced**

Students will build on the concepts they established in Rock Band.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisites: Rock Band*

### **Broadcasting**

Students will learn about a variety of media skills including, scripting, story telling, interviewing, and effective communications. Students will practice reading scripts from a teleprompter. Students will also learn about news values as well as audio and video productions including use of video cameras, studio lighting, switch boards, microphones, and the use of editing software. This class focuses on the use of Adobe PremierPro and Adobe Audition. Students in this class are responsible to research, organize, and positively report the school news through the Andrada News Network.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Marching Band (Zero Hour at Cienega High School)**

This class is a high-profile ensemble and consists of those involved with other bands within the school. It provides the opportunity for students to perform in one of the finest groups on campus as well as in the district. Students will learn the basic concepts of marching and music, and combine both skills to create a performance piece on a weekly basis. Marching Band is a Zero Hour class. Color Guard will provide instruction of basic marching fundamental and rhythmic accuracy, with the use of auxiliary equipment such as flags, rifles, sabers, and auxiliary percussion. Dance skills are also part of the curriculum. Color Guard is coordinated with Marching Band and all students are required to participate in Marching Band functions and performances.

Grade: 9-12

Credit: 1 credit, 2 semesters

Prerequisite: Freshman Camp and Band Camp in July. Check [cienegabands.com](http://cienegabands.com) for information.

Requirements: Evening and weekend practices and performances. There may be a materials fee required.

### **Steel Drums (Zero Hour at Empire High School)**

No experience is required; however, some musical knowledge is helpful. The following topics will be studied from beginning to advanced levels:

- Music theory (reading, playing, and writing music)
- Interpreting and performing a variety of music genres, including: calypso, samba, soca, one drop reggae, classical, Latin jazz, pop, fusion rock, swing, and much more
- Music Performance Both On And Off Campus
- Festival Participation

Grade: 9-12

Credit: 1 credit, 2 semesters

Fee: There may be an associated fee

## **WORLD AND NATIVE LANGUAGES**

Two years of the same language are required for Arizona university admission.

Three to four years are required for many selective universities.

<b>COURSE</b>	<b>Grade Level</b>	<b>Credit</b>	<b>Maximum GPA Potential</b>
Spanish 1	9–12	1.0	4.00
Spanish 2	10–12	1.0	4.00
Spanish 3 Honors	11-12	1.0	4.03
AP Spanish Language and Culture	11-12	1.0	4.05
American Sign Language 1	9-12	1.0	4.00
American Sign Language 2	10-12	1.0	4.00

### **Spanish 1**

Students will develop primary listening and speaking skills that stress the correct pronunciation and intonation of the Spanish language. Students will explore Spanish speaking countries and their cultures. Students will use appropriate Spanish material to assist them through the four basic communication skills of reading, writing, listening and speaking.

Grade: 9-12

Credit: 1 credit, 2 semesters

## **Spanish 2**

Students will improve and expand listening and speaking skills through emphasis on pronunciation and intonation of the Spanish language. Students will continue to improve communication skills in Spanish and further their knowledge, not only of grammar and complex sentence structure, but also the culture of the Spanish-speaking world. There is a high level of in-class participation.

Grade: 10-12

Credit: 1 credit, 2 semesters

Prerequisite: Spanish 1

## **Spanish 3 Honors**

This course will continue to develop skills in speaking, listening and writing Spanish. At this level there is an increased emphasis on vocabulary development, oral proficiency, expression in the past tense and various other tenses (future tense). Students will read short stories and class is conducted entirely in Spanish. Students will also continue to expand knowledge of the culture of Spanish-speaking people.

Grade: 11-12

Credit: 1 credit, 2 semesters

Prerequisite: Spanish 2

## **AP Spanish Language and Culture**

Develop your Spanish language skills and learn about the cultures in Spanish-speaking parts of the world. You'll practice communicating in Spanish and study real-life materials such as newspaper articles, films, music, and books. Advanced Placement students are expected to take the AP End of The Year Assessment. Recommended to have had at least 2 years of High School Spanish.

Grade: 11-12

Credit: 1 credit, 2 semesters

Prerequisite: Spanish 2

Fee: AP Exam

## **American Sign Language (ASL) 1/ Dual Enrollment- SERP 370A**

This course covers receptive signing, expressive signing, interactive communication, culture and language. Students will learn the American Sign Language fingerspelling alphabet, ASL grammar, sentence structure and vocabulary. We will also study Deaf culture and examine the history of deafness in America. By the end of this course, students will be able to communicate at the novice high level in American Sign Language. A variety of texts and websites will be



utilized. For a fee, students can earn dual enrollment credit with this course through the University of Arizona. **For a fee, students can earn dual enrollment credit with this course through the University of Arizona. One year of SERP 370A at Andrada equals one semester of ASL at the University of Arizona.**

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **American Sign Language (ASL) 2/ Dual Enrollment- SERP 370B**

This course will be a continuation of ASL 1. ASL 1 is required in order to take ASL 2. Students will increase their American Sign Language vocabulary. Both expressive and receptive skills will be practiced, with additional emphasis placed on students' expressive skills as the year progresses. A majority of class time will be conducted in ASL. This "Voices Off" policy will enable students to be immersed in the language. A variety of texts and websites will be utilized. At least one cultural experience in the Deaf community will be a requirement of this course. By the end of this course, students will be able to communicate at the intermediate mid-level in American Sign Language. **For a fee, students can earn dual enrollment credit with this course through the University of Arizona. One year of SERP 370B at Andrada equals one semester of ASL at The University of Arizona.**

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: American Sign Language 1*

## GENERAL ELECTIVES

Electives may have various class fees.

<b>COURSE</b>	<b>Grade Level</b>	<b>Credit</b>	<b>Maximum GPA Potential</b>
Animal Behavior	9–12	1.0	4.00
Fundamentals of Basic Repair	9-12	1.0	4.00
Pharmacy Technician**	10-12	1.0	4.00
Health/Leadership	9	1.0	4.00
Peer Mentoring 1	10–12	1.0	4.00
Peer Mentoring 2**	10–12	1.0	4.00
Sports Medicine and Rehabilitation	10-12	1.0	4.00
PE: Fitness	9-12	1.0	4.00
Weight Training	9-12	1.0	4.00
Weight Training: Advanced**	10-12	1.0	4.00
AP Computer Science	10-12	1.0	4.00
Chronicles of the 20th Century	9-12	1.0	4.00
Wildlife Management	9-12	1.0	4.00
Student Council	9–12	1.0	4.00

NJROTC Naval Sciences (CHS)*	9–12	1.0	4.00
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\* Offered zero hour at Cienega High School

\*\*Prerequisite/corequisite required

### **Animal Behavior**

Are you fascinated by animals and wonder why they do the things they do? Have you wondered how trainers can teach dolphins to do amazing tricks and lions to balance on footstools? We will answer those questions in this course! This course examines the history, evolution and future roles of companion animals in society, as well as, investigates the science behind the Human-Animal Bond. In addition, this course encourages students to practice positive reinforcement, science-based behavior modification and training techniques. Students will apply concepts learned in class to run group/obedience training simulations and train a pocket pet to perform behaviors on command in class. Students do NOT need to be enrolled in Veterinary Assisting.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Completion of this course along with the Veterinary Assisting courses will earn the student a Certificate of Veterinary Assisting with a Special Interest in Animal Behavior.*

### **Fundamentals of Basic Repair**

The premise of this class is to teach students how to repair items around them. Students will gain the understanding of a “Do It Yourself” (DIY) mindset. They will analyze the time, cost, and value of repairs versus buying a new item. Students will engage math and English skills by building a cost analysis of repairs, writing up estimates and work orders. Students will incorporate small business skills for customer service and marketing. Students will learn how to work safely with hand tools and power tools. Students will incorporate the proper use of personal protective equipment (PPE) for the task at hand. Introduction skills of wood working, metal working, automotive, electrical, and painting will be covered in class, based on the work that comes in. The proper use of measuring tools is a must for anyone in the class. This class will be counted as an elective class.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Pharmacy Technician**

The Pharmacy Technician program prepares students for employment in commercial pharmacies and hospitals alike. Students will become proficient in preparing medications, providing medications and related assistance to patients, manage inventory, and manage pharmacy clinical and business operations. Students in the Pharmacy Technician class will learn medical and pharmaceutical terminology, pharmacy laboratory procedures, principles of pharmacology, drug identification and indicated uses and prescription interpretation. Students

will also learn pharmacy laboratory safety procedures, testing and measurement techniques, dispensing procedures and pharmacy business operations.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Healthcare Foundations, or Healthcare Foundations-VET.*

### **Health/Leadership**

This course is designed to give students the opportunity to improve their health attitudes and practices through an increased knowledge of the individual's responsibilities for developing and maintaining a healthy mind and body. Topics include substance abuse, nutrition, widespread health problems, sex education, benefits of exercise, self-esteem, depression, wellness concepts, and coping with stress.

*Grade: 9*

*Credit: 1 credit, 2 semesters*

### **Peer Mentor 1**

This course is for students who want to pursue a career in the education or related service field in the future. A special educator provides direct instruction to Peer Mentors to teach educational philosophy and structure. In addition students will get to work in small groups with their peers with disabilities under the guidance of a special educator and experienced Peer Mentors in a vocational training course.

Peer Mentors will be assigned a Buddy to support daily under the supervision of the general education and special education teacher. Peer Mentors will be responsible for sending quarterly postcards home to the family of their Buddy to share with them experiences and highlights of the season.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Requirement: Instructor's approval is required*

### **Peer Mentor 2**

This course is for students who want to pursue a career in the education or related service field in the future. In their 3rd year, Peer Mentors will be assigned a small instructional group, a job coaching role with a Buddy in their off campus job or a Buddy who may be more challenging to work with. Peer Mentors will take an online paraprofessional certification course tailored to learning instructional strategies related to accommodations, modifications and positive behavioral supports. Peer Mentors will have the opportunity to get their Paraprofessional, First Aid and CPR certifications upon completion of the course and assessments.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Requirement: Instructor's approval is required*

## **Sports Medicine and Rehabilitation**

Sports Medicine and Rehabilitation introduces students to the analysis of human movement through anatomy and physiology of the muscular, skeletal, and nervous systems and their interaction in human movement and athletic performance. Students will also learn signs and symptoms of injuries, illnesses, and disorders commonly seen in the physically active population. Students will develop skills in injury prevention, injury and illness assessment, and using appropriate terminology and medical documentation to record injury and illness.

Sports Medicine is ideal for students who are interested in healthcare of active individuals and/or are interested in the following career paths: Athletic Training, Physical Therapy, Physician, Personal Trainer, Nutritionist, Sports Psychology, Coaching, Orthopedics, etc...

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisites: Healthcare Foundations (preferred but not required)*

## **Physical Education: Fitness**

This course is designed to offer students a wide variety of group fitness activities that enhance physical skills, movement, and wellness. Activities may include team handball, volleyball, over the line softball, 3 on 3 soccer, basketball, and flag football, ultimate Frisbee, lacrosse, soccer, speedball, flicker-ball, and foot tennis, badminton, golf, pickleball, tennis, Frisbee golf, archery, and table tennis. Through participation in these activities, students will develop cardiovascular fitness, muscular strength, muscular endurance, and flexibility. The concepts of teamwork and sportsmanship are emphasized. Fitness assessments will be conducted a minimum of 2 times per semester.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

## **Weight Training**

This course is designed for those students who want to get a basic, fundamental understanding on weight training. The main focus of this course is powerlifting and its benefits. Students who take this course begin to understand how the body works in terms of movements, muscle building, and establishing a healthy lifestyle. Core lifting is introduced in this class, along with range of motion and nutrition.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

## **Advanced Weight Training**

This course is designed for those students with a solid, fundamental understanding on core lifting. Core lifting includes squats, bench press, deadlifts, and power cleans. This course would help gain depth and knowledge on performing these lifts at a different level than the introduction class. Students will be able to create their own program, with the guidance of the instructor, to target their specific needs. In addition, olympic lifts such as power clean + squat + jerk and snatches will be added to this course. **It is highly recommended you have taken Intro to Weight Training prior to entering this class.**

**Please see Mr. Story prior to signing up.**

*Grade: 10–12*

*Credit: 1 credit, 2 semesters*

### **AP Computer Science**

This is equivalent to a first-semester, college level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language.

*Grade: 10 - 12*

*Credit: 1 credit, 2 semesters*

### **Chronicles of the 20th Century**

This history elective takes an in-depth look at 20th century history through modern day. This includes famous conflicts such as World War I, the rise of the Third Reich, World War II, and the Cold War. This class has an emphasis on analysis of film/tv documentaries of the particular era.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Wildlife Management**

This is an introductory elective course designed to introduce students to the principles of conservation and wildlife management, specifically in the state of Arizona and the United States. Students interested in careers in wildlife conservation, rescue and management, wildlife biology, the Forestry Service or Game and Fish will find this course beneficial. This course includes instruction in ecological concepts, predator-prey relationships, the history of wildlife conservation in the United States, human-wildlife conflict resolution, game and fish laws and the role of hunting in conservation.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **Student Council (Zero Hour)**

This class will be required for elected Student Council representatives and other students that are a part of the student government. It will not only incorporate the regular student council responsibilities, but will focus on leadership qualities and skills such as Robert's Rules of Order and Parliamentary procedures, Socratic Method of Argumentation. It will also include individualized school based "projects" (prom, winter formal, greater Vail community fundraisers, blood drive, and aspects of the yearbook).

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

*Requirements: Students must be elected to office. Teacher placement required. See Mrs. Nordling.*

### **NJROTC Naval Science 1 (Zero Hour at Cienega High School)**

The purpose of this class is to introduce students to the meaning of citizenship, the elements of leadership, and the value of scholarship in attaining life goals; promote an awareness of the importance of a healthy lifestyle, including physical fitness, a proper diet, and controlling stress; drug awareness; provide the principles of health and first aid, geography and survival skills and an overview of Naval ships and aircraft. These elements are pursued at the fundamental level. This course includes introduction to the NJROTC program; introduction to Leadership, Citizenship and the American Government; introduction to Wellness, Fitness, and First Aid to include diet, exercise and drug awareness, introduction to Geography, Orienteering, Survival and Map Reading Skills; Financial Skills and introduction to the U.S. Navy.

*Grade: 9-12*

*Credit: 1 credit, 2 semesters*

### **NJROTC Naval Science 2 (Zero Hour at Cienega High School)**

The purpose of this class is to build on the general introduction provided in Naval Science 1, to further develop the traits of citizenship and leadership, and to introduce cadets to the technical areas of naval science and the role of the U.S. Navy in maritime history and the vital importance of the world's oceans the continued wellbeing of the United States. This course includes ongoing instruction into Leadership; introduction to Maritime History, including the American Revolution, Civil War, the rise of the U.S. to world power status, World Wars 1 and 2, the Cold War Era and the 1990's and beyond; introduction to Nautical Sciences to include Maritime Geography, Oceanography, Meteorology, Astronomy, and Physical Sciences.

*Grade: 10-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Successful completion of Naval Science 1*

### **NJROTC Naval Science 3 (Zero Hour at Cienega High School)**

The purpose of this class is to broaden the understanding of students in the operative principles of military leadership, the concept and significance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives, and the importance of sea power and national security. Students gain a more in-depth knowledge of Naval ships and aircraft and an introduction to marine navigation and seamanship. Course content includes instruction in Sea Power and National Security. Naval Operations and Support Functions, Military Law, and International Law and the Sea. Provides introduction to Ship Construction and Damage Control, Shipboard Organizations and Watch Standing, Basic Seamanship, Marine Navigation, and Naval Weapons and Aircraft.

*Grade: 11-12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Successful completion of Naval Science 2*

### **NJROTC Naval Science 4 (Zero Hour at Cienega High School)**

The purpose of this course is to focus primarily on practical leadership techniques and implementation. The intent is to assist seniors in understanding leadership and improving their leadership skills by putting them in positions of leadership, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. Seniors are mentored/guided in their preparation for life after high school to include college preparation, scholarship applications, and the variety of choices that are available to them. Course content includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Students are provided access to ACT/SAT prep courses, guidance in selecting a college and pursuing available scholarships, and mentoring in establishing long range life goals.

*Grade: 12*

*Credit: 1 credit, 2 semesters*

*Prerequisite: Successful completion of Naval Science 3*