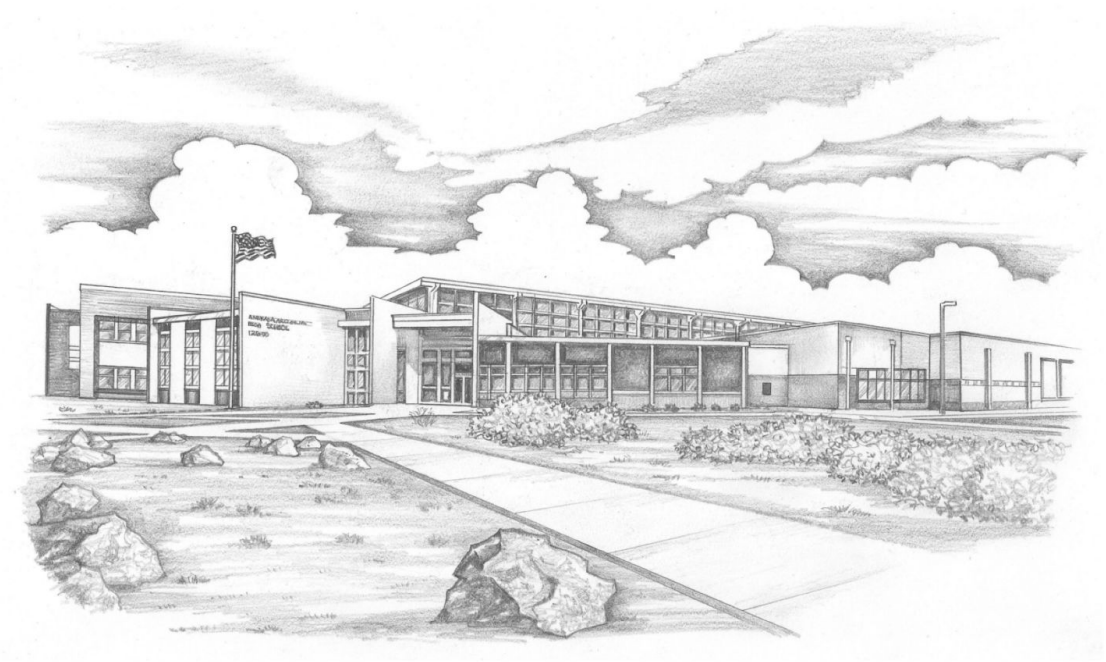
ANDRADA POLYTECHNIC

HIGH SCHOOL

Course Descriptions

2021-2022



12960 S. Houghton Rd.
Tucson, Arizona 85747
(520) 879-3300 Main
(520) 879-3301 Fax

Welcome to
Andrada Polytechnic High School

"Home of the Mavericks"

Administrative Staff

Julia Kaiser, Principal
Rod Carrier, Assistant Principal
Courtney Young, Assistant Principal

Counselors

David Goldberg
Callista Radloff
Aaryn Townsend

Non-Discrimination Policy

The Board is committed to a policy of nondiscrimination in relation to race, color, religion, sex, age, national origin, and disability. This policy will prevail in all matters concerning staff members, students, the public, educational programs and services, and individuals with whom the Board does business. Governing Board Policy AC.

To report any Title IX concerns, please contact the Title IX Coordinators:
Mr. Shannon Woolridge, Empire High School (520) 879-3012
Mr. John Carruth, Vail School District (520) 879-2005

To report any concerns regarding Special Education, please contact:
Mr. Ben Smith-Dryden, Andrada High School (520) 879-3337
Ms. Michelle Macias, Andrada High School (520) 879-3332
Mrs. Kathleen McNaboe, Vail School District (520) 879-2054

To report any concerns regarding 504 plans, please contact:
Callista Radloff, Andrada High School Grade 9 (520) 879-3314
Aaryn Townsend, Andrada High School, Grades 10-12, A-K (520) 879-3315
David Goldberg, Andrada High School, Grades 10-12, 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:

- Student prefers a different lunch
- 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. This grade will be reflected in the student's overall GPA. Any student who drops a class after the 6-day drop period and receives a W/F on their transcript will be ineligible for the remainder of the semester.

Classes Failed – If students fail classes needed for graduation, they should contact their School Counselor for options to make up the class. Students will not be able to repeat failed classes during their regular Andrada schedule due to high enrollment numbers. Credit Recovery is a self paced online course through Edmentum. The fee is $75 per semester class, and students have 8 weeks to complete the class. Students who qualify for free or reduced lunch may request a scholarship, the fee is $25. To enroll in credit recovery, please contact Mr. Jim Livinston at livingstonj@vailschooldistrict.org or (520)879-3309.

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.

AzM2

AzM2 is the statewide achievement test for Arizona students. Arizona public school students in 10th grade (cohort 2023 in 2020-2021 school year) will take the grade level AzM2 assessments in English Language Arts and Mathematics. AzSCI The AzSCI Field Test will be administered to 11th grade students (Cohort 2023) in the 2021-2022 school year.

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 honors 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. All classes must be approved by administration.

ACT, SAT, PSAT, ASVAB

The ACT and SAT are nationally standardized tests offered at various locations and testing dates. The ACT exam is offered to Andrada students in 11th grade 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

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 Schoolinks

Education and Career Action Plan (ECAP) is required by the state of Arizona. The Vail School District uses Schoolinks, 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.

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 parent/guardian 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 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 quarterly 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 3.5, 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 engage in additional fine arts or career and technical education courses; 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 4 credits in one artistic discipline: (dance, music, theatre, visual arts, or media arts) or;
    b. 3 credits in one artistic discipline; and 1 credit in a qualifying creative industries CTE credit or separate discipline; or
    c. 2 credits in one artistic discipline, and 2 credits in a qualifying creative industries CTE course or separate artistic discipline.
3. 80 hours of arts related extracurricular activities
4. A student capstone project

Andrada Polytechnic High School

Graduation Requirements

SUBJECT AREA	ANDRADA REQUIREMENTS	MINIMUM REQUIREMENTS FOR AZ UNIVERSITIES	MINIMUM REQUIREMENTS FOR SELECTIVE UNIVERSITIES
ENGLISH	4 Credits	4 Credits	4 Credits
MATH	4 Credits*	4 Credits	4 Credits
SCIENCE	3 Credits	3 Credits	4 Credits
SOCIAL STUDIES	3 Credits**	2 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	1 Credit in Fine Arts
WORLD & NATIVE LANGUAGES	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	Additional Credits to = 22***	Meet Andrada Requirements	Meet Andrada Requirements
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

***Andrada students are required to complete a 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.

9th Grade 1. English 9 or Honors English 9 2. Math (Algebra 1 or higher if taken in middle school) 3. Physics 4. World History or Honors World History 5. Health and Leadership 6. Elective	**10th Grade** 1. English 10 or Honors English 10 2. Math 3. Biology 4. Pathway/CTE 5. Elective 6. Elective
11th Grade 1. English 11 or Writing 101 2. Math 3. Chemistry 4. US History or Honors US History 5. Pathway/CTE 6. Elective	**12th Grade** 1. English 12 or Writing 102 2. Math 3. Government 4. Pathway/CTE 5. Elective 6. Elective or Reduced Schedule

2021/2022 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)	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)	12	1.0 high school & 3 college credits	4.05

English 1

This course 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 course 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.

Grade: 9

Credit: 1 credit, 2 semesters

Requirements: Additional homework. Must maintain at least a C. Teacher placement required.

English 2

This course 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

English 2 Honors

This honors course includes the same standard content as the English 2 course. This course 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.

Grade: 10

Credit: 1 credit, 2 semesters

Requirements: Additional homework. Must maintain at least a C. Teacher placement required.

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 critically, reflectively, and imaginatively.

Grade: 11

Credit: 1 credit, 2 semesters

Dual Enrollment English 3 – Writing 101 (PCC)

This class is a freshman level college course. It is a course in writing academic prose, including various types of essays, arguments, and constructions. It is a writing-intensive course that will be tailored to meet state requirements for Junior English, as well.

Grade: 11

Credit: 1 high school credit and 3 university credits

Prerequisites: English 2 or English 2 Honors; Placement Test Required

Requirements: Must meet GPA requirements. Teacher placement required.

English 4: Composition

This course 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

Dual Enrollment English 4 – Writing 102 (PCC)

This dual enrolled class can be taken after completion of GCU ENG105 or 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. It is a writing-intensive course that will be tailored to meet state requirements for Senior English, as well.

Grade: 12

Credit: 1 high school credit and 3 university credits

Prerequisites: GCU ENG-105 or Writing 101

Requirements: Must meet GPA requirements. Teacher placement required.

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.

COURSE	Grade Level	Credit	Maximum GPA Potential
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
Intermediate College Algebra	11 - 12	1.0	4.00
Financial Literacy	12	1.0	4.00
Statistics	11 - 12	1.0	4.00
Pre-Calculus	9 - 12	1.0	4.00
Pre-Calculus Honors	9 - 12	1.0	4.03
Calculus AB AP	9 - 12	1.0	4.05

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.
Grade: 9-12
Credit: 1 credit, 2 semesters
Requirements - A district approved graphing calculator is required for this course.

Geometry

In this course, 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.
Grade: 9-12
Credit: 1 credit, 2 semesters
Prerequisites: Algebra 1 (If taken in middle school must have earned a B or better)
Requirements: A district approved graphing calculator is required for this course.

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.

Grade: 9-12
Credit: 1 credit, 2 semesters
Prerequisites: Algebra 1 (If taken in middle school must have earned a B or better)
Requirements: A district approved graphing calculator is required for this course. Additional homework will be required. Students must maintain at least a C average to remain in any honors course. Teacher placement required.

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.

Grade: 9-12
Credit: 1 credit, 2 semesters
Prerequisites: Geometry (If taken in middle school must have earned a B or better)
Requirements: A district approved graphing calculator is required for this course.

Algebra 2 Honors

This is an honors course 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.

Grade: 9-12
Credit: 1 credit, 2 semesters
Prerequisites: Geometry (If taken in middle school must have earned a B or better)
Requirements: A district approved graphing calculator is required for this course. Additional homework will be required. Students must maintain at least a C average. Teacher placement required.

Intermediate College Algebra

This course is a study of basic algebraic functions. This includes lines in the plane, systems of linear equations, inequalities, absolute value, polynomials, rational expressions and equations, and radical expressions and equations. Quadratic equations, literal equations, exponents and logarithms, and exponential and logarithmic functions are also studied. A graphing calculator is recommended for this course.

At the conclusion of this course, students will take the Pima Community College mathematics assessment exam and depending on their scores, will be eligible to take Pima Mat 097 or Pima Mat 151.
Grade: 11-12
Credit: 1 credit, 2 semesters
Prerequisite: Algebra 2

***Financial Literacy**

This course 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.

Grade: 12

Credit: 1 credit, 2 semesters

Prerequisite: Algebra 2 or above.

Requirements: A district approved graphing calculator is required for this course. ***Teacher placement required.***

**This course is not approved by the NCAA or universities as a math class.*

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 graphing calculator is required for this course.

Grade: 9-12

Credit: 1 credit; 2 Semesters

Prerequisite: Algebra 2

Requirements: A district approved graphing calculator is required for this course. Teacher placement required.

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.

Grade: 9-12

Credit: 1 credit, 2 semesters

Prerequisite: Algebra 2

Requirements: A district approved graphing calculator is required for this course. Additional homework will be required. Students must maintain at least a C average to remain in any honors course. Teacher placement required.

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 above

Calculus AB AP

This is a course 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 course. This course is comparable to the first semester Calculus course taught at colleges and universities.

Grade: 9-12
Credit: 1 credit, 2 semesters
Prerequisite: Pre-Calculus Honors
Requirements: A district approved graphing calculator is required for this course. Additional homework and reading requirements, including summer work assignments. Students are expected to take the AP Exam (fee required). Teacher placement required.

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
Biology	10	1.0	4.00
Biology Honors	10	1.0	4.03
Earth & Space	11 – 12	1.0	4.00
Physics AP	11 - 12	1.0	4.05
Chemistry	11 - 12	1.0	4.00
Chemistry Honors	10 - 12	1.0	4.03
Dual Enrollment Chemistry – CHM 130 (PCC)	11 - 12	1.0 high school & 4.0 college credits	4.05

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.

Grade: 9

Credit: 1 credit, 2 semesters

Prerequisite: Successful completion of Algebra 1

Requirements: Additional homework will be required. Students must maintain at least a C average to remain in any honors class. Teacher placement required.

Biology

The scope of this course includes cellular biology, heredity/genetics, evolution, and ecology. This course develops the learning processes involving a mastery of fundamental concepts, progressing to the understanding of awareness of the interrelationships of living things, and their environmental adaptation.

Grade: 10

Credit: 1 credit, 2 semesters

Biology Honors

This is a college preparatory course that covers a sequence of concepts, including cellular biology, heredity/genetics, molecular biology, evolution, and ecology. Additional reading and labs are included beyond those in general Biology. The course develops the learning process involving a mastery of fundamental concepts progressing to the understanding of awareness of the interrelationships of living things and their environmental adaptation. This course serves as an excellent preparation for students interested in exploring a science-based career.

Grade: 10

Credit: 1 credit, 2 semesters

Requirements: Additional homework will be required. Students must maintain at least a C average to remain in any honors class. Teacher placement required.

Earth and Space

The Earth Science curriculum builds on the natural curiosity of students. By connecting them to the beauty of geological history, the amazing landforms around the globe, the nature of the sea and air, and the newest discoveries about our universe, it gives students an opportunity to relate to their everyday world. Students will explore topics such as:

- Fundamentals of geology, geography, oceanography, meteorology, and astronomy
- Earth's minerals and rocks
- Earth's interior
- Plate tectonics; earthquakes, volcanoes, and the movements of continents
- Paleontology and the fossil record (Dinosaurs!)
- Oceans and the atmosphere
- The solar system and the universe

Grade: 11-12

Credit: 1 credit, 2 semesters

Prerequisite: Must have completed 2 years of high school science

Physics AP

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.

Grade: 11 – 12

Credit: 1 credit, 2 semesters

Prerequisite or Co-requisite: Pre-Calculus Honors

Requirements: Additional homework and reading requirements, including summer work assignments. Students are expected to take the AP exam (fee required). Teacher placement required.

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 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.

Chemistry Honors

This is a college preparatory course that covers a sequence of concepts including the periodic table, chemical formulas and equations, stoichiometry, and chemical bonding. This covers some of the topics addressed during entry-level college chemistry, including stoichiometry, thermo-chemistry, the gas laws, kinetics, solutions, and acid-base chemistry. Students will conduct advanced labs, prepare lab reports, complete problem sets, and take midterm exams to earn their grade.
Grade: 11 – 12
Credit: 1 credit, 2 semesters
Prerequisite: Must have completed 2 years of high school science
Requirements: Additional homework will be required. Students must maintain at least a C average to remain in any honors class. Teacher placement required.

Dual Enrollment Chemistry - Chemistry 130 (PCC)

This course is a dual enrollment college-level class with 25% laboratory investigations, offered through Pima Community College. The focus will be inorganic chemistry as a basis for the study of some life processes. This will include the classification, structure and general chemical behavior of inorganic matter. Successful students will come away with understanding of the arrangement of atoms of elements as the building blocks of matter, structure and arrangement of atoms, ions, molecules and the forces between them, chemical and physical properties, changes in matter, chemical reactions through details of the molecular collisions, laws of thermodynamics, and chemical bonds.
Grade: 11-12
Credit: 1 high school and 4 college credits, 2 semesters
Prerequisite: Must have completed Chemistry or Honors Chemistry
Requirements: Additional homework will be required. Teacher placement required. Must earn a qualifying score on Pima's math placement test.

SOCIAL STUDIES

3.5 social studies credits are required for graduation.

COURSE	Grade Level	Credit	Maximum GPA Potential
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
Dual Enrollment US History – History 141/142 (PCC)	11	1 high school & 6 college credits	4.05
American Government	12	1.0	4.00
AP Government	12	1.0	4.05

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 course 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.

Grade: 9

Credit: 1 credit, 2 semesters

Requirements: Additional homework. Must maintain a C average. Teacher placement required.

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 college website for score needed to award college credit.

Grade: 10

Credit: 1 credit, 2 Semesters
Requirements: Additional homework. Summer work. Students should maintain at least a C average to remain in any AP class. Teacher placement required.

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 preparatory history class for the highly-motivated student. This course provides an overview of the principal political, economic, and cultural themes that shaped the U.S. from the Colonial period into the 20th century.
Grade: 11
Credit: 1 high school credit and 6 college credits; 2 semesters
Prerequisite: World History
Requirements: Teacher placement required.

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
Prerequisite: One of the US History options

AP American Government
This course 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.
Grade: 12
Credit: 2 Semesters
Requirements: Additional homework. Summer work. Students should maintain at least a C average to remain in any AP class. Teacher approval required.

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.

COURSE	Grade Level	Credit	Maximum GPA Potential
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

Adaptive Algebra 1/2

These courses place emphasis on strengthening basic math concepts and computational skills, while focusing on practical math applications. This course reviews basic math concepts and computational skills, including addition, subtraction, multiplication and division. Topics include: fractions, decimals, reading and interpreting charts and graphs, and solving word problems.

Grade: 9 – 12

Credit: 1 credit, 2 semesters

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

Adaptive Geometry

These courses place emphasis on strengthening basic math concepts and computational skills, while focusing on practical math applications. Students will learn basic geometric concepts, including community applications.

Grade: 9 – 12

Credit: 1 credit, 2 semesters

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

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.

PATHWAY (CTE) CLASSES*

*THESE PROGRAMS ARE SUPPORTED AND ENHANCED BY THE PIMA JTED.
ALL CTE COURSES ARE AT LEAST 50% LAB-BASED.

COURSE	Grade Level	Credit	Maximum GPA Potential
Healthcare Foundations	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
Psych & Behavioral Health 1	11	1.0	4.00
Psych & Behavioral Health 2	12	1.0	4.00
Transportation Tech 1	10	1.0	4.00
Transportation Tech 2	11	1.0	4.00
Transportation Tech 3/4	12	1.0	4.00
Digital Communications 1 - Graphic	10	1.0	4.00
Digital Communications 2	11	1.0	4.00
Digital Comm. – TV/Film	12	1.0	4.00
Digital Comm. – Graphic/Web Design	12	1.0	4.00
Digital Communications 1 - Audio	10	1.0	4.00
Audio Engineering 1	11	1.0	4.00
Audio Engineering 2	12	1.0	4.00
Engineering 1	10	1.0	4.00
Engineering 2	11	1.0	4.00
Engineering 3	12	1.0	4.00

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.

Grades: 10

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.
Grades: 11
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, work place professionalism, resume writing, and interviewing techniques.
Grades: 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.
Grades: 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 procedure. In addition, special emphasis is made on surgical nursing, radiology and animal dentistry.
Grades: 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.
Grades: 11
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.
Grades: 12
Credit: 1 credit, 2 semesters
Prerequisite: Psychological and Behavioral Health 1

Transportation Technologies 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.
Grades: 10
Credit: 1 credit, 2 semesters

Transportation 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, lubrications and minor tune-up.
Grades: 11
Credit: 1 credit, 2 semesters
Prerequisite: Transportation Technologies 1

Transportation 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.
Grades: 12
Credit: 1 credit, 2 semesters
Prerequisite: Transportation Technologies 2

Digital Communications – Graphic

Digital Communications-Graphic is an introductory class to the Digital Communications pathway. You will be introduced to graphic design, website design, film and TV throughout the year. We use the Adobe Creative Suite to help students gain access to industry standard tools.
Grades: 10
Credit: 1 credit, 2 semesters

Digital Communications 2

In this course, students will be introduced to communications using audio and visual media. Students will explore the production process of TV and film; this includes the planning, making and editing of non-fictional video pieces. Students will begin to build visual literacy skills that will help design and develop broadcasts. Students will also explore the world of picture manipulation, graphics, design and development through hands-on projects. C# (C-Sharp) will be introduced to explore the benefits of coding and environment manipulation. Students will learn to use script writing, graphics design techniques, and video capture concepts. Students will create user interactive sites incorporating the essential elements of software (Dreamweaver, Photoshop and Flash). Website maintenance, management theories, and techniques will be introduced through the use of prototypes, templates, CSS and HTML/XHTML and FTP software.
Grades: 11
Credit: 1 credit, 2 semesters
Prerequisite: Digital Communications - Graphic

Digital Communications – TV/Film

TV/Film focuses on high level projects such as live broadcasting, shorts films, TV episode pilots and more. We will be using the Adobe Creative Suite and other tools to edit and compile our films. We will also be using cutting edge cameras, sound, lighting and green screening to create our films.
Grades: 12
Credit: 1 credit, 2 semesters
Prerequisite: Digital Communications 2

Digital Communications – Graphic/Web Design

Graphic/Web Design focuses on high level projects such as logo creation for clients, brand and package design, graphics for on and offline use. We will work with real clients to meet their needs. We have cutting edge technology such as Wacom tablets and the Adobe Creative Suite to help us meet the needs of our clients and create our portfolios we will use for college and jobs beyond high school.
Grades: 12
Credit: 1 credit, 2 semesters
Prerequisite: Digital Communications 2

Digital Communications – Audio

Digital Communications-Audio is an introductory class to the Digital Communications pathway. This program will prepare students with the knowledge and skills to continue their education in various digital mediums, specifically in audio and music production.

Grades: 10
Credit: 1 credit, 2 semesters

Audio Engineering 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.
Grades: 11
Credit: 1 credit, 2 semesters
Prerequisite: Digital Communications - Audio

Audio Engineering 2
This course will involve a variety of aspects of music and audio production, continuing from Audio Engineering 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.
Grades: 12
Credit: 1 credit, 2 semesters
Prerequisite: Audio Engineering 1

Engineering 1
Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, 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.
Grades: 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.
Grades: 11
Credit: 1 credit, 2 semesters
Prerequisite: Engineering 1

Engineering 3
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.
Grades: 12
Credit: 1 credit, 2 semesters
Prerequisite: Engineering 2

WORLD AND NATIVE LANGUAGES

Two years of the same language are required for Arizona university admission.
Three to four years are required for selective universities.

COURSE	Grade Level	Credit	Maximum GPA Potential
Spanish 1	9 – 12	1.0	4.00
Spanish 2	10 – 12	1.0	4.00
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.
Grades: 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.
Grades: 10 – 12
Credit: 1 credit, 2 semesters
Prerequisite: Spanish 1

American Sign Language (ASL) 1

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. One year of ASL 1 at Andrada equals one semester of ASL at the University of Arizona.
Grades: 9 - 12
Credit: 1 credit, 2 semesters
No prerequisite required.

American Sign Language (ASL) 2

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 ASL 2 at Andrada equals one semester of ASL at the University of Arizona.

Grades: 10 - 12
Credit: 1 credit, 2 semesters
Prerequisite: American Sign Language 1.

FINE ARTS

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

COURSE	Grade Level	Credit	Maximum GPA Potential
Art: Studio 1	9 - 12	1.0	4.00
Art: Studio 2/3	10 – 12	1.0	4.00
Dance 1	9-12	1.0	4.00
Dance 2	9 – 12	1.0	4.00
Marching Band*	9 - 12	1.0	4.00
Steel Band*	9 – 12	1.0	4.00

*Courses offered during Zero hour at either CHS or EHS.

Art: Studio 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.

Grades: 9 – 12
Credit: 1 credit, 2 semesters
There may be a materials fee required.

Art: Studio 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.

Grades: 10 – 12
Credit: 1 credit, 2 semesters
Prerequisite: Art: Studio 1. Teacher placement required.
There may be a materials fee required.

2-D AP Art and 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.

Grades: 9– 12
Credit: 1 credit, 2 semesters
Prerequisite: Art: Studio 1 or teacher approval of portfolio.
There may be a materials fee required.

Dance I (Introduction to Dance)

This course explores ballet, modern, jazz/musical theatre, ethnic/world dance. 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 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.
Grades 9-12
1 credit, 2 semesters

Dance II

Prerequisite: Dance I or site approval.
This course extends the skills developed in Dance I and challenges students to develop greater conceptual, technical, and performance skills. Student classwork/writing will reflect inquiry, review, and critique of various dance topics 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.
Grades 9-12
1 credit, 2 semesters

Marching Band (ZERO Hour at Cienega)

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. Colorguard will provide instruction of basic marching fundamental and rhythmic accuracy, with the use of auxiliary equipment such as flags, rifles, sabers, and auxiliary percussions. Dance skills are also part of the curriculum. Colorguard 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 for

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

Steel Band (ZERO Hour at Empire)

No experience is required. 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
- Virtual and online lessons and assessment
- Music performance both on and off campus
- Festival participation

This course requires several extracurricular concerts throughout the school year, and occasionally during quarter breaks.
Grades 9 - 12
Credit: 1 credit, 2 semesters
Prerequisite: NONE
There may be a fee required.

PHYSICAL EDUCATION

COURSE	Grade Level	Credit	Maximum GPA Potential
Athletic Conditioning	9 - 12	1.0	4.00
Fitness	9 - 12	1.0	4.00

Athletic Conditioning

This course is designed for those students who are planning to participate in school athletic activities. Speed, cardio-endurance, strength training, agility, and polymeric will be the focus of the course.

Grade: 9 – 12

Credit: 1 credit, 2 semesters

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

GENERAL ELECTIVES

Electives may have various class fees.

COURSE	Grade Level	Credit	Maximum GPA Potential
Animal Behavior	9 – 12	1.0	4.00
Choir	9 – 12	1.0	4.00
Computer Science	9 – 12	1.0	4.00
Computer Science AP	10 – 12	1.0	4.05
Film & Television Analysis	9 – 12	1.0	4.00
Health/Freshman Skills	9	1.0	4.00
Photo Journalism	9 – 12	1.0	4.00
Peer Mentoring 1	9 – 12	1.0	4.00
Peer Mentoring 2	9 – 12	1.0	4.00
Rock Band	9 – 12	1.0	4.00
Rock Band Advanced	10 – 12	1.0	4.00
Student Council	9 – 12	1.0	4.00
Welding	9 – 12	1.0	4.00
Yearbook	9 – 12	1.0	4.00
NJROTC Naval Sciences (CHS)	9 – 12	1.0	4.00

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.

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.

Grades: 9 - 12

Credit: 1 credit, 2 semesters

Computer Science

This course emphasizes programming methodology using Objects and Classes for problem solving and algorithm development. Students will learn to write code in the Java programming

language emphasizing design issues that make programs understandable, adaptable, and reusable. Students will also learn the importance of breaking down a large problem into smaller manageable parts, incorporating the use of methods and passing parameters, and writing appropriate comments to justify their solutions.
Grades: 9 - 12
Credit: 1 credit, 2 semesters

Computer Science AP

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.
Grades: 10 - 12
Credit: 1 credit, 2 semesters
Prerequisite: Computer Science
Requirements: Teacher placement required.

Film & Television Analysis

Film & Television Analysis introduces students to the vocabulary and techniques necessary for serious viewing and writing on television series and film. This course requires that you take film and TV more seriously and actively engage with it, being not a passive, but an active viewer and reader. Through this active viewing, students will examine and analyze a series of films and television, stretching across multiple genres, historical periods, and social inquiries. Students will also think, discuss, and write critically about each film.
Grades: 9 - 12
Credit: 1 credit, 2 semesters

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.
Grades: 11-12
Credit: 1 credit, 2 semesters
Requirement: Instructor's approval is required

Photo Journalism
One semester of this course will focus on photography and the other semester will focus on photo journalism. Photojournalism is a course designed to introduce students to the basic principles of photography and to provide them with opportunities to apply those skills to the more specific practice of journalistic photography. Although the class will cover core concepts associated with traditional SLR and print photography, (composition, focus, exposure, etc.) the student's practical experience will be exclusively with digital photography and its applications to the field of journalism.
Grades: 9-12
Credit: 1 credit, 2 semesters

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.
Grades: 10-12
Credit: 1 credit, 2 semesters
Prerequisites: Rock Band

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 Roberts 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).
Grades: 9-12
Credit: 1 credit, 2 semesters
Requirements: Students must be elected to office. Teacher placement required. See Mrs. Wolfe.

Welding and Fabrication
Welding and metal fabrication is designed to teach the basic skills of metal fabrication welding, with the major emphasis on welding. Student will learn how to make layouts and blueprints, join metals by the use of MIG, STICK, and Oxy-Acetylene according to the layouts, and cut metal to a given shape and size using gas cutting and plasma burning equipment. Basic elements of the course may include, but are not limited to, the recognition of welding symbols, familiarity with melting and welding characteristics of various types of metals, and making different welds from all angles. Students will be able to select the proper materials and equipment for proper and safe operation, and blueprint reading.
Grades: 10-12
Credit: 1 credit, 2 semesters
Requirements: Students must be in the Engineering or Transportation Technologies Pathway.

Yearbook
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: 9-12
Credit: 1 credit, 2 semesters
There may be a fee required.

NJROTC Naval Science 1 (ZERO Hour at Cienega)
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)
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)
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)
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