Catalina Foothills High School

Tucson, Arizona

Course Guide

2016 ~ 2017

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February 23, 2016

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CFHS Credit Information

Students must complete a minimum of 24 credits for graduation

English	4.0 credits	English 9, English 10, English 11, and English 12
Math	4.0 credits	Algebra 1, Geometry, Algebra 2, and additional post- Alg 2 math
Science	3.0 credits	Biology, Chemistry, and Physics or Field or Astronomy or Environmental Science
Social Studies	4.0 credits	Global Issues, Western Civ or AP Euro, US History, and Government (.5) and Economics (.5)
World Lang	2.0 credits	Spanish or Chinese (or, if transfer, two credits of other approved language - see page 17)
Fine Art or CTE	1.0 credit	
Health	.5 credit	
Physical Ed	1.0 credit	Class of 2018 and beyond must do .5 individual fitness and .5 group fitness
Electives	4.5 credits	
	24.0 credits	

Credit accepted towards CFSD graduation requirements from non-CFHS classes include *credits earned through alternative courses, e.g., correspondence courses (limited to 1 credit in each of the four major subject areas of English, Math, Science, and Social Studies), online, credit recovery, from an accredited institution; and/or by passing appropriate courses at the college or university level* ***if*** *the courses are determined to meet or exceed standards and criteria established by the Board and in accord with A.R. S. 15-701.01. The high school principal will evaluate alternative courses and approve them for credit.*

Course Load: Freshmen and Sophomores must be enrolled in seven classes each semester or six classes and an assigned Study Hall. Juniors and Seniors must carry a minimum of six classes on their schedule each semester.

Course Availability: Students will be assigned to classes as space is available. Courses listed will only be offered if there is sufficient enrollment and appropriate staffing.

Course Notations:

Prerequisite – Students must meet noted prerequisites (grade level, class completed, grade earned, other).
Co-requisite – Students must be enrolled simultaneously in noted courses.
Teacher Recommendation – Requires current subject teacher's signature.
Teacher Approval – Requires course instructor's signature.

Schedule Changes: Every effort is made to get students into their first or second choice courses. Once school starts, student requests for schedule changes are restricted and based on the following criteria:

ACCEPTABLE reasons for Schedule Change may include:
- Failure in a prerequisite course
- Need to add required course to graduate on time
- Successfully completed course
- Medical reasons (requires a doctor's note)

UNACCEPTABLE reasons for Schedule Change include, but are not limited to:
- A free period or lunch change
- A teacher change
- Unnecessary change

Note: *CFHS reserves the right to change student schedules for administrative reasons at any time (e.g., class leveling, etc.)*

Withdrawing from a Class: Students may request to withdraw from a class prior to the end of quarter without any record on the transcript. If withdrawing after the end of quarter, a WF (Withdrawal Failing) will be noted on the transcript. This designation will not affect the student's grade point average but will affect athletic eligibility. Note: Students may only withdraw from a class if they maintain the minimum course load requirement of six for-credit classes.

State Assessments

AzMERIT (Arizona's Measurement of Educational Readiness to Inform Teaching): Students in the class of 2016 and beyond will take end-of course assessments in English 9, English 10, English 11, Algebra 1, Geometry, and Algebra 2.

AIMS Science (Arizona Instrument to Measure Standards): Students enrolled in a life science course (i.e., CFHS Biology) at grades 9 or 10 will take the AIMS Science assessment.

Civics Test: Students in the class of 2017 and beyond are required to pass a state-mandated Civics test to meet graduation requirements.

Honors and Advanced Placement (AP) Courses

Honors Courses:

Honors courses cover a wider scope of material, in greater depth, at a faster pace than the standard courses. The more rigorous Honors courses are designed for students who are interested in the subject area, are self-motivated and independent learners, have well-developed study habits and time management skills, and generally excel academically. Students are encouraged to take the highest-level courses that are appropriate for them. Honors course requests should be made thoughtfully as students are not able to make a level change if they decide they don't like the work or the course is too hard. Students and parents must sign an Honors/AP Agreement to be placed in Honors or AP courses. Honors courses are given an additional .25 weight in the GPA calculation.

Students are not obligated to take Honors courses in all subject areas or in every year, however, but may pick and choose among their interests and skill areas. A student who takes Honors Biology is not required to take Honors Chemistry. Similarly, a student who takes standard English as a freshman is not precluded from taking Honors English as a sophomore. Similarly,

Honors Course Eligibility:

English: Students who are currently in Honors English or who are receiving an A in standard English are eligible for and strongly encouraged to take Honors (or AP) English. Other students interested in taking H/AP English classes may also commit to the more rigorous work. English courses at all levels award Honors credit/distinction for students in standard/non-Honors classes who consistently perform at the Honors level in their coursework and assessments.

Social Studies: Social Studies courses at all levels award Honors credit/distinction for students who consistently perform at the Honors level in their coursework and assessments. Separate AP courses are offered grades 10-12 and students who understand and commit to the increased rigor may choose to take AP coursework in Social Studies.

Math: Students must demonstrate proficiency by earning an 83% both semesters in the prerequisite Honors course (or a 93% average in the prerequisite standard course both semesters), and earn a minimum 83% on each part of the two-part proficiency exam (given during each semester's Final Exam Week) to be eligible for the next level Honors course. Teacher recommendation is also required. Algebra 1 does not have a separate Honors section but students who perform at the Honors level may earn Honors credit/distinction (H).

Science: Students must earn a minimum B average in the prerequisite Honors course or an A both semesters in the prerequisite standard course to be eligible for the next level Honors course. Math skills are also important for success in science courses and there may be a math co-requisite. See specific course description for requirements.

Spring Review: As spring semester grades are not available at the time of course selection, math and science Honors/AP requests will be reviewed at the end of spring semester to confirm eligibility. Students who fail to meet the grade eligibility or teacher recommendation requirement for Honors/AP math or science will be placed in a standard section of the course.

Honors Credit/Distinction (HC)

Honors credit/distinction is available in all standard **English** and **Social Studies** courses and in **Algebra 1**. Students who consistently perform at the Honors level in their coursework and assessments will be awarded Honors credit (additional .25 weight in the GPA calculation) and have an (H) designation added to their transcript.

Note for Middle School Students re Honors coursework:

Honors **English 9** is open to any student who wishes to commit to the rigor of Honors coursework. **Social Studies** does not have a separate Honors section. **Math** placement will be determined by a proficiency assessment given in the spring to 8th graders. Students who take Algebra 1 as freshmen may earn Honors credit/distinction by performing at the Honors level. Orange Grove and Esperero students interested in **Science** Honors courses must have teacher recommendation. New-to-district students must have received an A average (no more than one quarter B) in 8th grade science.

Note: Grade review will occur over the summer. Placement in Honors math and science is contingent upon continued eligibility.

Advanced Placement (AP) Courses

AP Courses are college level classes, taught at the high school, which require significant reading, writing, and independent study. Courses are challenging and offered to academically motivated students who wish to pursue excellence in their studies. AP coursework covers a national curriculum that prepares students to take the Advanced Placement exam for their subject(s) in the spring. Students who do well on the AP exam may be granted credit by their college for that subject. ***Note: Students who take an AP class are expected to take the AP exam.***

Students are expected to make informed and committed decisions prior to signing up for the course. Students and parents must sign an AP Agreement, which is a statement of understanding regarding the rigor of the coursework and commitment to the yearlong course. Students are not able to drop an AP course without extenuating circumstances and proof that everything possible has been done for success.

AP Information Sessions

AP course information is shared each year during spring course selection to help students make an informed decision regarding their coursework. Instructors review course content, structure, rigor, and expectations for AP Courses in subject area classes or in an announced group meeting which interested students are expected to attend.

Students and parents must sign the AP Agreement on the course request form to be eligible for assignment to the AP course.

H/AP Credit/Transcript Notation:

Honors courses are identified by "H" on the student's transcript and are weighted an additional .25 GPA points. AP courses are identified by "AP" on the student's transcript and are weighted an additional .5 GPA points.

Earned Weight

Grade	Std	H	AP
A	4.0	4.25	4.5
B	3.0	3.25	3.5
C	2.0	2.25	2.5
F	0	0	0

Note: + and – do not affect GPA weighting

JTED Courses

CFSD is a member of the Pima County Joint Technological District (JTED). In conjunction with business and industry, JTED provides career and technical education programs for students that focus upon both the educational and employment needs of Pima County. JTED courses provide access to state-of-the art equipment and training programs in a variety of career pathways, offer articulated college-level credit (applicable courses only), offer the opportunity for industry certifications, and the opportunity to work at an advanced level in a variety of career areas.

CFHS JTED course offerings are listed below. See the course descriptions for descriptions and prerequisite information.

Career and Technical Education

- Theatre Fundamentals, Intermediate Theatre Productions, Advanced Theatre Productions 1 & 2, Theatre Co-Op
- Graphic Design 1, 2, 3 and Yearbook
- Photo Imaging 1, 2, 3
- Media Production Fundamentals, Advanced Media Production 1 & 2, Media Co-Op
- Introduction to Journalism, Writing for Investigative Reporting, Broadcast News Production
- Entrepreneurship: Business & Marketing 1, Entrepreneurship: Business & Marketing 2, Entrepreneurship: Business & Marketing Co-Op

Science

- Agriscience ~ Biology: Environmental (meets CFHS Biology requirement), Chemistry: Environmental, (meets CFHS Chemistry requirement), Environmental Science (meets CFHS 3rd year science requirement), AP Environmental Science
- Bioscience ~ Chemistry: Forensics (meets CFHS Chemistry requirement), Anatomy and Physiology, AP Biology
- Introduction to Engineering Design, Principles of Engineering, Digital Electronics, Engineering Design and Development

Pima County JTED Programs

CFHS Students interested in off-site JTED courses in the following areas should see Principal Chomokos for registration information. These courses are free to CFHS students and credits earned will be noted on the CFHS transcript. Info at pimajted.org/program.

Accounting • Agriculture • Allied Health • Audiovisual • Automotive • Aviation • Biosciences • Business • Carpentry • Cosmetology • Construction • Culinary Arts • Diagnostic & Intervention • Design & Merchandising • Drafting • Education • Electrical • Engineering • Finance • Fire Science • Graphic Communications • HVAC • Hospitality Management • Information Technology • Law & Public Safety • Marketing & Management • Nursing Services • Performing Arts • Plumbing • Telecommunications • Welding

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English

Four years (4 credits) required for CFSD graduation: English 9, English 10, English 11, and English 12 (standard/HC, H, or AP options).

Honors Credit

Students may take a designated Honors course to earn Honors credit (additional .25 GPA weight).

English courses at all levels award Honors credit/distinction (additional .25 GPA weight) for students in standard/non-Honors classes who consistently perform at the Honors level (3.5 rubric score) in their coursework and assessments.

English 9: Global Perspectives # 1100
This course emphasizes a wide variety of modern texts from Africa, Asia, Latin America and the Middle East. The course emphasizes reading and writing of narrative, analytical, and argumentative text, research skills and critical thinking skills, as well as the conventions of written English. *Students who consistently perform at the Honors level in their coursework and assessments will be awarded Honors credit/distinction for this class.*
Grade: 9
Prerequisite: None
Credit: 1 credit, 2 semesters

Honors English 9: Global Perspectives # 1103
This course emphasizes a wide variety of modern texts from Africa, Asia, Latin America and the Middle East. Students will read and analyze a variety of texts and write in response to those texts in order to gain an understanding of the world, themselves, and how to communicate effectively with others. The course emphasizes reading and writing of narrative, analytical, and argumentative text, research skills and critical thinking skills, as well as the conventions of written English. Because this is an Honors course, students will be expected to demonstrate independent learning and a more advanced level of performance. Instruction will target the Honors level learning goals.
Grade: 9
Prerequisite: None
Credit: 1 credit, 2 semesters

Humanities 9: Global Studies (English) #1111
Humanities is an interdisciplinary English and Social Studies class. The Humanities 9 curriculum encompasses all of the standards and benchmarks of both the English 9 and Global Issues 9 courses; however, the course is structured so that the content is integrated. Students will examine the history, culture, and geography of four non-European areas of the world: Africa, Asia, Middle East, and Latin America. They will study these regions through a wide variety of genres as well as primary and secondary sources. The course emphasizes analytical reading and writing of narrative and expository text, research skills, and critical thinking skills, as well as factual knowledge of geography and history, vocabulary, and the conventions of written English. *Students who consistently perform at the Honors level in their coursework and assessments will be awarded Honors credit/distinction for this class, and all students will be prepared for any sophomore level English or Social Studies course.*
Grade: 9
Prerequisite: None
Co-requisite Humanities 9: Global Studies (Social Studies)
Credit: 2 credits, 2 semesters (English and Social Studies)

English 10: Western Perspectives #1120
This course emphasizes a wide variety of fiction and non-fiction texts from Western perspectives throughout history. Students read, write, and analyze expository, narrative, and argumentative texts in order to gain an understanding of the world, themselves, and how to communicate effectively with others. In this course, students are expected to develop vocabulary, write correctly in Standard English, undertake independent research, and think critically. *Students who consistently perform at the Honors level in their coursework and assessments will be awarded Honors credit/distinction for this class.*
Grade: 10
Prerequisite: English 9 or Humanities 9
Credit: 1 credit, 2 semesters

Honors English 10: Western Perspectives #1123
This course emphasizes a wide variety of fiction and non-fiction texts from Western perspectives throughout history. Students read, write, and analyze expository, narrative, and argumentative texts in order to gain an understanding of the world, themselves, and how to communicate effectively with others. In this course, students are expected to develop vocabulary, write correctly in Standard English, undertake independent research, and think critically. Because this is an Honors course, students will be expected to demonstrate independent learning and a more advanced level of performance. Instruction will target the Honors level learning goals.
Grade: 10
Prerequisite: English 9 or Humanities 9
Credit: 1 credit, 2 semesters

Humanities 10: Western Studies #1131
Humanities is an interdisciplinary English and Social Studies class. The Humanities 10 curriculum encompasses all of the standards and benchmarks of both the English 10 and Western Civilization 10 courses; however, the course is structured so that the content is integrated. Students will examine the history, culture, and geography of Europe and its surroundings and the development of "Western thought." They will study these regions through a wide variety of genres: fiction, biography, philosophy, and poetry, as well as primary and secondary sources. *Students who consistently perform at the Honors level in their coursework and assessments will be awarded Honors credit/distinction for this class, and all students will be prepared for any junior level English or Social Studies course.*
Grade: 10
Prerequisite: Humanities 9, or English 9 and Global Issues
Co-requisite Humanities 10: Western Studies (Social Studies)
Credit: 2 credits, 2 semesters (English and Social Studies)

English 11: American Perspectives #1140
Through a wide variety of texts, the course will explore significant themes and traditions in American literature. The course emphasizes analytical reading and writing of narrative and expository text, literary analysis, critical thinking skills, and oratory. In preparation for senior year and beyond, students in this class will also develop the skills to create effective job or college applications. *Students who consistently perform at the Honors*

level in their coursework and assessments will be awarded Honors credit/distinction for this class.
Grade: 11
Prerequisite: English 10 or Humanities 10
Credit: 1 credit, 2 semesters

Humanities 11: American Studies (English) #1151
The Humanities 11 curriculum encompasses all of the standards and benchmarks of both the English 11 and American History 11 courses; however, the course is structured so that the content is integrated. Students will examine the history, culture, and geography of the United States of America, from the colonial era to the present. They will study the development of our country through a wide variety of genres: fiction, biography, popular culture, and poetry, as well as primary and secondary sources. The course emphasizes analytical reading and writing of narrative and expository text, literary analysis, critical thinking skills, and oratory, as well as factual knowledge of geography and history, vocabulary, and the conventions of written English. In preparation for senior year and beyond, students in this class will also develop the skills to create effective job or college applications. *Students who consistently perform at the Honors level in their coursework and assessments will be awarded Honors credit/distinction for this class and all students will be prepared for any senior level English or Social Studies course.*
Grade: 11
Prerequisite: Humanities 10, or English 10 and Western Civ
Co-requisite Humanities 11: American Studies (Social Studies)
Credit: 2 credits, 2 semesters (English and Social Studies)

AP English 11: Language and Composition #1154
This college-level course engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. This course provides students with opportunities to write about a variety of subjects and to demonstrate an awareness of audience and purpose. Students will synthesize material from primary and secondary sources carefully in their own compositions. The overarching objective is to enable students to write effectively and confidently in their college courses across the curriculum and in their professional and personal lives. Therefore, this course emphasizes the expository, analytical and argumentative writing that forms the basis of academic and professional communication, as well as the personal and reflective writing that fosters the development of writing facility in any context. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. This course prepares students to
take the AP English Language and Composition Exam. ***Note: Students who take an AP class are expected to take the AP exam.***
Grade: 11
Prerequisite: English 10
Credit: 1 credit, 2 semesters

English 12: Language and Composition
In English 12: Language and Composition, students read, write, and analyze narrative and expository texts. They are expected to think critically about arguments, synthesize ideas from various sources, write with an effective style and voice, undertake independent research, and use a variety of strategies to communicate with others. Students enhance their understanding of the dynamic between an author, audience, and text/subject, as well as the way standard language conventions and the resources of language contribute to effectiveness in writing. Students integrate content, thinking skills, and technology, as needed, to learn and communicate effectively. In preparation for college, career, and life-long literacy, students will read a variety of texts and write for a variety of audiences and purposes. *Students who consistently perform at the Honors level in their coursework and assessments will be awarded Honors credit/distinction for this class.*
Grade: 12
Prerequisite: English 11, Humanities 11, or AP English 11
Credit: 1 credit, 2 semesters

English 12: Language and Composition	**#1165**
English 12: Language and Composition (Craft of Persuasion)	**#1166**
English 12: Language and Composition (Science Fiction)	**#1172**
English 12: Language and Composition (War and Conflict)	**#1192**
English 12: Language and Composition (Mystery)	**#1182**

AP English 12: Literature and Composition #1215
This college-level course engages students in the careful reading and critical analysis of literature. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit from American and British literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, tone, and themes, as well as smaller-scale elements such as figurative language. This course prepares students to take the AP English Literature and Composition exam. ***Note: Students who take an AP class are expected to take the AP exam.***
Grade: 12
Prerequisite: English 11
Credit: 1 credit, 2 semesters
Note: Interested seniors may take AP English 12: Literature and Composition and another English 12 class as an elective.

English Electives

Creative Writing #1301
During this one-semester English elective, students will develop skills in creative writing, from flash fiction, traditional short story, poetry, screenwriting, and creative nonfiction. Students will generate, draft, and revise original pieces of writing and experiment with various creative writing techniques to refine their sense of how such elements as word choice, imagery, and sound contribute to the distinct voice of the writer. Students will explore how 21st century media have influenced the craft of the writer as they read and write from models as well as from their own personal interests and write for a variety purposes and audiences.
Grades 10-12
Prerequisites: English 9
Credit: .5 credit, 1 semester
Course may be repeated for credit

Speech & Debate #1322
Speech & Debate is a course designed to give students the opportunity to acquire the skill of public speaking, with an emphasis on debate. Sophisticated oral as well as written communication and argumentation skills will be taught empowering students to take a reasoned and well-substantiated stance in affirmation or negation of a statement concerning a current issue. The course stresses the necessity of thorough research and clear organization in creating a speech and

provides extensive practice in informative and persuasive speaking/argumentation with a focus on current public issues - local, national, and international - and the historical context surrounding a topic for debate. Critical thinking, research, writing, oral presentation, and teamwork will all come together in this course making students more aware of the world around them and how to expertly convey and substantiate their opinions on issues facing our world. **Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class.*

Grade: 9-12
Prerequisite: None
Credit: 1 credit, 2 semesters
Course may be repeated for credit

Introduction to Journalism: Writing for News / Falcon Voice #1340

Introduction to Journalism will focus on essential concepts of writing and journalistic skills. The students will use the literary skills, journalists vocabulary, and reasoning, to write and produce articles for publication. Students will acquire the prerequisite skills necessary for advanced writing and editing in newspaper (Falcon Voice), investigation, media, research, and problem solving through authentic journalistic experiences.

Grades: 10-12
Prerequisite: English 9
Credit: 1 credit, 2 semesters
***** This is a JTED class

Journalism: Writing for Investigative Reporting #1350

Journalism: Writing for Investigative Reporting will focus on advanced concepts of journalistic skills (writing, interviewing, editing and publishing) while learning the editorial responsibilities of newspaper production. The students will use writing skills in interviewing, editing, script writing and creation of broadcast news articles and videos for web-based publications. Students will acquire 21st century skills through teamwork, professional relationships, authentic news projects (Falcon Voice), entrepreneurial publishing, and representing and reporting real-life situations.

Grades: 11-12
Prerequisite: Introduction to Journalism
Credit: 1 credit, 2 semesters
***** This is a JTED class

Journalism: Broadcast News Production #1360

Journalism: Broadcast News Production will focus on advanced concepts of journalistic skills (interviewing, editing and digital publishing) while learning the fundamentals of media broadcasting. The students will use technical skills in camera interviewing, editing, and production packages for broadcast and web-based publications. Students will acquire 21st century skills through teamwork, professional relationships, authentic broadcast video projects (interviews, documentaries, news features), entrepreneurial broadcasting, and representing and reporting real-life situations.

Grades: 11-12
Prerequisite: Introduction to Journalism
Credit: 1 credit, 2 semesters
***** This is a JTED class

AP Seminar #3502

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listen to and view speeches, broadcasts, and personal accounts; and experience artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. Note: Students are assessed with two through-course performance assessment tasks and one end-of-course exam. All three assessments are summative and will be used to calculate a final AP score (using the 1-5 scale).

Grade: 11-12
Prerequisite: H English 10 (or "A" in English 10) and AP Euro (or "A" in Western Civ)
Credit: 1 credit, 2 semesters

AP Research (planned for 2017-18) **#3503**

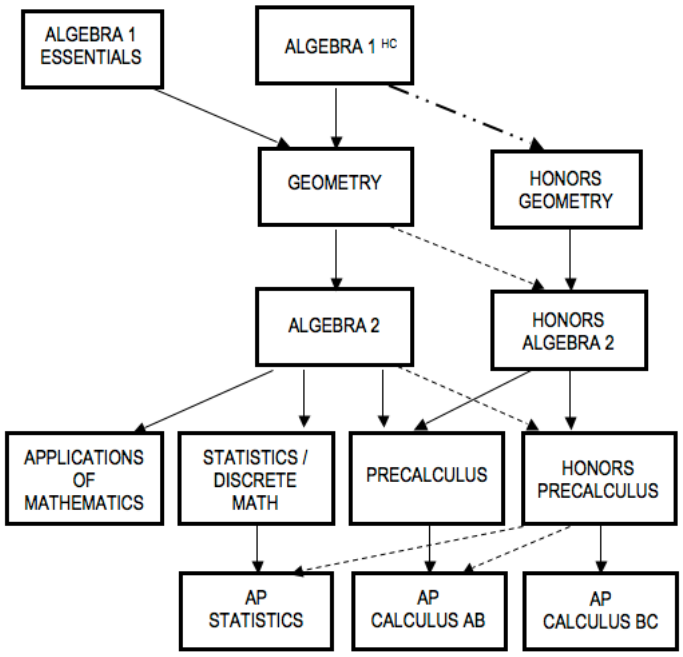
AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a yearlong mentored, research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methods; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic thesis paper of approximately 5,000 words and a presentation, performance, or exhibition with an oral defense.

Grade: 12
Prerequisite: AP Seminar
Credit: 1 credit, 2 semesters

Math

Four credits of math courses are required for CFSD graduation: Algebra 1, Geometry, Algebra 2, and one additional course/credit beyond Algebra 2.

MATH PATHWAY



Honors Placement in Math

To ensure that students are prepared for the highest-level math courses at CFHS, students seeking placement in Honors courses must meet the following requirements:

Honors Requirement Part A: Semester Grade

- Students currently enrolled in an Honors level course must earn at least a B (83%) both semesters.
- Students currently enrolled in a standard level course must earn an A (93%) both semesters.

Honors Requirement Part B: Proficiency Assessment

Students must earn a minimum 83% on each part of the two-part proficiency exam (given during each semester's Final Exam Week) testing content knowledge of the current Honors level course to be eligible for the next level of Honors math. (E.g., Student must earn 83% on both parts of the Honors Algebra 1 proficiency assessment to be eligible for placement into Honors Geometry.)

Honors Requirement Part C: Teacher Recommendation

The student's current teacher will provide a written recommendation of the student's knowledge and skills.

Algebra 1 Essentials **#2004**

Algebra 1 Essentials will focus on an understanding of the essential concepts and skills in Algebra 1. The students will use the language of algebra, its vocabulary, symbols and reasoning, to solve problems, and describe relationships and patterns. Using algebraic, numeric, and graphical representations, students will solve problems and acquire the mathematical skills necessary for Geometry and Algebra 2.

Prerequisite: Placement through proficiency assessment and teacher recommendation

Credit: 1 credit, 2 semesters

Algebra 1 HC **#2000**

Algebra 1 students will use the language of algebra — its vocabulary, symbols, and reasoning — to solve problems, describe relationships and patterns, and apply algebra to represent real-life situations. Using algebraic, numerical, and graphical representations, students will use critical and creative thinking to solve problems and acquire the algebraic foundation and skills necessary for Geometry and Algebra 2. Performance expectations will be differentiated for Honors level coursework. **Students who consistently perform at the Honors level in their coursework and assessments will be awarded Honors credit/distinction for this class.*

Credit: 1 credit, 2 semesters

Geometry **#2120**

Geometry students will use the language of geometry, its vocabulary, symbols, and logic, in order to make and prove conjectures and develop an understanding of geometric principles and relationships. Using the properties of geometric figures, students will write formal proofs, solve problems involving algebra and real-life situations, and visualize and draw geometric figures.

Prerequisite: Algebra 1

Credit: 1 credit, 2 semesters

Honors Geometry **#2123**

Honors Geometry explores mathematical concepts at a faster pace and a greater depth than Geometry. Students in this course will study a greater breadth of geometric concepts and a more formalized approach to proof writing than students in Geometry. This rigorous course is designed to prepare students who excel in mathematics for future Honors courses.

Prerequisite: Prerequisite: Algebra 1 and Honors placement requirements (see page 8)

Credit: 1 credit, 2 semesters

Algebra 2 **#2230**

Algebra 2 builds upon the concepts and skills learned in previous mathematics courses. Students will study functions and relations, with an emphasis placed on conceptual understanding, graphical representation, problem solving, modeling, and application. Trigonometric concepts are introduced, developed, and extended. This course is designed to prepare students for college-level mathematics.

Prerequisite: Algebra 1, Geometry or Honors Geometry

Credit: 1 credit, 2 semesters

Honors Algebra 2 **#2241**

Honors Algebra 2 with Trigonometry explores advanced algebraic concepts at a more extensive breadth, depth, and pace than in Algebra 2. Trigonometry concepts are introduced and developed. Each topic is studied with emphasis on conceptual understanding, graphical representation and applications through the creation of mathematical models. This rigorous course is

designed to prepare students who excel in mathematics for future Honors and AP courses.
Prerequisite: Geometry or Honors Geometry, and Honors placement requirements (see page 8)
Credit: 1 credit, 2 semesters

Applications of Mathematics **#2364**
Applications of Mathematics will further develop students' understanding of mathematical concepts and extend problem-solving strategies and skills to apply mathematics in routine and non-routine contexts. Students will refine algebraic and trigonometric concepts studied in Algebra 2, and will be introduced to essential applications of mathematics used to make financial decisions. Units include extended applications of linear and nonlinear systems of equations, exponential growth and decay functions, trigonometric relationships, and business and finance applications. Technology, including graphing calculators (TI-84+) and spreadsheet applications, will be used to support coursework. Applications of Mathematics is designed to prepare students for the study of entry-level college mathematics and to support students' abilities to make mathematically informed decisions relating to business and finance.
Prerequisite: Algebra 2
Credit: 1 credit, 2 semesters

Statistics and Discrete Mathematics **#2365**
Statistics and Discrete Mathematics is a rigorous study of statistics and discrete mathematics topics, and is designed to be beneficial to students who are interested in pursuing studies/careers in a variety of areas, including the social sciences, medical fields, business, and economics. Students will study key components of statistics such as frequency distributions, data description, probability distributions, confidence intervals, and hypothesis testing. The discrete mathematics units taught during second semester include the mathematics of voting, fair division, and graph theory. This study will prepare students for AP Statistics and/or future college level coursework in statistics.
Prerequisite: Algebra 2
Credit: 1 credit, 2 semesters

Precalculus **#2351**
Precalculus will extend and refine algebraic and trigonometric concepts introduced and developed in Algebra 2. This course emphasizes critical and creative thinking in its design for students who wish to further their advanced algebra skills. Precalculus is taught at a level and pace to prepare students for AP Calculus AB.
Prerequisite: Algebra 2
Credit: 1 credit, 2 semesters

Honors Precalculus **#2363**
Honors Precalculus will extend and refine advanced algebraic and trigonometric concepts and will introduce concepts in probability, statistics, vectors, parametrics, and polars. This course emphasizes problem solving through application and technology. This rigorous course is designed to prepare students who excel in mathematics for AP Calculus BC and AP Statistics and/or college coursework in Statistics and Calculus.
Prerequisite: Algebra 2 or Honors Algebra 2, and Honors placement requirements (see page 8)
Credit: 1 credit, 2 semesters

AP Calculus AB **#2400**
AP Calculus AB is a college-level course intended for students who have a thorough knowledge of college preparatory mathematics. The content of AB Calculus includes at least as much material as the standard one-semester college calculus course. AB Calculus is a course in introductory calculus designed to prepare students for the Advanced Placement Calculus AB exam, but also for higher-level college courses in mathematics. Students interested in pursuing programs in mathematical sciences, physics, chemistry, life sciences, economics, computer science, or engineering are especially encouraged to take this course. ***Note: Students who take an AP class are expected to take the AP exam.***
Prerequisite: Precalculus or Honors Precalculus (or demonstrated proficiency on HPrecalc exemption exam)
Credit: 1 credit, 2 semesters

AP Calculus BC **#2401**
AP Calculus BC is a college-level course intended for students who have a thorough knowledge of college preparatory mathematics. The content of BC Calculus includes at least as much material as the standard two-semester college calculus course. BC Calculus prepares students not only for the Advanced Placement Calculus BC exam, but also for higher-level college courses in mathematics. This course emphasizes the development of mature mathematical reasoning. Students interested in pursuing programs in mathematical sciences, physics, chemistry, life sciences, economics, computer science, or engineering are especially encouraged to take this course. ***Note: Students who take an AP class are expected to take the AP exam.***
Prerequisite: Honors Precalculus or AP Calculus AB*
*Students coming from AP Calculus AB are expected to independently study parametric and polar equations, vectors, sequences, and series to be prepared for the Calculus BC curriculum.
Credit: 1 credit, 2 semesters

AP Statistics **#2402**
AP Statistics is a college level course intended for students who have a thorough knowledge of college preparatory mathematics. This course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. This class will be beneficial to students who are interested in pursuing studies/careers in a variety of areas, including the Social Sciences, medical fields, business, and economics. ***Note: Students who take an AP class are expected to take the AP exam.***
Prerequisite: Honors Precalculus or Statistics
Credit: 1 credit, 2 semesters

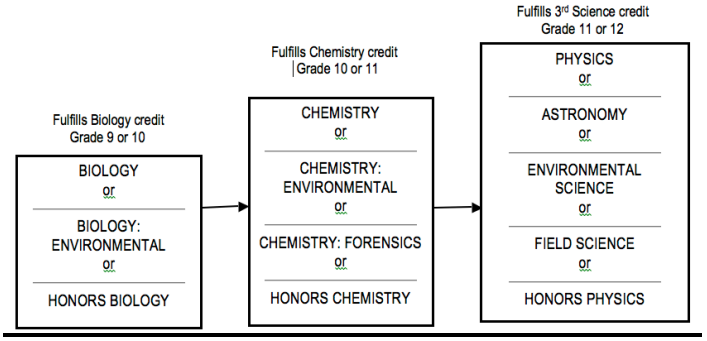
Math Lab **#2006**
Math Lab is designed to support and reinforce the concepts and skills required in Algebra 1, Geometry, and/or Algebra 2. Students who are identified by a current or previous teacher as needing support to meet proficiency standards may be required to enroll.
Prerequisite: Placement through proficiency assessment and teacher recommendation
Co-requisite: Concurrent enrollment in the corresponding math class
Credit: .5 elective credit, 1 semester, Pass/Fail
Course may be repeated for credit.

Science

Three credits of science courses are required for CFSD graduation: Biology, Chemistry, and a third year of either Physics, Honors Physics, Field Science, Astronomy or Environmental Science. Interested students may take elective courses beyond the required science courses.

As is true for all subjects, students are encouraged to visit the websites of colleges of interest to review their recommended or required high school coursework. (Note: Some engineering/technical programs require a year of physics or Honors physics at the high school level).

SCIENCE PATHWAY



SCIENCE ELECTIVES

(See course descriptions for prerequisites)

Intro to Engineering Design	*Physics or *Honors Physics	AP Biology
Principles of Engineering	*Astronomy	AP Chemistry
Digital Electronics	*Environmental Science	AP Physics
Engineering Design & Development	*Field Science	AP Environmental Sci
Anatomy & Physiology	H Adv Field Science	

*Any of the five third-year science options may be taken as Elective courses if not already used to fulfill the third year science requirement. However, students may not take both Physics and Honors Physics.

Biology **#4000**

Biology is an inquiry-based laboratory course that incorporates aspects of inquiry, cooperative learning and independent research. A diverse range of topics will be covered including cellular biology, genetics, evolution and ecology. Students will be engaged in activities that promote analytical thinking including systems thinking, scientific inquiry, and development of higher level cognitive skills while working to improve their organization and communication skills (oral and written). The course will make use of sophisticated laboratory equipment, technological resources, and media equipment to enhance the inquiry process. The course will emphasize the development of organization, communication, and study skills, but does require some independence and self-directed learning.

Grade: 9 -10
Prerequisite: None
Credit: 1 credit, 2 semesters

Biology: Environmental (Agriscience) **#4004**

Environmental Biology is an inquiry-based laboratory course that incorporates aspects of inquiry, cooperative learning and independent research while focusing on essential real-world concepts and environmental issues. A diverse range of topics will be covered including cellular biology, genetics, evolution, and ecology, all through an environmental perspective. Students will be engaged in activities that promote analytical thinking including systems thinking, scientific inquiry, and development of higher-level cognitive skills and will be required to complete an independent, semester long research project. The course will make use of sophisticated laboratory equipment, technological resources, and media equipment to enhance the inquiry process and heighten students' awareness of community and global issues. The course will emphasize the development of organization, communication, and study skills, but does require some independence and self-directed learning.

Grade: 9 -10
Prerequisite: None
Recommendations: For students who comprehend scientific concepts with little difficulty and demonstrate some independence and self-direction in their learning. Students who are interested in environmental issues and renewable natural resource sciences.
Credit: 1 credit, 2 semesters
* This is a JTED class

Honors Biology **#4010**

Honors Biology is a rigorous inquiry-based laboratory course that incorporates aspects of inquiry, cooperative learning and independent research and study. Students in Honors Biology will focus on the same primary topics as Biology but with greater depth and breadth and with a greater expectation of skill and competency. Students will be engaged in activities that incorporate and require analytical thinking, including systems thinking and data analysis, scientific inquiry, integration and use of higher-level cognitive skills, organization, and advanced oral and written communication skills. Students will participate in independent and collaborative investigations using sophisticated laboratory equipment, library and technological resources, and media equipment. The course requires a high level of independence and strong application of self-directed learning strategies.

Grade: 9 -10
Prerequisite: OG/EC students: Teacher recommendation based on 3.0 rubric grade; New-to-CFSD: an A average (no more than one quarter B) in 8th grade Science
Recommendations: For students with strong oral and written communication skills; strong study, note-taking and reading skills; excellent work ethic and organizational skills; a high level of independence
Credit: 1 credit, 2 semesters

Chemistry **#4110**

Chemistry is inquiry-based laboratory course that emphasizes essential concepts with real world applications. Students will explore topics such as structure of matter, molar relationships, gas laws, chemical reactions, qualitative analysis, acid/base reactions, and periodicity. Laboratory experiments are enhanced by 21st century skills, such as scientific inquiry, data analysis, and critical thinking. A combination of guided instruction and collaborative learning will enrich the learning experience of students with varied learning styles.

Grade: 10-11
Prerequisite: Biology, Algebra 1
Credit: 1 credit, 2 semesters

Chemistry: Environmental (Agriscience) **#4120**

Environmental Chemistry is an inquiry-based laboratory course that focuses on essential real world concepts and environmental issues. Students will explore concepts related to the environment, natural renewable resources, the structure of matter, molar relationships, gas laws, chemical reactions,

qualitative analysis, oxidation-reduction, and periodic law. Hands-on laboratory experimentation enhances class lectures. Research-based projects will heighten students' awareness of community and global issues and involve them in thinking and problem-solving activities. Students will be required to complete an independent, semester-long research project.
Grade: 10-11
Prerequisite: Biology, Algebra 1
Credit: 1 credit, 2 semesters
* This is a JTED class

Chemistry: Forensics (Bioscience) **#4111**
Chemistry: Forensics is an inquiry-based laboratory course that emphasizes essential concepts with real world applications and forensic science as the over-arching theme. Students will explore topics such as structure of matter, molar relationships, gas laws, chemical reactions, qualitative analysis, acid/base reactions, and periodicity. Laboratory experiments are enhanced by skills, such as scientific inquiry, data analysis, and critical thinking. A combination of guided instruction and collaborative learning will enrich the learning experience of students with varied learning styles.
Grade: 10-11
Prerequisite: Biology, Algebra 1
Credit: 1 credit, 2 semesters
* This is a JTED class

Honors Chemistry **#4130**
Honors Chemistry is an accelerated, inquiry-based laboratory course involving a detailed, in-depth study of introductory chemistry concepts including, but not limited to, a detailed study of the structure of matter, kinetic theory of gases, acid/base equilibria, stoichiometry, organic chemistry, thermodynamics, and quantum mechanics**.** Course emphasis is on investigation and problem solving techniques utilizing a mathematical approach. A self-directed, lab-based research project will be required second semester.
Grade: 10-11
Prerequisite: "B" or better in H Biology (or an "A" in Biology), an "A" in Algebra 1, and teacher recommendation
Credit: 1 credit, 2 semesters

Physics **#4230**
Physics is an inquiry-based laboratory course that examines the workings of the physical world. Students will examine the workings of the physical world through the study of mechanics, wave phenomena, energy and matter interactions, electricity, and magnetism. Lab experiments will address the 21st century skills of scientific inquiry, and data analysis. Modern technology will be used where applicable. Mathematics is used in this course and students should understand basic algebra and graphing. Standard physics is more conceptual and requires less intensive mathematical analysis than Honors Physics.
Grades: 11-12
Prerequisite: Chemistry
Prerequisite: Algebra 2 or concurrent enrollment
Credit: 1 credit, 2 semesters

Honors Physics **#4233**
Honors Physics is a rigorous inquiry-based laboratory course that is designed for students interested in a career in science, engineering, or a health-related field. Students will examine the workings of the physical world through the study of mechanics, wave phenomena, electricity and magnetism, optics and relativity. Mathematics is used extensively in this course and students who have already completed trigonometry will be more prepared than those co-enrolled as the mathematics is trig-based. Lab experiments will address the 21st century skills of scientific inquiry and data analysis. Modern technology will be used where applicable. Honors Physics is a mathematically intense course preparing students for AP and college Physics.
Grades: 11-12
Prerequisites: "B" in H Chemistry (or "A" in Chemistry), and teacher recommendation
Prerequisite Math: H Algebra 2 (or "A" in Algebra 2)
Credit: 1 credit, 2 semesters

Astronomy **#4490**
Astronomy is an inquiry and physics-based laboratory course that focuses on the properties and dynamics of the universe. Concepts of motion, forces of nature, energy, optics, radiation, and thermodynamics are applied to concepts in astronomy. First semester introduces students to the history and methods of observational astronomy and the study of the solar system. Second semester includes the study of the life cycle of stars, astrophysics, and cosmology. Students will make extensive use of internet sources and tools as well as in-class technology to learn how astronomers make and analyze their observations. A strong background in algebra and geometry is important, as mathematics will be a key tool to learning about physics through astronomy.
Grades: 11-12
Prerequisites: Chemistry
Credit: 1 credit, 2 semesters

Environmental Science (Agriscience) **#4450**
Environmental Science is an inquiry, laboratory, and career-based course that studies local and global environments through the physics topics of mechanics, wave phenomena, energy and matter interactions, electricity, and magnetism. Other topics include physical geology, inter-relationship of plants and animals, scientific field sampling methods and equipment, and computer modeling of natural resource systems. The 21st Century skills of scientific inquiry, systems thinking, and technological innovations are integrated throughout the course. In depth investigations of natural resource systems and career opportunities are supported through real world authentic experiences. Students will be required to complete an independent, semester-long research project.
Grades: 11–12
Prerequisites: Chemistry
Credit: 1 credit, 2 semesters
* This is a JTED class

Field Science **#4460**
Field Science is an inquiry-based, outdoor, and laboratory based course that studies local environments through the physics topics of mechanics, wave phenomena, energy and matter interactions, electricity, and magnetism. Other topics include physical geology, identification of local plants and animals, scientific field sampling methods and equipment, and computer modeling of ecosystems. The skills of data analysis, scientific inquiry, and systems thinking are integrated throughout the course. Field trips to investigate local ecosystems are offered as an optional component of this course.
Grades: 11-12
Prerequisite: Chemistry
Credit: 1 credit, 2 semesters

Science Electives

NOTE: Students may **take Physics, Honors Physics, Field Science, Environmental Science,** or **Astronomy** as an elective after they have already completed one of these courses as their third year science requirement for CFSD graduation. Additional science electives described below.

Anatomy & Physiology (Bioscience) **#4540**

Anatomy & Physiology is a hands-on inquiry-based laboratory course that helps students discover the wonders of the human body. The structures and functions of the major body systems will be explored from a sub-cellular level to a multi-cellular organism level. Students will gain extensive knowledge of the human body through lecture, research and reading, and laboratory investigations, including two major dissections. This course introduces techniques used to investigate questions in life science such as image processing, molecular modeling, serology, pathology, anthropology, and microbiology, and applies to any student interested in discovering the inner workings of the human organism.

Grades: 10-12

Prerequisites: Biology and Chemistry (or concurrent enrollment in a chemistry course)

Credit: 1 credit, 2 semesters

* This is a JTED class

Honors Advanced Field Science **#4543**

Honors Advanced Field Science is a research-centered course for seniors who have demonstrated high achievement in Field Science. Major topics include how biological and physical systems interact to produce the biogeographical and geological phenomena we see in the natural world today, statistical field research, and community service. The 21st century skills of data analysis, teamwork, leadership, digital learning, and systems thinking are important components of the course. Fluency with physical processes, the taxonomy and behavior of local flora and fauna at the family and species levels, as well as expertise with field research techniques are critical skills in this course. Overnight trips to demonstrate competency in field knowledge and methods are offered as an optional component of this course.

Grade: 12

Prerequisites: Minimum "B+" average in Field Science and teacher approval

Credit: 1 credit, 2 semesters

AP Biology **#4544**

Advanced Placement Biology is the equivalent of an introductory college biology course usually taken by biology majors during their first year in college. AP Biology helps students develop a conceptual framework for the biological sciences based on four themes and gain an appreciation of science as a process. A wide range of topics will be covered including biochemistry and structure of cells, molecular basis of heredity, evolution of life, anatomy and physiology, and ecology. There are twelve mandatory laboratory experiences. Students will use college-level textbooks and references, as well as be expected to dedicate approximately 3 to 5 hours a week and the effort required of a college course. AP Biology is designed to prepare students to take the Advanced Placement Biology exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grades: 11-12

Prerequisites: "B" in H Biology (or "A" in Biology), and "B" in H Chemistry (or "A" in Chemistry)

Recommendation: Anatomy & Physiology as prior or concurrent course

Credit: 1 credit, 2 semesters

* This is a JTED class

AP Chemistry **#4545**

Advanced Placement Chemistry is a college level laboratory course involving a detailed study of typical general chemistry topics. A strong math background is highly recommended and students should be prepared to do extensive independent study to support class lectures and lab investigations. AP Chem is a fast-paced course designed to prepare students to take the Advanced Placement Chemistry exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grades: 11–12

Prerequisites: "B" in Honors Chemistry (or "A" in Chemistry) and teacher recommendation

Credit: 1 credit, 2 semesters

AP Environmental Science (Agriscience) **#4546**

Advanced Placement Environmental Science is designed to be the equivalent of a one-semester introductory college course in environmental science. The course provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will identify and analyze environmental problems both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. Students will be required to complete an independent, semester-long research project. This course prepares students to undertake more advanced study of topics in environmental science and prepares them for the Advanced Placement Environmental Science exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grades: 11-12

Prerequisites: "B" in H Biology (or "A" in Biology) and "B" in H Chemistry (or "A" in Chemistry), and teacher recommendation

Credit: 1 credit, 2 semesters

* This is a JTED class

AP Physics C **#4547**

Advanced Placement Physics is a rigorous calculus-based course on mechanics, and electricity and magnetism. It is the equivalent of two semesters of a college physics course taken by engineering or science majors. Emphasis is placed on solving a variety of challenging problems and analyses in the classroom and laboratory. AP Physics prepares students to take the two Advanced Placement Physics C Exams: Mechanics, and Electricity & Magnetism. ***Note: Students who take an AP class are expected to take the AP exam.***

Grades: 12

Prerequisites: "B" in H Physics (or "A" in Physics) and teacher recommendation

Math Prerequisite: AP Calculus AB, or concurrent enrollment in AP Calculus BC

Credit: 1 credit, 2 semesters

Engineering Courses

Introduction to Engineering Design **#4602**

Engineering Design introduces aspects of problem solving, logic and relationships. This course emphasizes problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software. Topics explored include various technology systems, manufacturing processes, and how technological advances affect society. Students are introduced to the scope, rigor, and discipline of engineering and encouraged to integrate math and science technologies into engineering problem solving processes. (Credit through Pima Community College is available – see instructor).

Grades: 9-12
Prerequisite: None
Credit: 1 credit, 2 semesters
* This is a JTED class

Digital Electronics **#4603**

Digital Electronics examines the logic applied to electronic circuits and devices in conjunction with biotechnical engineering problems. Testing and designing digital circuitry with computer simulation software will introduce students to how circuits and devices are constructed. Relevant projects in the area of engineering enable students to experience the logic, rigor, and discipline of integrating math and science skills into engineering problems. Activities are designed to help students synthesize and construct knowledge as applied to solve and resolve problems within the scope of engineering.

Grades: 10-12
Prerequisite: Introduction to Engineering Design
Credit: 1 credit, 2 semesters
* This is a JTED class

Principles of Engineering **#4604**

Principles of Engineering is a course designed to integrate math and science skills into engineering/engineering technology. Students will gain an understanding of the intricacies associated with technology systems and engineering problem solving. Students will learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people and solve real world problems. Students will engage in hands-on, real-world projects, to gain an appreciation for social and political consequences of technological change. This course emphasizes the relevancy of math and science skills.

Grades: 10-12
Prerequisite: Introduction to Engineering Design
Credit: 1 credit, 2 semesters
* This is a JTED class

#4605

Engineering Design and Development / UA Engineering 102

Engineering Design and Development is a research course that offers an opportunity for advanced students to research, design, and construct solutions to open-ended engineering problems. Students will work in research teams to collect and analyze data relevant to their project. In an effort to develop additional workplace skills, community mentors will be provided for each team to guide their problem-solving process. Progress reports, data analysis, and a final written report will be presented. This course is designed for the advanced student planning a career in engineering. (Interested/Eligible students may earn credit for UA Engineering 102*. See instructor for information.)

Grade: 12
Prerequisite: Digital Electronics and Principles of Engineering, or teacher approval
Co-requisite for UA Engineering 102: Precalculus or AP Calculus AB or BC
Credit: 1 credit, 2 semesters
* This is a JTED class

Social Studies

Four years (4 credits) required for CFSD graduation: Global Issues, Western Civilization or AP European History, US History, and .5 Government and .5 Economics (Standard/HC and AP options).

Honors Credit

Social Studies courses at all levels award Honors distinction/credit (additional .25 GPA weight) for students in standard/non-Honors classes who consistently perform at the Honors level in their coursework and assessments.

Global Issues **#3200**

This course is an introduction to the basic concepts, vocabulary, and research skills necessary for success in the social sciences. The course will prepare students for subsequent social studies courses in Western Civilization, U.S. History, and Civics/Government for the 21st Century. Global Issues and Perspectives will examine the history, culture, and geography of four non-European areas of the world: Africa, Asia, Middle East, and Latin America. Following an initial introductory block, which introduces the students to basic vocabulary and concepts, each of the areas above will be addressed in a separate unit of study. Research skills and utilization of a broad array of primary and secondary sources will be emphasized throughout the year. All students will demonstrate competency in research skills by producing a research paper that demonstrates in-depth research and appropriate documentation. *Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class.*

Grade: 9
Prerequisite: None
Credit: 1 credit, 2 semesters

Humanities 9: Global Studies (Social Studies) **#3111**

Humanities is an interdisciplinary English and Social Studies class. The Humanities 9 curriculum encompasses all of the standards and benchmarks of both the English 9 and Global Issues 9 courses; however, the course is structured so that the content is integrated. Students will examine the history, culture, and geography of four non-European areas of the world: Africa, Asia, Middle East, and Latin America. They will study these regions through a wide variety of genres as well as primary and secondary sources. The course emphasizes analytical reading and writing of narrative and expository text, research skills, and critical thinking skills, as well as factual knowledge of geography and history, vocabulary, and the conventions of written English. *Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class, and all students will be prepared for any sophomore level English or Social Studies course.*

Grade: 9
Prerequisite: None
Co-requisite Humanities 9: Global Studies (English)
Credit: 2 credits, 2 semesters (English and Social Studies)

Western Civilization **#3220**

This course provides a survey of the West from antiquity to the present world. Students will analyze the major economic, social, religious, intellectual, scientific, and artistic movements over time and their impact on the world today. A variety of instructional methods will be used including lecture, discussion, independent research, web-based learning, and working in teams. Students will focus on critical and abstract thinking skills, reading primary and secondary documents, performing independent research, and writing historical essays. An important goal of this course is to prepare students for their roles as 21st century citizens in a rapidly changing world, in which a rich understanding of history and its impact on the present and future is integral to effective leadership and citizenship. *Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class.*

Grade: 10
Prerequisite: Global Issues or Humanities 9
Credit: 1 credit, 2 semesters

Humanities 10: Western Studies (Social Studies) **#3131**

Humanities is an interdisciplinary English and Social Studies class. The Humanities 10 curriculum encompasses all of the standards and benchmarks of both the English 10 and Western Civilization courses; however, the course is structured so that the content is integrated. Students will examine the history, culture, and geography of Europe and its surroundings and the development of "Western thought." They will study these regions through a wide variety of genres: fiction, biography, philosophy, and poetry, as well as primary and secondary sources. The course emphasizes analytical reading and writing of expository and visual media (with a focus on persuasion), research skills, critical thinking skills, and presentation skills as well as factual knowledge of geography and history, vocabulary, and the conventions of written English. All students will demonstrate competency in research skills by producing a research paper that demonstrates in-depth research and appropriate documentation. *Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class, and all students will be prepared for any junior level English or Social Studies course.*

Grade: 10
Prerequisite: Humanities 9 or Global Issues
Co-requisite Humanities 10: Western Studies (English)
Credit: 2 credits, 2 semesters (English and Social Studies)

AP European History **#3224**

AP European History is a college level course that offers a broad overview of European history, introducing students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which we live. Students are provided with a basic narrative of events and movements in European history from approximately 1450-2000 in order to develop an understanding of some its principal themes. It also seeks to provide students with an ability to analyze historical evidence and historical interpretation, and an ability to express historical understanding in writing. This college level survey class is aligned with the College Board's standards for the course. It is largely taught in lecture format and prepares students to take the Advanced Placement European History exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grade: 10-12
Prerequisite: Global Issues
Credit: 1 credit, 2 semesters

US History **#3240**

This course presents a general survey of the history of the United States from the colonial era to the present day. Students will learn how to think and write thematically about social, historical, political, and economic issues and trends that have shaped the United States. An emphasis of the course will be the

emergence of representative democracy, the evolving patterns of race relations and their effect on the nation, American territorial expansion, growth of American popular culture, immigration, industrialization, urbanization, and the emergence of the United States as a superpower in the postwar world. Students will utilize a variety of primary and secondary sources and will reinforce their writing, research, and critical thinking skills through independent research, writing simulations, and classroom discussion**.** *Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class.*

Grade: 11
Prerequisite: Western Civilization or AP European History
Credit: 1 credit, 2 semesters

Humanities 11: American Studies (Social Studies) #3151

Humanities is an interdisciplinary English and Social Studies class. The Humanities 11 curriculum encompasses all of the standards and benchmarks of both the English 11 and American History 11 courses; however, the course is structured so that the content is integrated. Students will examine the history, culture, and geography of the United States of America, from the colonial era to the present. They will study the development of our country through a wide variety of genres: fiction, biography, popular culture, and poetry, as well as primary and secondary sources. The course emphasizes analytical reading and writing of narrative and expository text, literary analysis, critical thinking skills, and oratory, as well as factual knowledge of geography and history, vocabulary, and the conventions of written English. In preparation for senior year and beyond, students in this class will also develop the skills to create effective job or college applications. *Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class, and all students will be prepared for any senior level English or Social Studies course.*

Grade: 11
Prerequisite: Humanities 9 or Western Civ or AP European History
Co-requisite Humanities 11: American Studies (English)
Credit: 2 credits, 2 semesters

AP United States History #3356

AP United States History is a college-level course that surveys the history of the United States from the colonial period to the present. The course is designed to provide students with the analytical skills and knowledge necessary to deal critically with the problems and issues in American History. It strikes a balance between learning factual knowledge and increasing critical thinking skills of analysis, interpretation, synthesis, and evaluation. Improving writing skills, especially in the area of developing a thesis, supporting it with specific, relevant, factual content, and formulating a conclusion, is a major objective of the course. The course is aligned with the College Board's standards and prepares students to take the Advanced Placement US History exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grade: 11
Prerequisite: Western Civilization or AP European History
Credit: 1 credit, 2 semesters

United States Government #3360

United States Government is a one-semester course that focuses on the fundamental concepts and practices of the American and Arizona systems of government. Course content will include an examination of the political process, political ideologies, the Constitution and Bill of Rights, the three branches of government, as well as the rights and responsibilities of individuals in our government system. Students will also explore current issues at the local, state, national, and global levels and will primarily apply their understanding of concepts through projects, activities, simulations, and research. *Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class.*

Grade: 12
Prerequisite: US History
Credit: .5 credit, 1 semester

AP United States Government #3363

Advanced Placement US Government is a one-semester college-level course of study in American political science. Course content includes a survey of constitutional development, political beliefs and behaviors, demographics, parties and interest groups, institutions of national government, public policy, and civil rights and liberties. The course is aligned with the College Board's standards and prepares students to take the Advanced Placement US Government exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grade: 12
Prerequisite: US History
Credit: .5 credit, 1 semester

Economics #3400

Economics is a one-semester course that focuses on a greater understanding of economics ranging from the viewpoint of the individual consumer or small business owner (Microeconomics) to the national and global economy (Macroeconomics). The course will study the law of supply and demand, forms of business, labor unions, government finances and influence on the economy, money and prices, inflation and deflation cycles, as well as personal finance. The course also relates history, government, and politics to the study of economics. **Students who consistently perform at the Honors level in their coursework and assessments may be awarded Honors credit/distinction for this class.*

Grade: 12
Prerequisite: US History
Credit: .5 credit, 1 semester

AP Macroeconomics #3402

Advanced Placement Macroeconomics is a one-semester college-level course that focuses on economic principles and their application to the economic systems as a whole. Course content includes an introduction to basic economic principles followed by an in-depth look at major macroeconomic goals and performance indicators, the financial sector, monetary and fiscal policy, and foreign exchange markets. The course requires students to demonstrate their understanding of economic principles in written work, but also graphically. The course is aligned with the College Board's standards and prepares students to take the Advanced Placement Macroeconomics exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grade: 12
Prerequisite: US History
Credit: .5 credit, 1 semester

Social Studies Electives

AP European History **#3224**

AP European History is a college level course that offers a broad overview of European history, introducing students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which we live. Students are provided with a basic narrative of events and movements in European history from approximately 1450-2000 in order to develop an understanding of some its principal themes. It also seeks to provide students with an ability to analyze historical evidence and historical interpretation, and an ability to express historical understanding in writing. This college level survey class is aligned with the College Board's standards for the course. It is largely taught in lecture format and prepares students to take the Advanced Placement European History exam. Note: Sophomores may elect to take AP European History for their 10th grade Social Studies class (in lieu of Western Civilization). ***Note: Students who take an AP class are expected to take the AP exam.***

Grade: 10-12
Prerequisite: Global Issues
Credit: 1 credit, 2 semesters

AP World History **#3500**

AP World History is a college level course that offers motivated students the opportunity to immerse themselves in the processes that, over time, have resulted in the knitting of the world into a tightly integrated whole. The course invites students to explore key themes of interaction with the environment, cultures, state building, economic systems, and social structures, from approximately 8,000 BCE to present-day. The course offers balanced global coverage of Africa, the Americas, Asia and Europe. It seeks to provide students with an ability to analyze historical evidence and historical interpretation, and an ability to express historical understanding in writing. This college level survey class is aligned with the College Board's standards for the course and prepares students to take the Advanced Placement World History exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grade: 11-12
Prerequisite: Global Issues, and Western Civilization or AP European History
Credit: 1 credit, 2 semesters

AP Seminar **#3402**

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listen to and view speeches, broadcasts, and personal accounts; and experience artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. Note: Students are assessed with two through-course performance assessment tasks and one end-of-course exam. All three assessments are summative and will be used to calculate a final AP score (using the 1-5 scale).

Grade: 11-12
Prerequisite: H English 10 (or "A" in English 10) and AP Euro (or "A" in Western Civ)
Credit: 1 credit, 2 semesters

AP Research (planned for 2017-18) **#3403**

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a yearlong mentored, research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methods; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic thesis paper of approximately 5,000 words and a presentation, performance, or exhibition with an oral defense.

Grade: 12
Prerequisite: AP Seminar
Credit: 1 credit, 2 semesters

Student Leadership **#3600**

Student Leadership is a course designed to give students the opportunity to study, practice, and develop individual and group leadership and organization skills. These skills include, but are not limited to, leadership roles, interpersonal relations, civic responsibility, decision-making, problem solving, and communication. Students enrolled in this course apply these skills by working with peers, school administration, and the community. This course is a hands-on approach to leadership by involving students in participatory leadership through project planning and implementation. All Student Council officers and elected class presidents and representatives serving in leadership roles are required to take this course.

Grades: 9–12
Credit: 1 credit, 2 semesters
Course may be repeated for elective credit.

World Languages Elective

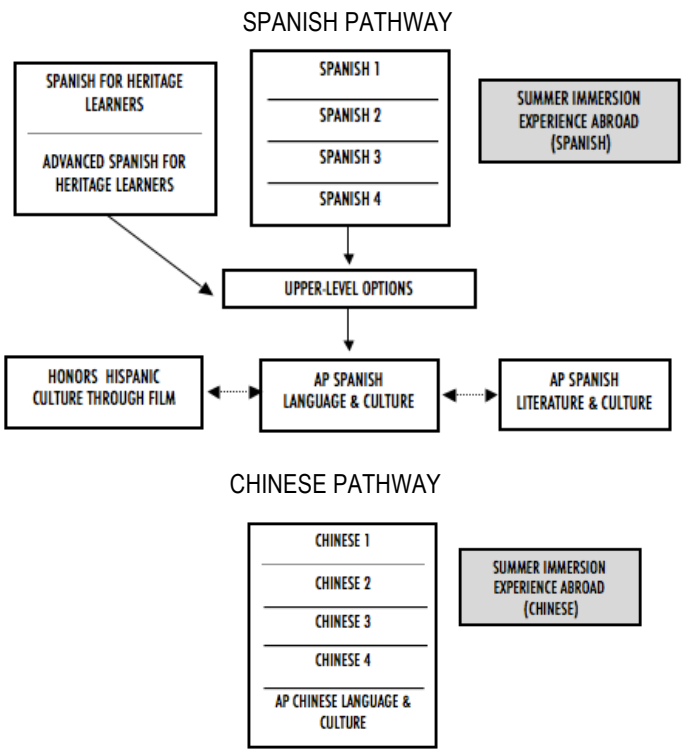
Summer Immersion Experience Abroad – Chinese **#5551**

This study-abroad experience in China offers students a unique opportunity to deepen their understanding of Chinese culture while also developing their ability to communicate in the Chinese language. Students will be placed in Chinese language classes at the novice, intermediate, and advanced levels based on individual need. Students will also take part in a variety of cultural excursions to modern and ancient sites, and will take classes (conducted in English) on topics such as Chinese culture, history, politics, and economics. This study abroad experience is chaperoned by a CFSD staff member.

Grades: 10-12
Prerequisite: Proficiency in Chinese is not a prerequisite for participation in this program.
Fee: To be determined
Credit: .5 elective credit (Credit cannot be used to fulfill the graduation requirement for World Languages.)

World Languages

Two years (2 credits) in same language is required for CFSD graduation. CFHS students may take either Spanish or Chinese.



Transfer students will meet the graduation requirements for World Languages in one of the following ways:

- *Transfer students who have successfully completed two years of continuous language study other than Spanish or Chinese from an accredited program at a previous high school will be deemed to have met CFSD graduation requirements.*
- *Students who enroll in grades 9-11 with no previous years of language study at the high school level will need to earn two credits of CFHS Spanish or Chinese to meet the CFSD graduation requirement.*
- *Transfer students who enroll in grades 10-12 and bring one credit of Spanish or Chinese may take Spanish or Chinese at CFHS as available to earn credit for their second year of continuous language study and meet CFSD graduation requirements.*
- *Transfer students who enroll in grades 10-12 who come with one credit in a language not offered at CFHS will be allowed to take an approved continuing language course (online or traditional classroom) at another approved accredited institution to earn the additional credit required for graduation.*
- *Students who enroll in grade 12 with no previous language study at the high school level will need to take Spanish 1 or Chinese 1, and an approved summer course (online or traditional classroom) or two semesters of approved college level Spanish or Chinese to meet the CFSD graduation requirement.*

Spanish

Spanish 1 **#5320**

This introductory language course is for students who have no previous Spanish or who have not yet acquired the proficiencies addressed in CFHS Spanish 1. Although all areas of communication (speaking, listening, basic reading and writing) will be addressed, our approach emphasizes the spoken language. In this course students will begin to develop the skills and cultural competence necessary to communicate with native speakers.

Prerequisite: None
Targeted Proficiency Outcome: Novice-High
Grades 9-12
Credit: 1 credit, 2 semesters

Spanish 2 **#5322**

This course is for students who have acquired Novice-High proficiency. Students will further develop the communication skills and cultural competence acquired in Spanish 1. Students will continue to use Spanish in all areas of communication (speaking, listening, reading and writing) with emphasis on the spoken language.

Prerequisite Target: Novice-High
Targeted Proficiency Outcome: Intermediate-Low
Grades 9-12
Credit: 1 credit, 2 semesters

Spanish 3 **#5328**

This course is for students who have acquired Intermediate-Low proficiency. Students will enhance the communication skills and cultural competence developed in Spanish 1 and 2. Students will examine and utilize more advanced features of language and will begin to develop greater fluency in all areas of communication (speaking, listening, reading and writing).

Prerequisite Target: Intermediate-Low
Targeted Proficiency Outcome: Intermediate-Mid
Grades 9-12
Credit: 1 credit, 2 semesters

Spanish 4 **#5330**

This course is for students who have acquired Intermediate-Low/Mid proficiency. Students will acquire more sophisticated communication skills and will develop a deeper understanding of Spanish-speaking cultures through advanced reading and topics for discussion and composition.

Prerequisite Target: Intermediate-Low/Mid
Targeted Proficiency Outcome: Intermediate-High
Grades 9-12
Credit: 1 credit, 2 semesters

Spanish for Heritage Learners (SHL) **#5340**

Designed for Heritage Language Learners of Spanish, this course can accommodate a wide range of Heritage Language Learners, from those who are minimally functional (can comprehend Spanish but are not able to speak fluently, read or write) to those who are more proficient and literate in Spanish. The recommended entrance requirement for the beginning level is at the Intermediate-Mid level of proficiency in listening comprehension however it is not necessary that students speak at the Intermediate level prior to entering the course. This course will develop reading, writing, speaking, and listening skills. The student will also develop an awareness and understanding of Hispanic culture, such as language variations, customs,

geography, and current events.
Prerequisite Target: Intermediate-Mid (for listening) and Heritage Learner Background and teacher recommendation
Targeted Proficiency Outcome: Intermediate-High to Advanced--Low
Grades 9-12
Credit: 1 credit, 2 semesters

Advanced Spanish for Heritage Learners (ASHL) #5350
This course will accommodate Advanced Heritage Learners as they continue to develop their reading, writing, speaking, and listening skills in Spanish. Students in the course will also gain a deeper understanding of Hispanic culture through investigations of language variation, customs, geography, history, literature, and current events.
Prerequisite Target: Intermediate-High (in reading and writing) and Heritage Learner Background and teacher recommendation
Targeted Proficiency Outcome: Advanced Low to Advanced-High
Grades 10-12
Credit: 1 credit, 2 semesters

Honors Hispanic Culture Through Film #5360
This course uses film to enhance students' understanding of Hispanic culture while also serving as a springboard for improving students' speaking, listening, and writing skills. Oral proficiency and listening comprehension are refined through conversation, discussion, and presentations. Writing skills are enhanced through journal topics related to the films viewed and discussed in class. Students will analyze and discuss selected films and segments of films from Latin America, Spain, and the United States on subjects concerning life and culture in the Hispanic world. Students will explore these films in light of their political, cultural, and social contexts. This course will be taught primarily in Spanish. Students' oral presentations will be given in Spanish, but papers may be submitted in either English or Spanish.
Prerequisite Target: Intermediate-High and successful completion of Spanish 4 or Advanced Spanish for Heritage Learners and teacher recommendation
Targeted Proficiency Outcome: Intermediate-High to Advanced Low
Grades 11-12 (or 10 with teacher recommendation)
Credit: 1 credit, 2 semesters

AP Spanish Language and Culture #5436
This course will prepare students to demonstrate competence on the Advanced Placement Spanish Language and Culture exam. AP Spanish requires a sophisticated command of Spanish grammar and vocabulary and competence in listening, reading, speaking, and writing. The course examines geographic, historical, artistic, social, and political features of communities in the Spanish-speaking world through six themes: Global Challenges, Science & Technology, Families & Communities, Contemporary Life, Beauty & Aesthetics, and Personal & Public Identities. ***Note: Students who take an AP class are expected to take the AP exam.***
Prerequisite Target: Intermediate-High and successful completion of Spanish 4 or Advanced Spanish for Heritage Learners and teacher recommendation
Targeted Proficiency Outcome: Intermediate-High to Advanced-Low
Grades 11-12 (or 10 with teacher recommendation)
Credit: 1 credit, 2 semesters

AP Spanish Literature and Culture #5437
Advanced Placement Spanish Literature is the equivalent of a university course and requires a sophisticated command of Spanish grammar and vocabulary and competence in listening, reading, speaking, and writing. AP Spanish Literature and Culture focuses on selected authors from the literature of Spain and Latin America and on the understanding and analysis of literary texts. The course will prepare students to demonstrate competence on the Advanced Placement Spanish Literature and Culture Exam and/or the AP Spanish Language and Culture Exam. ***Note: Students who take an AP class are expected to take the AP exam.***
Prerequisite Target: Advanced-Low (reading), Intermediate-Mid (writing) and teacher recommendation, and Intermediate High to Advanced-Low (speaking)
Targeted Proficiency Outcome: Advanced-Mid (reading), Intermediate-High (writing), and Advanced-Low/Mid (speaking)
Grades 11-12 (or 10 with teacher recommendation)
Credit: 1 credit, 2 semesters

Summer Immersion Experience Abroad - Spanish #5450
This study-abroad experience is for students who have attained Intermediate-Low proficiency or higher in Spanish. This program offers the student an authentic "life experience" to live abroad with a host family and attend a language school during the day. Through our host family program, students are given the opportunity to be totally immersed in the culture as well as the language. Students will participate in weekend excursions to study the geography, ecosystems, and culture of Costa Rica. This study abroad experience is chaperoned by a CFSD staff member.
Prerequisite Target: Intermediate-Low and teacher recommendation
Targeted Proficiency Outcome: Intermediate-Mid to Advanced-Low
Grades 10-12
Fee: To be determined
Credit: 1 credit

Chinese

Chinese 1 **#5510**

This introductory Mandarin language course is for students who have no previous experience with the language. Students will learn the pinyin transcription system for Chinese pronunciation and will also be able to recognize and produce 220 Chinese characters by the end of the course. Although there is an emphasis on oral communication, students will also develop basic listening, reading, and writing skills in the language. In this course, students will begin to develop the skills and cultural competence necessary to communicate with native speakers.

Prerequisite: None
Targeted Proficiency Outcome: Novice-Mid (for speaking); Novice-High (for listening); Novice-Low (for reading and writing)
Grades 9-12
Credit: 1 credit, 2 semesters

Chinese 2 **#5520**

This course is for students who have acquired Novice-High proficiency. Students will continue to learn the pinyin transcription system of Chinese pronunciation and expand the number of Chinese characters they can recognize and produce. Students will further develop the communication skills and cultural competence acquired in Chinese 1. Students will continue to use Chinese in all areas of communication (speaking, listening, reading and writing) with emphasis on the spoken language.

Prerequisite Target: Novice-Mid (for speaking); Novice High (for listening), Novice-Low (for reading and writing)
Targeted Proficiency Outcome: Novice-High (for speaking and listening); Novice-Mid (for reading and writing)
Grades 9-12
Credit: 1 credit, 2 semesters

Chinese 3 **#5530**

This course is for students who have acquired Intermediate-Low/Mid proficiency. Students will enhance the communication skills and cultural competence developed in Chinese 1 and 2. Students will examine and utilize more advanced features of language and will begin to develop greater fluency in all areas of communication (speaking, listening, reading, and writing).

Prerequisite Target: Novice-High (for speaking and listening); Novice-Mid (for reading and writing)
Targeted Proficiency Outcome: Intermediate-Low (for speaking and listening); Novice-High (for reading and writing)
Grades 9-12
Credit: 1 credit, 2 semesters

Chinese 4 **#5540**

This course is for students who have acquired Intermediate-Mid proficiency. Students will enhance the communication skills and cultural competence developed in Chinese 1, 2, and 3. Students will examine and utilize more advanced features of language and will begin to develop greater fluency in all areas of communication (speaking, listening, reading, and writing).

Prerequisite Target: Intermediate-Low (for speaking and listening); Novice-High (for reading and writing)
Targeted Proficiency Outcome: Intermediate-Mid (for speaking and listening); Intermediate-Low (for reading and writing)
Grades: 9-12
Credit: 1 credit, 2 semesters

AP Chinese Language and Culture **#5550**

Advanced Placement Chinese Language and Culture will prepare students to demonstrate competence on the Advanced Placement Chinese Language and Culture exam. AP Chinese requires a strong command of Chinese grammar and vocabulary and competence in listening, reading, speaking, and writing. The course will reflect the intellectual interests of the students such as arts, current events, and literature while following the prescribed Advanced Placement curriculum. ***Note: Students who take an AP class are expected to take the AP exam.***

Prerequisite Target: Intermediate-Mid (for speaking and listening); Intermediate-Low (for reading and writing)
Targeted Proficiency Outcome: Intermediate-Mid (for speaking and listening); Intermediate-Low (for reading and writing)
Grades: 11-12 (or 10 with teacher recommendation)
Credit: 1 credit, 2 semesters

World Languages Electives

Summer Immersion Experience Abroad – Chinese **#5551**

This study-abroad experience in China offers students a unique opportunity to deepen their understanding of Chinese culture while also developing their ability to communicate in the Chinese language. Students will be placed in Chinese language classes at the novice, intermediate, and advanced levels based on individual need. Students will also take part in a variety of cultural excursions to modern and ancient sites, and will take classes (conducted in English) on topics such as Chinese culture, history, politics, and economics. This study abroad experience is chaperoned by a CFSD staff member.

Grades: 10-12
Prerequisite: Proficiency in Chinese is not a prerequisite for participation in this program.
Fee: To be determined
Credit: .5 elective credit (Credit cannot be used to fulfill the graduation requirement for World Languages.)

Fine Arts

1 year (1 credit) of Fine Art (Performing Art or Visual Art) or CTE coursework required for CFSD graduation.

Note: Arizona university admission requirements include either 1.0 Fine Art or 1.0 CTE credit. Some colleges outside of Arizona may require 1.0 Fine Art credit. Please check admissions requirements for colleges of interest.

Performing Arts

Instrumental Music

Concert Band **#6010**

Students in Concert Band will develop individual and ensemble musical performance skills through participation in the CFHS marching band, pep band, and concert band. Several trips will be scheduled throughout the school year, and a wide variety of performance opportunities will be offered. Students will also have the opportunity to audition for all-region and all-state band and participate in the state solo/ensemble contest. The concert band is open to woodwind, brass, and percussion performers and no audition is required. One to two years of playing experience is preferred.

Grades: 9–12
Fees: $25 co-curricular, $35 uniform, $55 travel, $95 if instrument rental
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Symphonic Band **#6011**

Symphonic Band is an advanced concert band open to students by audition or consent of the instructor. The focus of this course will be development of advanced individual and ensemble performance skills and in-depth musical understanding while performing high quality symphonic band music. Students in this ensemble will participate in marching band, pep band, and symphonic band. Students will have the opportunity to audition for regional and all-state bands and state solo/ensemble contest. Several travel and performance opportunities will be offered. Auditions for all woodwind, brass, and percussion players will be held prior to registration.

Grades: 9–12
Prerequisite: Director consent – Auditions will be held prior to registration
Fees: $25 co-curricular, $35 uniform, $55 travel, $95 if instrument rental
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Wind Ensemble **#6020**

Wind Ensemble is a select ensemble composed of the most highly skilled wind and percussion musicians at Catalina Foothills High School. The focus of this course will be development of advanced individual and ensemble performance skills and in-depth musical understanding while performing upper-level wind ensemble music. Membership in this group will be by audition only, and the ensemble size will be limited to approximately fifty members with standard instrumentation. Several travel and performance opportunities will be offered. Students in this ensemble will participate in marching band, pep band, and wind ensemble as well as regional and all-state auditions and state solo/ensemble contests. Auditions for all woodwind, brass, and percussion players will be held prior to registration.

Grades: 9–12
Prerequisite: Director consent – Auditions will be held prior to registration
Fees: $25 co-curricular, $35 uniform, $55 travel, $95 if instrument rental
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Small Ensembles **#6021**

This class will be composed of small ensembles such as woodwind quintet, brass quintet, flute choir, or saxophone choir. Woodwind quintets will be composed of standard quintet instrumentation, which includes flute, oboe, bassoon, French horn, and clarinet. Brass quintets will be composed of the standard brass instrumentation of two trumpets, French horn, trombone, and tuba. Instrumentation in flute and saxophone choirs may vary. Performance techniques specific to these chamber ensembles will be taught, and a wide variety of literature will be studied. Students auditioning for these ensembles should possess strong individual performance skills and be capable of rehearsing with other members of the ensemble independently of the director. Priority will be given to students also enrolled in one of the concert bands. Several performances will be held throughout the year and students in this class are eligible for solo ensemble but NOT regional or all state band. Auditions will be held prior to registration.

Grades: 9-12
Prerequisite: Director consent – Auditions will be held prior to registration
Fees: $25 co-curricular
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Foothills Jazz Band **#6029**

Jazz Band is a comprehensive music course that includes jazz performance techniques, improvisation, and jazz history. A wide variety of jazz styles will be studied and performed. Several performances, trips, and competitions should be expected. Enrollment will be limited to standard jazz instrumentation and students playing saxophone, trumpet, trombone, low brass, drum set, guitar, bass, or keyboard may audition for this select group. Priority will be given to students also enrolled in one of the concert bands.

Grades: 9–12
Prerequisite: Director consent – Auditions will be held prior to registration
Fees: $25 co-curricular, $55 travel, $95 if instrument rental
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Foothills Jazz Combo **#6028**

This small jazz ensemble will emphasize improvisation skills and will include jazz performance techniques and history. A wide variety of jazz styles will be studied and performed and several performances, clinics, and competitions should be expected. Students should be able to work independently as small ensembles may be combined. Students playing saxophone, trumpet, trombone, low brass, drum set, guitar, bass, or keyboard may audition for this ensemble.

Grades: 9–12
Prerequisite: Director consent – Auditions will be held prior to registration
Fees: $25 co-curricular, $55 travel, $95 if instrument rental
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Drum Line **#6031**

Drum Line is offered to all percussionists interested in being a member of the Foothills Falcon Band Drum Line. Advanced percussion techniques will be taught and students will learn field show music and drill, cadences, and pep band music. Drum Line is part of the marching band during fall semester, and percussionists **must** enroll for wind ensemble, symphonic band, or concert band during the second semester.

Grades: 9–12
Prerequisite: Director consent – Auditions will be held prior to registration
Fees: $25 co-curricular, $35 uniform, $55 travel, $75 percussion
Credit: .5 credit, Fall semester
Note: Participants must enroll in one of the other bands second semester
Course may be repeated for elective credit.

Falcon Colorguard (year) **#6041**

Falcon Colorguard is offered to students interested performing with the Foothills Falcon Band. Basic flag and dance will be taught, and students will learn routines to perform with the band at football games, competitions, and parades. During the second semester, Colorguard members will compete as an ensemble in Winter Guard International. Musicians wishing to participate in Colorguard during marching season may enroll in one of the concert bands for second semester. No experience is necessary, but members should plan to participate in the Falcon Band Camp in late July.

Grades: 9-12
Prerequisite: Director consent - Auditions will be held prior to registration
Fee: $25 co-curricular, $35 uniform, $55 travel
Credit: 1 credit, 2 semesters - Full Year Course
Course may be repeated for elective credit.

Pom/Dance Line (fall semester) **#6042**

Pom/Dance Line is offered to all students wishing to perform as a member of the Pom/Dance Line for the Foothills Falcon Band. Basic dance and pom skills will be taught, and students will learn routines to perform with the band at football games, competitions, and parades. The Pom/Dance Line will perform pom routines with the band on the sidelines during football games and will perform as a dance line on the field with the band during halftime. Musicians wishing to participate in Pom/Dance Line during marching season may enroll in one of the concert bands for second semester. Members should plan to participate in the Falcon Band Camp in late July.

Grades: 9-12
Prerequisite: Director consent - Auditions will be held prior to registration
Fee: $25 co-curricular, $55 travel
Credit: .5 credit, 1 semester - Semester Course
Course may be repeated for elective credit.

Beginning Steel Drums - Semester **#6037**

This performance ensemble is open to all students interested in learning basic music reading, beginning performance technique, and the history of steel drumming. As skills develop, public performances will be scheduled. Students enrolling in Beginning Steel Drums should be capable of rehearsing independently of the director as small ensembles may be combined.

Grades: 9–12
Prerequisite: Director consent. Class size is limited and will be filled with qualified individuals on a first come, first served basis
Fees: $25 co-curricular, $15 tuning fee
Credit: .5 credit, 1 semester
Course may be repeated once for elective credit.

Beginning Steel Drums - Year **#6038**

This performance ensemble is open to all students interested in learning basic music reading, beginning performance technique, and the history of steel drumming. As skills develop, public performances will be scheduled. Students enrolling in Beginning Steel Drums should be capable of rehearsing independently of the director as small ensembles may be combined.

Grades: 9–12
Prerequisite: Director consent. Class size is limited and will be filled with qualified individuals on a first come, first served basis
Fees: $25 co-curricular, $25 tuning fee
Credit: 1 credit, 2 semesters – Full Year Course

Intermediate Steel Drums **#6039**

This performance ensemble is open to all students interested in continuing to learn about performance technique and the history of steel drumming through the performance of traditional and popular music of the Caribbean. As skills develop, public performances will be scheduled. Students enrolling in Intermediate Steel Drums should be capable of rehearsing independently of the director as small ensembles may be combined.

Grades: 9–12
Prerequisite: *One semester of Beginning Steel Drums. Director consent. Class size is limited and will be filled with qualified individuals on a first come, first served basis.
Fees: $25 co-curricular, $25 tuning fee
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Advanced Steel Drums **#6040**

This performance ensemble is designed for students who have prior steel drum or percussion experience. Students will develop advanced performance techniques as well as study other styles of Caribbean and American popular music. Several performances will be scheduled on and off campus. Students enrolling in this ensemble should be capable of rehearsing independently of the director.

Grades: 10–12
Prerequisite: Director consent, 2 semesters of steel drums
Fees: $25 co-curricular, $55 travel, $25 tuning fee
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Vocal Music

Falconaires Chorus **#6060**

This performance-oriented class is designed as an entry-level choir for students wanting to sing in a choral group. No audition is required. A variety of styles of choral literature will be studied including Renaissance, Baroque, American folk song, spirituals, Broadway, classical, and contemporary. Training will include vocal production, breath support, vowel formation, as well as ensemble blend for the purpose of expressive singing. Sight-reading skills will be incorporated into the curriculum. Students are expected to attend all scheduled rehearsals and participate in all performances.

Grades: 9–12
Fee: $25 co-curricular, $30 uniform rental
Credit: 1 credit, 2 semesters
Course may be repeated for elective credit.

Falcon Women's Chorus **#6061** and **#6062**

This performance-oriented ensemble is a group open to female students by audition only. Literature to be studied will come from many styles and periods from the Renaissance to twentieth century. Vocal development as it relates to breath support, production, vowel formation, and ensemble blend will be emphasized. Independent musicianship skills will be enhanced through various sight-singing techniques. Students are expected to participate in all scheduled rehearsals and performances.

Grades: 9–12
Prerequisite: Director consent – Voice Placement Hearings will be held prior to registration
Fee: $25 co-curricular, $30 uniform, $20 travel
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Concert Chorale **#6075**

This performance-oriented class is a mixed ensemble open to students by audition only. Musical literature includes styles from the Renaissance to the Twentieth Century. Composers and historical musical performance practices will be part of the course of study. Vocal development as it relates to breath support, production, vowel formation and ensemble blend will be emphasized. Sight-reading and aural musicianship skills will be a primary focus. Students are expected to participate in all scheduled rehearsals and concerts, and are encouraged to prepare a solo work for the Arizona Regional Choir auditions. A spring festival/competition will be offered for interested students.

Grades: 9–12
Prerequisite: Director consent – Placement Hearings will be held prior to registration
Fee: $25 co-curricular, $30 uniform, $20 travel
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Change of Pace Choir **#6070**

This performance-oriented class is an ensemble devoted to musical styles including Pop Rock, Big Band, Broadway, and Jazz. Vocal development as it relates to breath support, production, vowel formation, and ensemble blend will be emphasized. Vocal improvisation will also be explored in the course. Choreography may be incorporated to enhance musical productions. Students are expected to participate in all scheduled rehearsals and concerts, and are encouraged to perform a solo work for the Arizona regional Choir auditions. A spring festival/competition will be offered for interested students.

Grades: 10–12
Prerequisite: Director consent – Placement Hearings will be held prior to registration
Fee: $25 co-curricular, $50 travel
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Music Theory **#6099**

Students will learn the basic elements of music theory, as well as composing and arranging. Incorporation and analysis of familiar genres such as classical, pop, and jazz will aid in the understanding of commonly used harmonic structures. Sight singing will be incorporated, as will aural training and recognition of pitches, rhythms and intervals. Information learned in Music Theory will assist students preparing for UA (and other) College of Fine Arts admissions tests.

Grades: 10–12
Prerequisite: teacher approval
Credit: 1 credit, 2 semesters – Full Year Course
Course may be repeated for elective credit.

Theatre Arts

Theatre Fundamentals **#6100**
Theatre Fundamentals is a one-year introductory theatre course designed to introduce students to a variety of theatrical elements. Students will spend one semester physically working with professional theatrical equipment and learning the foundations of technical productions in the theatre setting, in addition to providing technical support for the Theatre Department's seasonal productions. The other semester will focus on how historical and cultural developments have impacted theatre, as well as how text analysis and critique, play writing, and directing affect production. Theatre Fundamentals prepares students for all other Theatre courses.
Grades: 9-12
Prerequisite: None
Fee: $40 lab fee
Credit: 1 credit, 2 semesters
Course may NOT be repeated.
* This is a JTED class

Intermediate Theatre Productions **#6200**
Theatrical Productions is a one-year course focusing on the creation of scenery, lighting and sound for the theatre from design concept to construction and implementation. Scenic design concepts, elements and principles, as well as extensive construction techniques will be covered during first semester. Second semester will focus on lighting design including electricity, history of lighting design, technical lighting elements, computer and manual lighting boards, intelligent lighting, and color theory, and sound design including sound equipment usage, theatrical soundboard operation, sound effect techniques, and theatrical sound system design. The class will be directly involved in the design and construction of the Theatre Department's seasonal production.
Grades: 10–12
Prerequisite: Theatre Fundamentals and teacher approval
Fee: $25 co-curricular fee, $50 lab fee
Credit: 1 credit, 2 semesters
Course may NOT be repeated.
* This is a JTED class

Advanced Theatre Production 1 **#6220**
Advanced Theatre Production is a one-year class, which allows students to explore theatre with an in-depth, hands-on approach. Students are assigned production roles and jobs and continue their design work by applying their skills to actual performances. Integrating knowledge and skills into actual performances allows students to explore and experience the professional nuances of technical theatre.
Grades: 11–12
Prerequisite: Intermediate Theatre Production and teacher approval
Fee: $25 co-curricular fee, $50 lab fee
Credit: 1 credit, 2 semesters
* This is a JTED class

Advanced Theatre Production 2 **#6240**
Students in ATP 2 are responsible for the design elements of the student-directed shows in the ATP class. All theatrical design jobs will be assigned, and the show will be produced, built and run by the students. Students are assigned production roles and continue their design work by applying their skills to a realized performance.
Grades: 12
Prerequisite: Advanced Theatre Production 1 and teacher approval
Fee: $25 co-curricular fee, $50 lab fee
Credit: 1 credit, 2 semesters
Course may be repeated for elective credit.
* This is a JTED class

Intermediate Theatre Arts **#6250**
Intermediate Theatre Arts reviews the basics of beginning acting and performance. Students develop knowledge of various acting theories and techniques, learn and apply the critiquing process, perform in-class monologues and scenes, and work to develop their presentation abilities. Students will also continue to build on skills in play writing and directing by writing original scenes and directing them in class.
Grades: 10–12
Prerequisite: Theatre Fundamentals and teacher approval
Fee: $25 co-curricular fee, $40 lab fee
Credit: 1 credit, 2 semesters
Course may NOT be repeated.

Advanced Theatre Arts - Semester **#6300 Sem 1, #6305 Sem 2**
This one-semester class allows students to explore theatre with an in-depth, hands-on approach. Students audition for placement based on roles and jobs available and continue their acting and directing work by applying their skills to an actual performance. Specific information about each semester's production and the positions available may be obtained from the Theatre Office. This course may be repeated.
Grades: 11–12
Prerequisite: Intermediate Theatre Arts and teacher approval
Fee: $25 co-curricular fee, $25 per semester lab fee
Credit: .5 credit, 1 semester
Course may be repeated for elective credit.

Advanced Theatre Arts - Year **#F6307**
This yearlong class allows students to explore theatre with an in-depth, hands-on approach. Students audition for placement based on roles and jobs available and continue their acting and directing work by applying their skills to an actual performance. Specific information about productions and the positions available may be obtained from the Theatre Office. This course may be repeated.
Grades: 11–12
Prerequisite: Intermediate Theatre Arts and teacher approval
Fee: $25 co-curricular fee, $50 lab fee
Credit: 1 credit, 2 semesters
Course may be repeated for elective credit.

Visual Art

Studio Art 1 **#6320**
Level 1 art is a foundations class where students learn a range of concepts including perspective, composition, drawing skills, and color theory. Students receive an introduction to key artists and movements in history. Mediums include pencil, charcoal, pastels, painting, printmaking, and collage.
Grades: 9-12
Prerequisite: None
Fee: $20 lab fee
Credit: 1 credit, 2 semesters

Studio Art 2 **#6330**
Level 2 art expands on foundations including art history, theory, concepts and skills. It empowers the student to make standards-based choices about the content and interpretation of their artwork. Projects will require the use of creative thinking and problem solving.
Grades: 10–12
Prerequisite: Studio Art 1
Fee: $20 lab fee
Credit: 1 credit, 2 Semesters

Studio Art 3 **#6340**
Level 3 art draws on the student's prior knowledge and challenges them to direct their artistic growth by providing a variety of choices in subject matter, interpretation of concepts, and media. We look at the work and ideas of contemporary global artists. Students use critical thinking to evaluate their own work and the work of others. There is focus on creating portfolio quality artwork, developing an artist statement, and participating in exhibitions.
Grades: 11–12
Prerequisite: Studio Art 2
Fee: $20 lab fee
Credit: 1 credit, 2 semesters

Studio Art 4 **#6350**
Studio Art 4 is designed for the advanced artist. Students are expected to already possess a variety of skills in a variety of media, think creatively, and develop a portfolio.
Grades: 12
Prerequisite: Studio Art 3 and teacher approval
Fee: $20 lab fee
Credit: 1 credit, 2 semesters

AP Art – as available **#6400**
AP Studio Art is designed for the advanced artist. Students continue to develop a portfolio in alignment with the College Board's standards of evaluation. This portfolio of 2-D work includes 12 artworks demonstrating a student's breadth of skills, and 12 additional artworks demonstrating a student's concentration of one theme. The student is expected to already possess a variety of skills in a variety of media, think creatively, and manage their time to meet both the high expectations and deadlines of AP Art. Students use the College Board standards in the classroom critiques and in the evaluation of their art. ***Note: Students who take an AP class are expected to take the AP exam.***
Grades: 12
Prerequisite: AP Art teacher approval based on previous Studio Art and review of 8 completed artworks at the AP level of performance.
Fee: $20 lab fee
Credit: 1 credit, 2 semesters

Ceramics and Sculpture **#6430**
This one-semester course introduces students to the basics of three-dimensional design using a variety of media: clay, fibers, wire, plaster, recycled materials, and paper mache. Students will learn wheel throwing and various hand-building techniques in clay. They will also learn additive and subtractive sculpting techniques, surface decoration, and firing and glazing of clay pieces.
Grades: 9–12
Prerequisite: None
Fee: $10 lab fee (per semester)
Credit: .5 credit, 1 semester
Course may be repeated once for elective credit

Graphic Design 1 **#6401**
Graphic Design 1 introduces students to the fundamentals of graphic arts and design. Students will explore 21st Century skills including career paths in graphics arts, design, and communication. Professional standards, skills and ethics will be addressed. Students will learn digital media techniques and data input and output media applications. This exploration class offers an orientation and understanding of communication, problem solving, critical thinking, information technology, organizational systems, leadership and teamwork. (Credit through Pima Community College may be available – see instructor).
Grades: 10-12
Fee: $80 lab fee
Credit: 1 credit, 2 semesters
* This is a JTED class

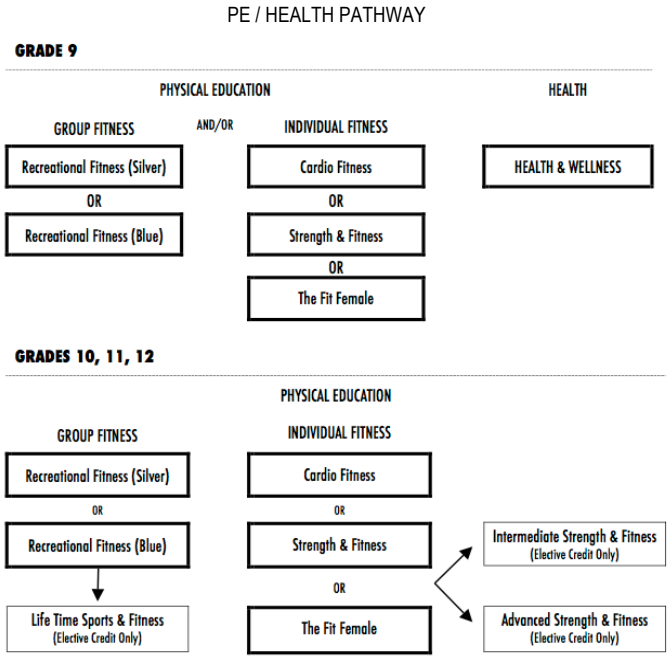
Graphic Design 2 **#6410**
Graphic Design 2 introduces students to a variety of art techniques and computer software applications programs in graphic design (Adobe Creative Suite). Students will learn to use graphic art skills and techniques, word processing, desktop publishing, image editing, and illustration programs to create professional looking layouts. Projects will require the use of creative thinking to solve visual communication problems.
Grades: 11-12
Prerequisite: Graphics Design 1 and teacher approval
Fee: $80 lab fee
Credit: 1 credit, 2 semesters
* This is a JTED class

Graphic Design 3 **#6420**
Advanced Graphic Design 3 explores the wide world of image making. Students learn to incorporate the principles of design to creatively arrange images and text. Projects may include the conceptualization and design of advertisements, magazines, package design, television graphics, and trademarks. Emulating working professionals, students will work collaboratively and individually as graphic designers, illustrators, and photographers to produce "client-directed" projects.
Grades: 12
Prerequisite: Graphic Design 2 and teacher approval
Fee: $80 lab fee
Credit: 1 credit, 2 semesters
* This is a JTED class

Kinetic Wellness

(Physical Education and Health)

One year (1credit) of **Physical Education** is required for CFHS graduation. To fulfill the graduation requirement, students must take two different PE classes. One class must be taken from the Group Fitness options and one class from the Individual Fitness options. One of the .5 credit requirements must be taken as a freshman. The second .5 credit may also be taken during freshman year or at any time during grades 10-12. One semester (.5 credit) of **Health** is required for CFHS graduation. Health must be taken as a freshman.



Health

One semester (.5 credit) required – Grade 9

The goal of health education is to help students develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors.

Health and Wellness **#7103**

This course addresses health and wellness topics and issues relevant to high school students. Students will acquire knowledge and skills necessary to maintain lifelong good health and to make informed choices and accept personal responsibility for those choices. The units covered in this course include nutrition and fitness; mental and emotional health; first aid; tobacco, alcohol, and other drugs; and human growth and development. This is a required course that must be taken in freshman year. (Students may take CFHS Health through CFSD Community Schools, if offered, summer prior to or following freshman year.

Grade: 9
Prerequisite: None
Credit: .5 credit, 1 semester

Physical Education

Two semesters (1 credit) required for CFHS graduation

One class must be taken from the Group Fitness options and one class from the Individual Fitness options. One of the .5 credit requirements must be taken as a freshman.

Physical education offers a variety of group and individual fitness-based activities anchored in the goal of lifelong fitness and wellness. Students will develop physical skills and knowledge that can be used throughout life. A cornerstone of the program is a health-related fitness assessment administered in each course.

Group Fitness Options

Recreational Fitness (Silver) **#7010**

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. 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. This course meets the .5 credit requirement for Group Fitness.

Grades: 9-12
Prerequisite: None
Credit: .5 credit, 1 semester
Course may be repeated for elective credit.

Recreational Fitness (Blue) **#7020**

This course is designed to offer students a wide variety of group fitness activities that enhance physical skills, movement, and wellness. Activities may include ultimate Frisbee, lacrosse, indoor soccer, speedball, flickerball, and foot 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. This course meets the .5 credit requirement for Group Fitness.

Grades: 9-12
Prerequisite: None
Credit: .5 credit, 1 semester
Course may be repeated for elective credit.

Individual Fitness Options

Cardio Fitness **#7050**

This course is designed to offer students a wide variety of cardiovascular fitness activities that enhance physical skills, movement, and wellness. Activities may include cardiovascular endurance training, step aerobics, Yoga, Pilates, jogging/walking, dance/rhythm, basic calisthenics, and interval training. Through participation in these activities, students will develop cardiovascular fitness, muscular strength, muscular endurance, and flexibility. Fitness assessments will be conducted a minimum of 2 times per semester. This course meets the .5 credit requirement for Individual Fitness.

Grades: 9-12
Prerequisite: None
Credit: .5 credit, 1 semester
Course may be repeated for elective credit.

Strength and Fitness **#7051**

This is an introductory course designed to teach students the proper techniques in developing muscular strength and endurance, flexibility, and cardiovascular fitness. Students will be taught the principles of training, how these principles relate to conditioning, and injury prevention. A unit on dance/rhythm is also included. Students will assess their current fitness level, develop a goal-oriented fitness plan, and demonstrate progress toward goals. Fitness assessments will be conducted a minimum of 2 times per semester. This course meets the .5 credit requirement for Individual Fitness.

Grades: 9-12
Prerequisite: None
Credit: .5 credit, 1 semester
Course may be repeated for elective credit.

The Fit Female **#7052**

This course is designed specifically for the female student who is interested in strength training techniques and endurance, cardiovascular fitness, flexibility, core strength development, and body contouring. Students will be taught the principles related to strength and conditioning with an emphasis on injury prevention. A unit on dance/rhythm is also included. Students will assess their current fitness level, develop a goal-oriented fitness plan, and demonstrate progress toward goals. Fitness assessments will be conducted a minimum of 2 times per semester. This course meets the .5 credit requirement for Individual Fitness.

Grades: 9-12
Prerequisite: None
Credit: .5 credit, 1 semester
Course may be repeated for elective credit.

Advanced PE Electives

Intermediate Strength and Fitness **#7070**

This course is designed to build upon the strength training skills in Strength and Fitness or The Fit Female. Emphasis is on developing muscular strength and endurance and other skill related components of fitness (flexibility, cardiovascular endurance, and body composition). Students will assess their current fitness level and develop an individualized conditioning program to meet desired outcomes. Supplemental lifts will be researched and incorporated into students' individualized programs. Connections will be made between anatomy and specific conditioning activities. Goal setting and related journal work will be incorporated into the course. Students will be evaluated on knowledge, improvement, and work accomplished toward goal attainment. Fitness assessments will be conducted a minimum of 2 times per semester.

Grades: 10-12
Prerequisite: Strength and Fitness or The Fit Female
Credit: .5 credit, 1 semester
Course may be repeated for elective credit.

Advanced Strength and Fitness **#7071**

This course is designed for the highly motivated student who wants to learn advanced techniques in developing muscular strength and endurance and other skill related components of fitness (flexibility, cardiovascular endurance, and body composition). Students will participate in a variety of conditioning activities (Olympic and power lifting, speed, agility, and interval training) and will implement a conditioning program designed around individual needs and goals. Goal setting and related journal work will be incorporated into the course. Students will be evaluated on knowledge, improvement, and work accomplished toward goal attainment. Fitness assessments will be conducted a minimum of 2 times per semester.

Grades: 10-12
Prerequisite: Strength and Fitness or The Fit Female, and teacher approval
Credit: .5 credit, 1 semester
Course may be repeated for elective credit.

Lifetime Sports & Fitness **#7072**

This is an advanced course for students interested in individualized sports and racquet-based activities. This course is designed to offer students a wide variety of fitness activities that enhance physical skills, movement, and wellness. Activities may include badminton, golf, pickle ball, tennis, Frisbee golf, archery, and table tennis. Through participation in these activities, students will develop cardiovascular fitness, muscular strength, muscular endurance, and flexibility. Fitness assessments will be conducted a minimum of 2 times per semester. This course does not meet the required graduation credit.

Grades: 10-12
Prerequisite: Recreational Fitness Silver or Blue
Credit: .5 elective credit, 1 semester
Course may be repeated for elective credit.

Career & Technical Education and JTED Electives

and Career Pathways

CFSD is a member of the Pima County Joint Technological District (JTED). In conjunction with business and industry, JTED provides career and technical education programs for students that focus upon both the educational and employment needs of Pima County. JTED courses provide access to state-of-the art equipment and training programs in a variety of career pathways, offer articulated college-level credit (applicable courses only), offer the opportunity for industry certifications, and the opportunity to work at an advanced level in a variety of career areas.

(Note: Arizona university will accept either 1.0 Fine Art or CTE credit. Some colleges outside of Arizona may require 1.0 Fine Art credit. Please check college admissions requirements for schools of interest.)

CFHS JTED course offerings and career pathways are listed below.

Career and Technical Education

- Theatre Fundamentals, Intermediate Theatre Productions, Advanced Theatre Productions 1 & 2, Theatre Co-Op
- Graphic Design 1, 2, 3 and Yearbook
- Photo Imaging 1, 2, 3
- Media Production Fundamentals, Advanced Media Production 1 & 2, Media Co-Op
- Introduction to Journalism, Writing for Investigative Reporting, Broadcast News Production
- Entrepreneurship: Business & Marketing 1, Entrepreneurship: Business & Marketing 2, Entrepreneurship: Business & Marketing Co-Op

Science

- Agriscience ~ Biology: Environmental (meets CFHS Biology requirement), Chemistry: Environmental, (meets CFHS Chemistry requirement), Environmental Science (meets CFHS 3rd year science requirement), AP Environmental Science
- Bioscience ~ Chemistry: Forensics (meets CFHS Chemistry requirement), Anatomy and Physiology, AP Biology
- Introduction to Engineering Design, Principles of Engineering, Digital Electronics, Engineering Design and Development

Pima County JTED Programs

CFHS Students interested in off-site JTED courses in the following areas should see Principal Chomokos for registration information. These courses are free to CFHS students and credits earned will be noted on the CFHS transcript. Info at pimajted.org/program.

Accounting • Agriculture • Allied Health • Audiovisual • Automotive • Aviation • Biosciences • Business • Carpentry • Cosmetology • Construction • Culinary Arts • Diagnostic & Intervention • Design & Merchandising • Drafting • Education • Electrical • Engineering • Finance • Fire Science • Graphic Communications • HVAC • Hospitality Management • Information Technology • Law & Public Safety • Marketing & Management • Nursing Services • Performing Arts • Plumbing • Telecommunications • Welding

Journalism Pathway

Intro to Journalism: Writing for News
Journalism: Writing for Investigative Reporting
Journalism: Broadcast News Production

Introduction to Journalism: Writing for News / Falcon Voice **#1340**
Introduction to Journalism will focus on essential concepts of writing and journalistic skills. The students will use the literary skills, journalists vocabulary, and reasoning, to write and produce articles for publication. Students will acquire the prerequisite skills necessary for advanced writing and editing in newspaper (Falcon Voice), investigation, media, research, and problem solving through authentic journalistic experiences.
Grades: 10-12
Prerequisite: English 9
Credit: 1 credit, 2 semesters
* This is a JTED class

Journalism: Writing for Investigative Reporting **#1350**
Journalism: Writing for Investigative Reporting will focus on advanced concepts of journalistic skills (writing, interviewing, editing and publishing) while learning the editorial responsibilities of newspaper production. The students will use writing skills in interviewing, editing, script writing and creation of broadcast news articles and videos for web-based publications. Students will acquire 21st century skills through teamwork, professional relationships, authentic news projects (Falcon Voice), entrepreneurial publishing, and representing and reporting real-life situations.
Grades: 11-12
Prerequisite: Introduction to Journalism
Credit: 1 credit, 2 semesters
* This is a JTED class

Journalism: Broadcast News Production **#1360**
Journalism: Broadcast News Production will focus on advanced concepts of journalistic skills (interviewing, editing and digital publishing) while learning the fundamentals of media broadcasting. The students will use technical skills in camera interviewing, editing, and production packages for broadcast and web-based publications. Students will acquire 21st century skills through teamwork, professional relationships, authentic broadcast video projects (interviews, documentaries, news features), entrepreneurial broadcasting, and representing and reporting real-life situations.
Grades: 11-12
Prerequisite: Introduction to Journalism
Credit: 1 credit, 2 semesters
*This is a JTED class

Media Productions Pathway

Media Production Fundamentals
Advanced Media Productions 1
Advanced Media Productions 2
Media Co-Op

Media Production Fundamentals **#7510**

This is a one-year course that provides students with the skills and knowledge to master lighting, camera operation, visual composition, live video switching, story telling, basic audio production and editing. The students produce specially designed video projects that apply technical knowledge and skills in production of television programs. Focused instruction in 21 century learning skills include leadership, productivity, teamwork, digital-age literacy, technology & tools, critical & creative thinking, and data analysis. Other important video production skills include interviewing, scripting, advertising techniques, studio operation, and audience analysis. Basics of copyright law and broadcast ethics are also included. *(Credit through Pima Community College may be available – see instructor).*

Grades 9-12
Credit: 1 credit, 2 semesters
* This is a JTED class

Advanced Media Production 1 **#7520**

This one-year course builds on the skills learned in Media Production Fundamentals. The course provides a focus on producing actual video productions that will meet the needs of clients or be submitted for distribution/competition. This advanced class will also focus on broadcast and industrial video production techniques. Podcasts as well as streaming production techniques will be covered. Career and technology trends will be discussed. A personal portfolio and resume will be developed as well as a job career plan. Job research and interviewing techniques are practiced. *(Credit through Pima Community College may be available – see instructor).*

Grades: 10-12
Prerequisite: Media Production Fundamentals
Credit: 1 credit, 2 semesters
* This is a JTED class

Advanced Media Production 2 **#7525**

This one-year course builds on the skills learned in Advanced Media Production. The course provides a focus on creating, critiquing and producing actual video for TV and broadcast productions that will meet the needs of clients or be submitted for distribution/competition. This advanced class will also focus on broadcast and industrial video production techniques. Advanced podcasts as well as advanced streaming production techniques will be covered. Career certifications will be optional. A personal portfolio and resume will be developed as well as a job career plan. Job research and interviewing techniques are practiced. *(Credit through Pima Community College may be available – see instructor).*

Grades: 11-12
Prerequisite: Advanced Media Production
Credit: 1 credit, 2 semesters
* This is a JTED class

Media Cooperative Education **#7530**

Media Cooperative Education combines enriching class projects with on-the-job learning. This course, worth two credits, meets 4 hours/week as a Media Coop/Internship class, and requires an average of 10-15 hours of cooperative CTE (Career and Technical Education) employment or volunteer work per week. Students acquire advanced skills related to their employment in the classroom, and the monitored work hours provide a practical application of classroom study. The course is awarded a letter grade and credit for the classroom work, and an additional Pass/Fail credit for the work/volunteer hours.

Grade: 12
Prerequisite: Advanced Media Production 2 and teacher approval
Credit: 2 credits, 2 semesters

Entrepreneurship Pathway

Entrepreneurship: Business and Marketing 1
Entrepreneurship: Business and Marketing 2
Entrepreneurship: Business and Marketing Co-Op

Entrepreneurship: Business and Marketing 1 **#7700**

Entrepreneurship: Business and Marketing 1 prepares students for business and marketing careers in the 21st century. Students develop critical thinking and communication skills for use in the global business community. The course provides career exploration in marketing and business careers, market trends, problem solving, leadership skills, critical thinking, business applications, and personal financial management. Students will study and practice the personal banking, financial, and investing skills necessary to prepare a sound basis for entrepreneurship. Class projects will further advance collaborative and systemic thinking skills by applying technology and tools used in business and marketing professions. This course is integrated with participation in DECA, a national marketing organization for students. *(Credit through Pima Community College may be available – see instructor).*

Grades: 10-12
Prerequisites: None
Credit: 1 credit, 2 semesters
* This is a JTED class

Entrepreneurship: Business and Marketing 2 **#7710**

Entrepreneurship: Business and Marketing 2 is designed to prepare students for business or entrepreneurial employment. A thorough knowledge of marketing, management, leadership, finance, accounting, and economic skills will offer additional opportunities in 21st century business and marketing careers. The practical application of marketing essentials affords students opportunities to develop into socially responsible and culturally competent leaders. Through a combination of collaborative and self-directed projects, students analyze, synthesize, and apply their business acumen toward entrepreneurial endeavors. Advanced marketing students are encouraged to pursue officer/leadership positions within DECA, an association of marketing students. *(Credit through Pima Community College may be available – see instructor).*

Grades: 10-12
Prerequisites: Entrepreneurship 1
Credit: 1 credit, 2 semesters
* This is a JTED class

Entrepreneurship: Business and Marketing Co-Op **#7720**

Entrepreneurship: Business and Marketing Co-Op combines enriching class projects with on-the-job learning. This course, worth two credits, meets 4 hours/week as an Advanced Marketing Coop/Internship class, and requires an average of 10-15 hours of cooperative CTE (Career and Technical Education) employment or volunteer work per week. Students acquire

advanced skills related to their employment in the classroom, and the monitored work hours provide a practical application of classroom study. The course is awarded a letter grade and credit for the classroom work, and an additional Pass/Fail credit for the work/volunteer hours.
Grade: 12
Prerequisite: Entrepreneurship 2 and Teacher approval
Credit: 2 credits, 2 semesters
* This is a JTED class

Photo Imaging Pathway

Photo Imaging 1
Photo Imaging 2
Photo Imaging 3

Photo Imaging 1 **#7570**
This one-year course focuses on applying 21st century skills while using state of the art equipment including digital cameras, the latest Adobe software, and new iMac computers to produce gallery quality images after having learned the technical and aesthetic means to control light and composition. Students will explore traditional photography in addition to digital imaging. Critiques and participation in the annual photo show will serve as the formal presentation of finished images. As a CTE course, students will explore career paths, professional standards, and communication skills. *(Credit through Pima Community College may be available – see instructor).*
Grades: 10-12
Prerequisite: None
Credit: 1 credit, 2 semesters
Fee: $80
* This is a JTED class

Photo Imaging 2 **#7580**
This one-year course builds on the skills learned in Photo Imaging I with an emphasis on developing a personal style to create a professional quality portfolio. Students are encouraged to join our CTSO, SkillsUSA, to develop skills in leadership, teamwork, and meeting personal and future career goals. Students will have the opportunity to participate in the annual leadership convention as well as the regional, and state level photo competitions. It is expected that second year students will display work in the annual photo show. Explorations in the process, production, and role of digital imaging will provide the students with the 21st century skills for personal development and the work setting. *(Credit through Pima Community College may be available – see instructor).*
Grades: 11-12
Prerequisite: Photo Imaging 1 and teacher approval
Credit: 1 credit, 2 semesters
Fee: $80
* This is a JTED class

Photo Imaging 3 **#7590**
This is a one-year course for students who are interested in pursuing photo and graphic communications professionally. It is expected that students join SkillsUSA, to develop skills in leadership, teamwork, and meeting personal and future career goals. Students will participate in the annual leadership convention as well as the regional, and state level photo competitions. It is expected that third year students will display work in the annual photo show. Third year students will be expected to mentor photo students in levels one and two. Students will refine their professional skills as they work on individual projects, including creating a gallery website using Adobe Dreamweaver and producing long-term graphic communications projects. *(Credit through Pima Community College may be available – see instructor).*
Grade: 12
Prerequisite: Photo Imaging 2
Credit: 1 credit, 2 semesters
Fee: $80
* This is a JTED class

Graphic Design Pathway

Graphic Design 1
Graphic Design 2
Graphic Design 3

Graphic Design 1 **#6401**
Graphic Design 1 introduces students to the fundamentals of graphic arts and design. Students will explore 21st Century skills including career paths in graphics arts, design, and communication. Professional standards, skills and ethics will be addressed. Students will learn digital media techniques and data input and output media applications. This exploration class offers an orientation and understanding of communication, problem solving, critical thinking, information technology, organizational systems, leadership and teamwork. *(Credit through Pima Community College may be available – see instructor).*
Grades: 10-12
Fee: $80 lab fee
Credit: 1 credit, 2 semesters
Course may be used to meet Fine Arts requirement
* This is a JTED class

Graphic Design 2 **#6410**
Graphic Design 2 introduces students to a variety of art techniques and computer software applications programs in graphic design (Adobe Creative Suite). Students will learn to use graphic art skills and techniques, word processing, desktop publishing, image editing, and illustration programs to create professional looking layouts. Projects will require the use of creative thinking to solve visual communication problems. *(Credit through Pima Community College may be available – see instructor).*
Grades: 11-12
Prerequisite: Graphics Design 1 and Teacher approval
Fee: $80 lab fee
Credit: 1 credit, 2 semesters
* This is a JTED class

Graphic Design 3 **#6420**
Advanced Graphic Design 3 explores the wide world of image making. Students learn to incorporate the principles of design to creatively arrange images and text. Projects may include the conceptualization and design of advertisements, magazines, package design, television graphics, and trademarks. Emulating working professionals, students will work collaboratively and individually as graphic designers, illustrators, and photographers to produce "client-directed" projects. *(Credit through Pima Community College may be available – see instructor).*
Grades: 12
Prerequisite: Graphics Design 2 and teacher approval
Fee: $80 lab fee
Credit: 1 credit, 2 semesters
* This is a JTED class

Yearbook: Graphic Design **#1330**

Yearbook is a course that offers students an opportunity to learn publication skills and commercial art while becoming part of the yearbook team. In addition to learning advanced journalism skills such as interviewing, copy writing, and editing, students will explore the basics of photojournalism, concept design, typography, and publication layout. State-of-the-art digital photography and desktop publishing programs enhance student production and processing of the all-digital yearbook. Students will be required to write frequently, conduct interviews, take photographs, meet deadlines, and contribute to the overall production of the *Falcon Yearbook*.

Grades: 11–12
Prerequisite: Graphic Design 1 and teacher approval
Credit: 1 credit, 2 semesters
Course may be repeated for elective credit
* This is a JTED class

Theatre Productions Pathway

Theatre Fundamentals
Intermediate Theatre Productions
Advanced Theatre Production 1
Advanced Theatre Production 2

Theatre Fundamentals **#6100**

Theatre Fundamentals is a one-year introductory theatre course designed to introduce students to a variety of theatrical elements. Students will spend one semester physically working with professional theatrical equipment and learning the foundations of technical productions in the theatre setting, in addition to providing technical support for the Theatre Department's seasonal productions. The other semester will focus on how historical and cultural developments have impacted theatre, as well as how text analysis and critique, play writing, and directing affect production. Theatre Fundamentals prepares students for all other Theatre courses.

Grades: 9-12
Prerequisite: None
Fee: $40 lab fee
Credit: 1 credit, 2 semesters
Course may NOT be repeated.
Course may be used to meet Fine Arts requirement
* This is a JTED class

Intermediate Theatre Productions **#6200**

Theatrical Productions is a one-year course focusing on the creation of scenery, lighting and sound for the theatre from design concept to construction and implementation. Scenic design concepts, elements and principles, as well as extensive construction techniques will be covered during first semester. Second semester will focus on lighting design including electricity, history of lighting design, technical lighting elements, computer and manual lighting boards, intelligent lighting, and color theory, and sound design including sound equipment usage, theatrical soundboard operation, sound effect techniques, and theatrical sound system design. The class will be directly involved in the design and construction of the Theatre Department's seasonal production.

Grades: 10–12
Prerequisite: Theatre Fundamentals and teacher approval
Fee: $25 co-curricular fee, $50 lab fee
Credit: 1 credit, 2 semesters
Course may NOT be repeated.
* This is a JTED class

Advanced Theatre Production 1 **#6220**

Advanced Theatre Production is a one-year class, which allows students to explore theatre with an in-depth, hands-on approach. Students are assigned production roles and jobs and continue their design work by applying their skills to actual performances. Integrating knowledge and skills into actual performances allows students to explore and experience the professional nuances of technical theatre.

Grades: 11–12
Prerequisite: Intermediate Theatre Production and teacher approval
Fee: $25 co-curricular fee, $50 lab fee
Credit: 1 credit, 2 semesters
* This is a JTED class

Advanced Theatre Production 2 **#6240**

Students in ATP 2 are responsible for the design elements of the student-directed shows in the ATP class. All theatrical design jobs will be assigned, and the show will be produced, built and run by the students. Students are assigned production roles and continue their design work by applying their skills to a realized performance.

Grades: 12
Prerequisite: Advanced Theatre Production 1 and teacher approval
Fee: $25 co-curricular fee, $50 lab fee
Credit: 1 credit, 2 semesters
Course may be repeated for elective credit.
* This is a JTED class

Science ~ Agriscience Pathway

Biology: Environmental
Chemistry: Environmental
Environmental Science
AP Environmental Science

Biology: Environmental (Agriscience) **#4004**

Environmental Biology is an inquiry-based laboratory course that incorporates aspects of inquiry, cooperative learning and independent research while focusing on essential real-world concepts and environmental issues. A diverse range of topics will be covered including cellular biology, genetics, evolution, and ecology, all through an environmental perspective. Students will be engaged in activities that promote analytical thinking, scientific inquiry, and development of higher-level cognitive skills. The course will make use of sophisticated laboratory equipment, technological resources, and media equipment to enhance the inquiry process and heighten students' awareness of community and global issues. The course will emphasize the development of organization, communication, and study skills, but does require some independence and self-directed learning.

Grade: 9

Prerequisite: None

Recommendation: For students who comprehend scientific concepts with little difficulty and demonstrate some independence and self-direction in their learning. Students who are interested in environmental issues and renewable natural resource sciences.

Course fulfills the CFHS biology graduation requirement.

Credit: 1 credit, 2 semesters

* This is a JTED class

Chemistry: Environmental (Agriscience) **#4021**

Environmental Chemistry is an inquiry-based laboratory course that focuses on essential real world concepts and environmental issues. Students will explore concepts related to the environment, natural renewable resources, the structure of matter, molar relationships, gas laws, chemical reactions, qualitative analysis, oxidation-reduction, and periodic law. Hands-on laboratory experimentation enhances class lectures. Research-based projects will heighten students' awareness of community and global issues and involve them in thinking and problem-solving activities.

Grades: 10

Prerequisite: Biology

Credit: 1 credit, 2 semesters

Course fulfills the CFHS chemistry graduation requirement.

* This is a JTED class

Environmental Science (Agriscience) **#4450**

Environmental Science is an inquiry, laboratory, and career-based course that studies local and global environments through the physics topics of mechanics, wave phenomena, energy and matter interactions, electricity, and magnetism. Other topics include physical geology, inter-relationship of plants and animals, scientific field sampling methods and equipment, and computer modeling of natural resource systems. The 21st Century skills of scientific inquiry, systems thinking, and technological innovations are integrated throughout the course. In depth investigations of natural resource systems and career opportunities are supported through real world authentic experiences.

Grades: 11–12

Prerequisites: Chemistry credit

Credit: 1 credit, 2 semesters

Course fulfills the CFHS third year science credit requirement.

* This is a JTED class

AP Environmental Science (Agriscience) **#4546**

Advanced Placement Environmental Science is designed to be the equivalent of a one-semester introductory college course in environmental science. The course provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will identify and analyze environmental problems both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. This course prepares students to undertake more advanced study of topics in environmental science and prepares them for the Advanced Placement Environmental Science exam. ***Note: Students who take an AP class are expected to take the AP exam.***

Grades: 11-12

Prerequisites: "B" in H Biology (or "A" in Biology) and "B" in H Chemistry (or "A" in Chemistry), and current teacher recommendation

Credit: 1 credit, 2 semesters

* This is a JTED class

Science ~ Bioscience Pathway

Chemistry: Forensics
Anatomy & Physiology and/or AP Biology

Chemistry: Forensics (Bioscience) **#4111**

Chemistry: Forensics is an inquiry-based laboratory course that emphasizes essential concepts with real world applications and forensic science as the over-aching theme. Students will explore topics such as structure of matter, molar relationships, gas laws, chemical reactions, qualitative analysis, acid/base reactions, and periodicity. Laboratory experiments are enhanced by skills, such as scientific inquiry, data analysis, and critical thinking. A combination of guided instruction and collaborative learning will enrich the learning experience of students with varied learning styles.

Grade: 10
Prerequisite: Biology
Credit: 1 credit, 2 semesters
Course fulfills the CFHS chemistry graduation requirement.
* This is a JTED class

Anatomy & Physiology (Bioscience) **#4540**

Anatomy & Physiology is a hands-on inquiry-based laboratory course that helps students discover the wonders of the human body. The structures and functions of the major body systems will be explored from a sub-cellular level to a multi-cellular organism level. Students will gain extensive knowledge of the human body through lecture, research and reading, and laboratory investigations, including two major dissections. This course introduces techniques used to investigate questions in life science such as image processing, molecular modeling, serology, pathology, anthropology, and microbiology, and applies to any student interested in discovering the inner workings of the human organism.

Grades: 10-12
Prerequisites: Biology and Chemistry (or concurrent enrollment in chemistry)
Credit: 1 credit, 2 semesters
* This is a JTED class

AP Biology **#4544**

Advanced Placement Biology is the equivalent of an introductory college biology course usually taken by biology majors during their first year in college. AP Biology helps students develop a conceptual framework for the biological sciences based on four themes and gain an appreciation of science as a process. A wide range of topics will be covered including biochemistry and structure of cells, molecular basis of heredity, evolution of life, anatomy and physiology, and ecology. There are twelve mandatory laboratory experiences. Students will use college-level textbooks and references, as well as be expected to dedicate approximately 3 to 5 hours a week and the effort required of a college course. AP Biology is designed to prepare students to take the Advanced Placement Biology exam.

Note: Students who take an AP class are expected to take the AP exam.
Grades: 11-12
Prerequisites: "B" in H Biology (or "A" in Biology), and "B" in H Chemistry (or "A" in Chemistry)
Recommendation: Anatomy & Physiology as prior or concurrent course
Credit: 1 credit, 2 semesters
* This is a JTED class

Science ~ Engineering Pathway

Introduction to Engineering Design
Principles of Engineering
Digital Electronics
Engineering Design and Development

Introduction to Engineering Design **#4602**

Engineering Design introduces aspects of problem solving, logic and relationships. This course emphasizes problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software. Topics explored include various technology systems, manufacturing processes, and how technological advances affect society. Students are introduced to the scope, rigor, and discipline of engineering and encouraged to integrate math and science technologies into engineering problem solving processes. (Credit through Pima Community College is available – see instructor).

Grades: 9-12
Prerequisite: None
Credit: 1 credit, 2 semesters
* This is a JTED class

Digital Electronics **#4603**

Digital Electronics examines the logic applied to electronic circuits and devices in conjunction with biotechnical engineering problems. Testing and designing digital circuitry with computer simulation software will introduce students to how circuits and devices are constructed. Relevant projects in the area of engineering enable students to experience the logic, rigor, and discipline of integrating math and science skills into engineering problems. Activities are designed to help students synthesize and construct knowledge as applied to solve and resolve problems within the scope of engineering.

Grades: 10-12
Prerequisite: Introduction to Engineering Design
Credit: 1 credit, 2 semesters
* This is a JTED class

Principles of Engineering **#4604**

Principles of Engineering is a course designed to integrate math and science skills into engineering/engineering technology. Students will gain an understanding of the intricacies associated with technology systems and engineering problem solving. Students will learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people and solve real world problems. Students will engage in hands-on, real-world projects, to gain an appreciation for social and political consequences of technological change. This course emphasizes the relevancy of math and science skills.

Grades: 10-12
Prerequisite: Introduction to Engineering Design
Credit: 1 credit, 2 semesters
* This is a JTED class

#4605

Engineering Design and Development / UA Engineering 102

Engineering Design and Development is a research course that offers an opportunity for advanced students to research, design, and construct solutions to open-ended engineering problems. Students will work in research teams to collect and analyze data relevant to their project. In an effort to develop additional workplace skills, community mentors will be provided for each

team to guide their problem-solving process. Progress reports, data analysis, and a final written report will be presented. This course is designed for the advanced student planning a career in engineering. (Interested/Eligible students may earn credit for UA Engineering 102*. See instructor for information.)
Grade: 12
Prerequisite: Digital Electronics and Principles of Engineering, or Teacher approval
Grade: 12
Prerequisite: Digital Electronics and Principles of Engineering, or teacher approval
Co-requisite for UA Engineering 102: Precalculus or AP Calculus AB or BC
Credit: 1 credit, 2 semesters
* This is a JTED class

Career Exploration and Technology (CET)

Career Exploration and Technology (CET) **#7500**
CET is a one-year course that provides students with career exploration and skills needed for success in the 21st century. The course will focus on interactive communication, problem solving, decision-making, critical thinking skills, ethics, and the legal responsibilities associated with school and the work setting. Digital-Age literacy skills will be demonstrated through computer-based activities and knowledge of technological and organizational systems. Units will include computer basics, word processing, spreadsheets, desktop publishing, computer simulations, video production, and media presentations. Students will use computer applications and the Internet for assignments and projects. The course will provide employability, career, and post-secondary transition skills.
Grades 9-10
Prerequisite: None
Credit: 1 credit, 2 semesters