

Coal Ridge High School

2022/2023

Curriculum Guide



CRHS 2022/2023 CURRICULUM GUIDE

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GARFIELD RE-2 MISSION STATEMENT

Our mission is to provide engaging educational experiences in a safe environment for students and staff, which result in exemplary learning and teaching.

COAL RIDGE HIGH SCHOOL MISSION STATEMENT

Reading, Writing, Communicating - Every Student, Every Day

GARFIELD RE-2 BOARD OF EDUCATION

District E - New Castle Tony May Vice President tmay@garfieldre2.net	District B - Rifle Jason Shoup jshoup@garfieldre2.net	District C - Rifle Christina Maness cmaness@garfieldre2.net	District A - Rifle Britton Fletchall bfletchall@garfieldre2.net	District D - Silt/New Castle Meryia Stickler President mstickler@garfieldre2.net
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GARFIELD RE-2 DISTRICT ADMINISTRATION

Superintendent: Heather Grumley

Assistant Superintendent: Lisa Pierce

Director of Human Resources: Kayla Swindell

Director of Curriculum and Assessment: Julie Knowles

Director of Communication: Theresa Hamilton

COAL RIDGE HIGH SCHOOL ADMINISTRATIVE TEAM

Principal; Dr. Jackie Davis

Assistant Principal: Michael Mikalakis

Athletic/Activities Director/Dean of Students: Ben Kirk

School Counselor (11/12): Amy Largent

School Counselor (9/10): Michelle Zinser

GRADUATION REQUIREMENTS

In pursuit of its mission to ensure that all students reach their learning potential, the Board of Education has established the following graduation requirements:

CREDITS/DIPLOMA:

A total of 26 credits are required to graduate. Successful completion of a course means that the student completed all coursework and earned a passing grade.

The following criteria shall earn a student a high school diploma:

- Achievement in content standards as demonstrated by mastery of the curriculum
- Completion of 26 credits in grades nine through twelve in the prescribed categories listed below.
- Completion of the requirements and goals as listed on a student's Individual Education Plan (IEP), which may include modified content standards.
- Demonstrate academic proficiencies in English and Math from the Menu of College and Career Readiness options listed below.

GARFIELD RE-2 SCHOOL DISTRICT /CRHS REQUIREMENTS:

English	4.0
Mathematics	3.0
Science	3.0
Social Science	3.0
Physical Ed	1.0
Health	0.5
Technology	0.5
World Language	1.0
Electives	10.0
Total Credits:	26.0

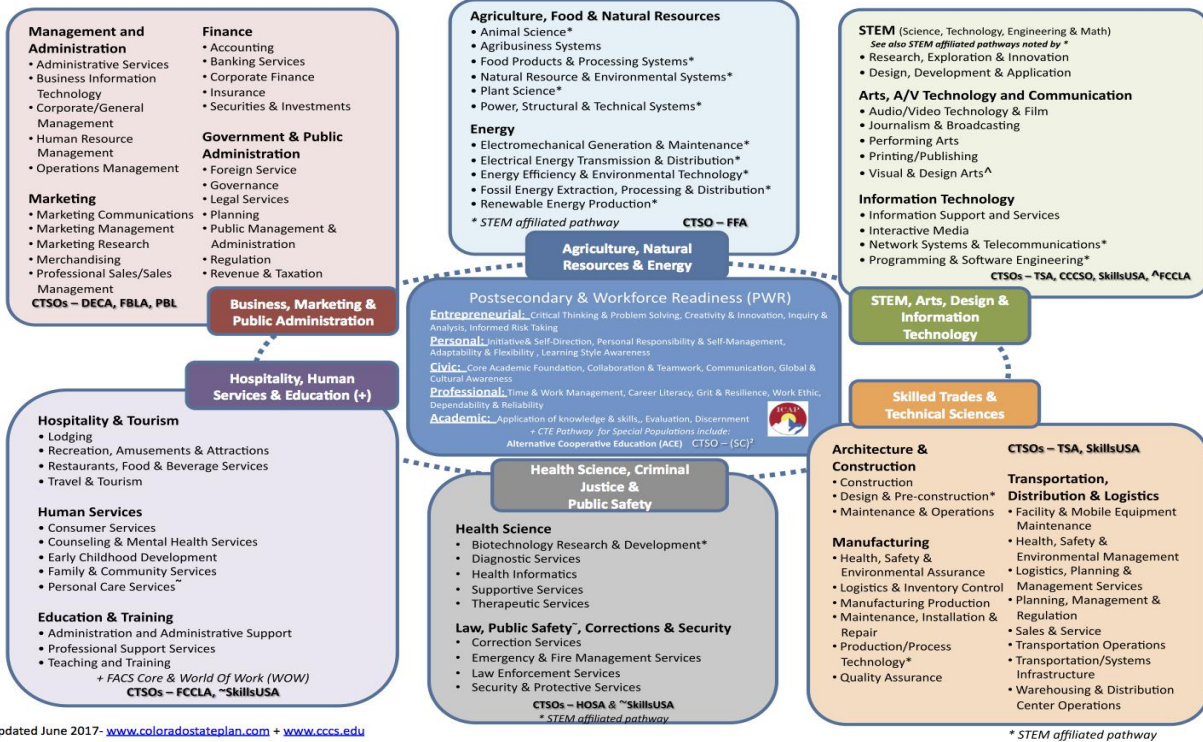
Colorado Graduation Guidelines

[click here](#) → [Menu of College and Career-Ready Demonstrations](#)

Students must demonstrate college **or** career readiness in **Reading, Writing, and Communicating** and **Math** based on at least one measure listed below.

<u>Menu of Options</u>	English	Math
ACCUPLACER	CLASSIC - 62 for Reading Comprehension or 70 for Sentence Skills NEXT GEN - 241 on Reading or 236 on Writing	CLASSIC - 61 on Elementary Algebra NEXT GEN - 255 on Arithmetic (AR) or 230 on Quantitative Reasoning, Algebra, and Statistics (QAS)
ACT	18	19
ACT WorkKeys - National Career Readiness Certificate	Bronze or higher	Bronze or higher
Advanced Placement (AP)	2	2
ASVAB	31 on the AFQT	31 on the AFQT
Concurrent Enrollment	Passing grade per district and higher education policy	Passing grade per district and higher education policy
District Capstone	Individualized	Individualized
Industry Certificate	Individualized	Individualized
International Baccalaureate (IB)	4	4
SAT	470	500
Collaboratively-developed, standards-based performance assessment	State-wide scoring criteria	State-wide scoring criteria

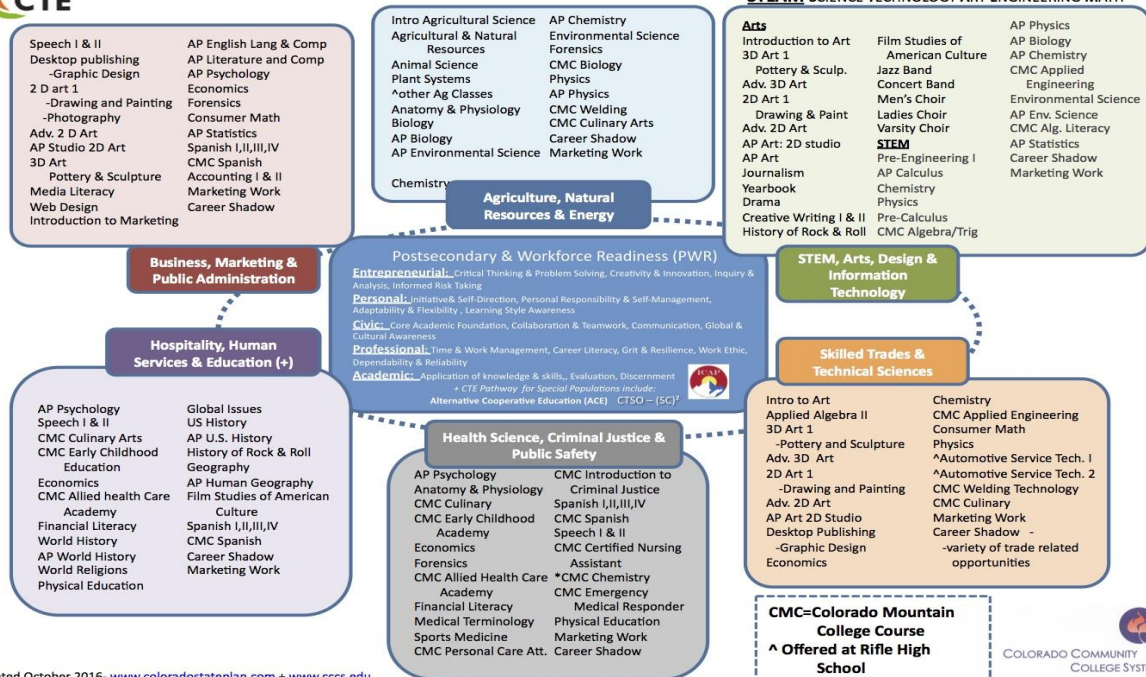
Colorado Career Cluster Model



Updated June 2017- www.coloradostateplan.com + www.cccs.edu

*STEM affiliated pathway

Colorado Career Cluster Model Coal Ridge HS ICAP Electives



Updated October 2016- www.coloradostateplan.com + www.cccs.edu

COURSE ADD/DROP POLICY

Excellent schools strive to act in the best interests of their students. Course changes occur through a collaborative process involving students, parents, school counselors, and administration. If you have course additions/subtractions, then you must follow the process. The first step is to discuss the course with your parents and agree that changing is in your best interest. The second step is setting an appointment with your school counselor to discuss options available for making this change. Not all changes can be accommodated because of scheduling conflicts, class sizes, or a change in course offerings. If you, your family, and the school counselor agree to the change, the administration may approve the paperwork. If you and your counselor cannot reach agreement, the administration will work collaboratively with all parties to attempt to reach a mutually agreeable result.

A student may attempt to add/drop a course within the first three (3) weeks of the beginning of the semester. The student must take the responsibility to meet the steps outlined above before any changes will be made. Transfer students, if enrolled in a school during the time period leading up to the transfer, will be allowed to enter the classes at CRHS without prejudice. Students not enrolled in school during the time period leading up to the transfer have missed too many days in the semester to receive credit for courses. Students in this situation can be enrolled; they will audit courses and receive a No Credit (NC) on their high school transcript.

Should a student decide to drop a class, which has met more than three weeks in the semester, they will receive a Withdraw Pass (WP) or a Withdraw Fail (WF), which will be recorded on the student's transcript, ***and the student will receive no credit for the class.*** Students may not withdraw from any classes in the last four weeks of the semester.

ACADEMIC LETTER REQUIREMENTS

In order to earn an academic letter a student must maintain a 3.5 grade point average in each semester, and have taken four solids (English, Math, Science, Social Science, AP courses, CMC) each semester during the school year.

VALEDICTORIAN/SALUTATORIAN

In the interest of encouraging and recognizing outstanding academic achievement, a valedictorian and salutatorian will be selected for each high school graduating class. The valedictorian and salutatorian will be selected according to the following: The valedictorian will be the student with the highest grade point average as computed at the end of eight semesters of high school work and a recipient of a Coal Ridge High School Silver Titan in academics. The salutatorian will be the student with the second highest grade point average as computed at the end of eight semesters of high school work and a recipient of a Coal Ridge High School Silver Titan in academics. A student earning one of these distinctions will have their name memorialized in the CRHS Academic Hall of Fame!

ROADMAP TO GRADUATION: SECTION 1

At Coal Ridge High School we offer learning opportunities that meet the needs of all students. For those seeking to complete their coursework through the requirements set forth by the State of Colorado, we have our “General” roadmap to graduation. For students seeking to complete their coursework through the most rigorous courses available, we have our “Advanced” roadmap. The greatness of our system is that you can bounce between the general and rigorous roadmaps to meet your academic needs. Regardless of the courses that you select, high expectations for learning exist. We are confident that a graduate of Coal Ridge High School will leave prepared to meet the challenges of college and/or career.

GUIDE:

AP: Advanced Placement (college-level coursework). AP courses within the core subject areas (English/Language Arts, Mathematics, Science, Social Studies) are grade-weighted on a 5-point scale. AP courses move faster, require students to complete more work, and go into more depth than their general pathway counter-parts. In order to potentially receive college credit exemption from an AP course, the student must take and pass the AP exam with a score of 3 or higher. AP credits may transfer around the country, and in some cases, the world. All students are required to take the AP exam.

CMC: Colorado Mountain College (college-level coursework). CMC courses within the core subject areas (English/Language Arts, Mathematics, Science, Social Studies, and World Language) are grade-weighted on a 5-point scale. CMC courses move faster, require students to complete more work, and go into more depth than their general pathway counter-parts. Students who successfully complete a CMC course earn both high school and college credit. Some CMC college credits are guaranteed to transfer to universities in the state of Colorado, but not all transfer out-of-state. It is recommended that students, whenever applicable, take the AP exam connected to the CMC course to improve the chance of out-of-state credit transferability. Many CMC courses require students to pass a placement exam (Accuplacer) before enrolling in the course.

CREDITS: When students successfully complete a course at CRHS, they earn credit toward graduation. A semester long class earns .5 or ½ of a credit and a yearlong class earns a 1.0 or one full credit.

PREREQUISITE: Some of our course offerings have knowledge and skill building blocks. If there are courses listed under prerequisite, that means you must take those prerequisite courses prior to being accepted into a class.

GRADE-LEVEL: Some courses are only offered to students at a particular grade-level or grade-levels.

ROADMAP SECTION 2

In Roadmap Section 2 you will find details for “Foundations”, “General” and “Advanced” graduation requirements. Remember, the general roadmap is the standard set by the State of Colorado, which is the minimum standard for all Colorado graduates. The advanced roadmap is for highly motivated students seeking to prepare and challenge themselves for the rigor of college coursework.

ENGLISH / LANGUAGE ARTS:

GENERAL ROADMAP

09TH GRADE ENGLISH
10TH GRADE ENGLISH
11TH AMERICAN LITERATURE
12TH SENIOR ENGLISH

ADVANCED ROADMAP

HONORS 9TH GRADE ENGLISH
HONORS 10TH GRADE ENGLISH
AP ENGLISH LANGUAGE AND COMPOSITION
AP ENGLISH LITERATURE AND COMPOSITION

MATHEMATICS:

FOUNDATIONS ROADMAP

09TH FOUNDATIONS TO ALGEBRA
10TH ALGEBRA/GEOMETRY
11TH GEOMETRY/APPLIED ALGEBRA II
12TH MENU

GENERAL ROADMAP

09TH ALGEBRA
10TH GEOMETRY
11TH ALGEBRA II
12TH MENU

ADVANCED ROADMAP

09TH GEOMETRY
10TH ALGEBRA II
11TH MENU
12TH MENU

MENU CHOICES:

APPLIED ALGEBRA II
ALGEBRA II
PRE CALCULUS
CMC ALGEBRA/TRIG
AP CALCULUS
AP STATISTICS
MATH SEMINAR
AP PHYSICS
ECONOMICS/PFL
CONSUMER MATH

SCIENCE:

GENERAL ROADMAP

09TH PHYSICAL SCIENCE
10TH BIOLOGY
11TH CHEMISTRY
12th MENU

ADVANCED ROADMAP

09TH BIOLOGY
10TH CHEMISTRY
11TH PHYSICS
12TH MENU

SOCIAL STUDIES:

GENERAL ROADMAP

09TH GOVERNMENT
10TH WORLD HISTORY
11TH US HISTORY
12TH MENU

ADVANCED ROADMAP

09TH AP HUMAN GEOGRAPHY
10TH AP WORLD HISTORY
11TH CMC US HISTORY
12TH GOVERNMENT/MENU

MENU CHOICES:

ANATOMY AND PHYSIOLOGY
ENVIRONMENTAL SCIENCE
ASTRONOMY
PHYSICS
FORENSIC SCIENCE
AP CHEMISTRY
AP PSYCHOLOGY
AP PHYSICS 1/2
CMC BIOLOGY

MENU CHOICES:

AP PSYCHOLOGY
CONSUMER ECONOMICS/PFL
FILMS STUDIES
HISTORY OF ROCK & ROLL

Remember, the general roadmap meets the minimum graduation requirements set by the State of Colorado. The advanced roadmap is for highly motivated students looking to challenge themselves with college-level coursework, earn college credit, and be graded on a 5-point scale versus a 4-point scale. We believe that every student at CRHS is capable of courses on the advanced track, but not all students choose that roadmap...and that's OK!

COURSE DESCRIPTIONS / PREREQUISITES

ENGLISH/LANGUAGE ARTS:

Freshman English:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 9th

Freshman English is aligned with the Colorado Academic Standards. This course introduces students to close and critical reading and responding to significant works (novels, short stories, essays, plays, and poetry) by a variety of authors. Students will be introduced to literary analysis and will be given many opportunities to discuss literature and apply writing skills. The course focuses on analyzing how language is used in significant, well-crafted works of fiction and nonfiction and evaluating and developing arguments with heightened attention to the connections between purpose, audience, and subject. Students will compose fluent, effective expository and persuasive writing through growth in organization, vocabulary, and grammatical conventions. In addition to essays, critical discussions, and oral presentations, students will complete a research paper.

Honors Freshman English:

Yearlong Course: 1.0 credit

Prerequisite: iReady test data will be used for placement

Grade: 9th

Honors Freshman English is aligned with the Colorado Academic Standards, and will serve as a vehicle to develop higher level thinking skills in the area of Language Arts. Students will review the fundamentals of grammar and vocabulary in connection with literature and writing. Intense reading and writing are a part of the major units of study, which include drama, poetry, nonfiction, fiction and the novel. Honors Freshman English is a more rigorous in depth course than Freshmen English, designed for the student who wants an extra challenge and is ready to accept significant responsibility for the learning process.

Freshman English: Jumpstart:

Yearlong Course: 1.0 credit

Prerequisite: iReady test data will be used for placement

Grade: 9th

Freshman English: Jumpstart provides instruction and support that will enable students to increase their reading and writing skills. This class will support students by focusing on the basics of writing in various forms: narratives, essays, poetry, summary, and research. In addition students will read a variety of texts that are first based on reading level and which gradually increase in difficulty. This course is taken concurrently with Freshman English.

Sophomore English:

Yearlong Course: 1.0 credit

Prerequisite: Freshman English

Grade: 10th

Sophomore English is aligned with the Colorado Academic Standards. It is a survey literature course that requires students to critically read works from a variety of genres (novels, essays, speeches, short stories, plays, etc), and time periods. Students will develop their writing skills by analyzing texts and supporting responses to thematic questions related to those texts.

Honors Sophomore English:

Yearlong Course: 1.0 credit

Prerequisite: Teacher approval

Grade: 10th

Honors Sophomore English is aligned with the Colorado Academic Standards. It is a survey literature course that requires students to critically read works from a variety of genres (novels, essays, speeches, short stories, plays, etc), and time periods. Students will develop their writing skills by analyzing texts and supporting responses to thematic questions related to those texts. Students will work collaboratively to analyze how different philosophies of human nature have influenced authors and refined literary arguments.

American Literature:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 11th

American Literature is aligned with the Colorado Academic Standards. Students will receive support to accelerate their skills in reading and writing. For example, they will distinguish between what is most and least important in a text, identify interrelationships between and among people, events, or ideas in written or non-print sources, and make accurate generalizations about people and events based on evidence presented in a text. The writing focus will be on strong sentence development, frequent single paragraph writing, and the multi-paragraph essays. Skills in grammar, mechanics, vocabulary, usage, and editing will be emphasized. This course will focus on the United States from its inception through the twentieth century incorporating American history, American literature, and current issues. Additionally, students in this class will prepare for the SAT test that is given 4th quarter.

Senior English:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 12th

Senior English is aligned with the Colorado Academic Standards. This class emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. Students will develop effective writing and speaking skills necessary for real-world and college preparation. Students will be required to write in a variety of genres, including the development of the following:

college/scholarship essays, persuasive projects, and business correspondence. This class also prepares students for the rigors of college level and real-world writing, focusing on literary analysis, composition, and rhetoric. Students will engage in close reading and analysis of novels, short stories, poetry, critical analysis, classic essays, and contemporary commentary. Students will hone in their skills in responding to a variety of texts through critical writing. Students will develop skills in time management, accountability, and organization through a choice project.

AP English Language and Composition:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Teacher approval

Grade: 11th – 12th

*The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. **All students are required to take the AP exam.***

AP English Literature and Composition:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Teacher approval

Grade: 11th – 12th

*The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. **All students are required to take the AP exam.***

COURSE DESCRIPTIONS / PREREQUISITES

MATHEMATICS

A graphing calculator is required for all math courses. Supported models are **TI-84** and **TI-84 Plus**. The **TI-84 Plus** are the graphing calculators the math department recommends, they are fast and very user-friendly. Contact a math teacher at Coal Ridge High School for more information.

Foundations to Algebra I:

Yearlong Course: 2.0 credit (1 credit of Math and 1 credit of Elective)

Prerequisite: iReady test data will be used for placement

Grade: 9th

Foundations to Algebra I lays a foundation for algebra concepts and the first semester of Algebra I topics. Foundational topics include developing an understanding of the structure of the real number system, becoming fluent in applying the four functions with integers, rational numbers and decimals, solving proportions, solving simple linear equations. Algebra I topics include graphing, solving systems of linear equations and exponential equations.

Algebra I:

Yearlong Course: 1.0 credit

Prerequisite: iReady test data will be used for placement

Grade: 9th – 10th

Algebra I will focus on developing fluency with solving linear equations, inequalities, and systems. These skills are extended to solving quadratic equations, exploring linear, quadratic, and exponential functions graphically, numerically, symbolically, and as sequences, and by using regression techniques to analyze the fit of models to distribution of data.

Geometry:

Yearlong Course: 1.0 credit

Prerequisite: Algebra I or iReady test data

Grade: 9th – 12th

Geometry will focus on establishing triangle congruence criteria using rigid motions and formal constructions and building a formal understanding of similarity based on dilations and proportional reasoning. It also helps students develop the concepts of formal proof, explore the properties of two- and three-dimensional objects, work within the rectangular coordinate system to verify geometric relationships and prove basic theorems about circles. Students also use the language of set theory to compute and interpret probabilities for compound events.

Algebra II:

Yearlong Course: 1.0 credit

Prerequisite: Algebra I, Geometry (C- or better in both classes)

Grade: 10th – 12th

Algebra II will focus on finding connections between multiple representations of functions, transformations of different function families, finding zeros of polynomials and connecting them to graphs and equations of polynomials, modeling periodic phenomena with trigonometry, and understanding the role of randomness and the normal distribution in making statistical conclusions.

Applied Algebra II:

Yearlong Course: 1.0 credit

Prerequisite: Foundations to Algebra I, Algebra I and Geometry

Grade: 10th – 12th

*Applied Algebra II teaches the **fundamentals** of finding connections between multiple representations of functions, transformations of different function families, finding zeros of polynomials and connecting them to graphs and equations of polynomials, modeling periodic phenomena with trigonometry, and understanding the role of randomness and the normal distribution in making statistical conclusions.*

Pre-Calculus:

Yearlong Course: 1.0 credit

Prerequisite: Algebra II

Grades: 11th – 12th

Pre-calculus addresses topics to include rates of change, vectors, logarithmic functions, polynomial and rational functions, trigonometric functions and identities, complex numbers, counting models, binomial distribution, and space geometry.

Consumer Math:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 12th

Consumer Math is an exploration of personal finance, which includes: income, savings, checking, credit, mortgages, recordkeeping, and investing. Other topics include sales, accounting, and financial management.

AP Statistics:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Algebra II

Grade: 11th – 12th

AP Statistics is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and

experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. **All students are required to take the AP exam.**

Math Seminar:

Yearlong Course: 1.0 credit

Prerequisite: Pre-Calculus **or** CMC Algebra Trigonometry

Grade: 12th

This course will be a capstone course for seniors that integrates math, science, and technology with reading, writing, group projects, and in-depth analysis. We will study a number of topics through a variety of methods: grouped investigations, readings, writing, lectures, presentations, and projects. Some of the topics covered will be: financial literacy, logic, probability, statistics, problem solving strategies, and service learning.

AP Calculus (AB):

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Pre-Calculus or CMC Trigonometry

Grade: 10th – 12th

*AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. **All students are required to take the AP exam.***

AP Calculus (BC):

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: AP Calculus AB

Grade: 11th – 12th

*AP Calculus BC is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. **All students are required to take the AP exam.***

CMC Algebra and Trigonometry:

Yearlong Course: 1.0 high school credit; 7 college credits; 5-pt scale

Prerequisite: Accuplacer

Grade: 10th – 12th

Algebra (4 college credits): Includes a review of intermediate algebra, equations and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear system, as well as a selection of topics from graphing of the conic sections, introduction to sequence and series permutations and combination, the binomial theorem, and the theory of equations.

Trigonometry (3 college credits): Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite to Calculus.

CMC Mathematics for the Liberal Arts (050):

Yearlong Course: 1.0 high school credit; 4 college credits; 5-pt scale

Prerequisite: Accuplacer

Grade: 12th

Mathematics for Liberal Arts highlights connections between mathematics and the society in which we live and is intended for liberal arts majors. Topics include set theory and logic, mathematics modeling, probability and statistics methods, and consumer mathematics.

CMC Algebraic Literacy (055):

Yearlong Course: 1.0 high school credit; 4 college credits; 5-pt scale

Prerequisite: Accuplacer

Grade: 12th

Algebraic Literacy develops algebraic skills necessary for manipulating expressions and solving equations. Topics in the course include radicals, complex numbers, polynomials, factoring, rational expressions, quadratic equations, absolute value equations, systems of linear equations in two variables, related applications, and linear inequalities.

COURSE DESCRIPTIONS / PREREQUISITES

SCIENCE

Physical Science:

Yearlong Course: 1.0 Credit

Prerequisites: iReady Test Data

Grades 9

Physical science is a laboratory-based course which will also include scientific investigations into relevant phenomena. Although the course will include basic mathematical applications, the focus is primarily on conceptual understanding. Topics include forces and motion, field forces, energy production and conversion, nuclear processes, electromagnetism and telecommunications, and the physics of stars and the universe.

Biology:

Yearlong Course: 1.0 Credit

Prerequisites: Physical Science or iReady Test Data

Grades 10-12

Biology focuses primarily on the living aspects of our world, but also makes connections between the living and nonliving world. Topics include interactions and energy in ecosystems, interactions between the atmosphere and the living world, natural selection and biodiversity, DNA, genetics, growth and development, and climate change.

Chemistry:

Yearlong Course: 1.0 Credit

Prerequisites: Biology and Algebra I

Grades 10-12

Chemistry is a laboratory-based course which makes connections between chemical processes and the role these processes play in the world around us. The topics covered are combustion, heat and energy in Earth systems, matter, chemical reactions, the chemistry of climate change, and the dynamics of chemical reactions and ocean acidification.

Physics:

Yearlong Course: 1.0 Credit

Prerequisites: Chemistry and Algebra 1. Highly recommended completion of or concurrent enrollment in Geometry.

Grades 10-12

Physics is a laboratory-based course which will also include scientific investigations into relevant phenomena. The course will apply algebra to solve problems in physics and engineering. Topics include forces and motion, field forces (electromagnetic and gravitational), energy production and conversion, nuclear processes, electromagnetism and telecommunications, and the physics of stars and the universe.

AP Chemistry:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Completion of Algebra II, Biology, and Chemistry with a "B" average in all three

Grade: 10th – 12th

*AP Chemistry provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. Created by the AP Chemistry Development Committee, the course curriculum is compatible with many Chemistry courses in colleges and universities. **All students are required to take the AP exam.***

AP Physics 1

Yearlong Course: 1.0 Credit; 5-pt scale

Prerequisites: Geometry and Chemistry. Concurrent enrollment in Algebra 2 is recommended. Completion of physics is highly recommended, exceptions can be made with counselor and teacher approval.

Grades: 11th - 12th

*AP Physics 1 is an algebra-based, equivalent to physics 1 in college. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion. You'll do hands-on and inquiry-based in-class activities and laboratory work to investigate phenomena. **All students are required to take the AP exam.***

CMC Biology 111 and 112:

Yearlong Course: 1.0 high school credit; 10 college credits; 5-pt scale

Prerequisite: Accuplacer

Grade: 10th – 12th

Biology 111 (5 college credits): Examines the fundamental molecular, cellular, and genetic principles characterizing plants and animals. Includes cell structure and function, and the metabolic processes of respiration and photosynthesis, as well as cell reproduction and basic concepts of heredity. The course includes laboratory experience.

Biology 112 (5 college credits): Examines the fundamental principles of ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

Anatomy and Physiology:

Yearlong Course: 1.0 credit

Prerequisite: Biology

Grade: 10th – 12th

Anatomy and Physiology includes a yearlong program of intense human anatomy and physiology studies. The areas covered include: medical terminology, basic chemistry, cell and tissue structure, and the 11 systems of the human body. Laboratory work is required, including a 6 – 8 week comparative anatomy

dissection lab using a cat.

Environmental Science:

Yearlong Course: 1.0 credit

Prerequisite: Physical Science or Biology

Grade: 11th – 12th

Environmental Science surveys key topic areas including the application of scientific process to environmental analysis; ecology; energy flow; ecological structures; earth systems; and atmospheric, land, and water science. Topics also include the management of natural resources and analysis of private and governmental decisions involving the environment.

Astronomy:

Yearlong Course: 1.0 credit

Prerequisite: Algebra 1, Physical Science or Biology

Grade: 11th – 12th

This course will begin with a historical overview of the ancient origins of science. We will then examine our solar system, stars, galaxies and the universe as a whole as well as the physical laws that govern it all. We will wrap up the course with a look at space exploration, colonization and the potential for extraterrestrial life.

Forensic Science:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 10th – 12th

Forensic scientists use scientific principles and laboratory/field methodology to solve problems. During first semester, students will assume crime scene investigator and medical examiner roles to collect and evaluate evidence in a problem-solving environment. Topics include DNA technology and uses, toxicology, anthropology, entomology, evidence law, criminalities, and career opportunities.

COURSE DESCRIPTIONS / PREREQUISITES

SOCIAL STUDIES

Government: (.5 credit of government is a graduation requirement)

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Government will give students the opportunity to explore the government of the United States at the local, state, and national levels. Emphasis will be placed on the political system and processes, as well as the branches of government, the Constitution, political participation, and citizenship. This course is based on Colorado State Standards.

World Geography:

Semester Course: .5 credit

Prerequisite: None

Grade: 9th

Elective

World Geography will allow students to examine physical and human characteristics of various regions, nationally and internationally. The course is comprised of four units of study, approximately one quarter each. "Thinking Like a Geographer" emphasizes map skills and spatial understanding. "Who's Earth is it Anyway?" focuses on sustainability. "Are We There Yet" investigates movement and migration patterns. "Interdependence: Globalization" examines global relationships.

AP Human Geography:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Teacher approval and/or iReady test data

Grade: 9th

*AP Human Geography is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). **All students are required to take the AP exam.***

World History:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 10th

World History is comprised of four units of study, each approximately one quarter in length. "How We Rule" focuses on power structures. "How We Relate" emphasizes historical interactions. "How We Revolutionize" investigates change throughout history. "How We Reach Out" examines forces of globalization. Historical skills, such as analyzing, evaluating, comparing and contrasting, note-taking, research, and document analysis will be incorporated into each content unit.

AP World History:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Teacher approval

Grade: 10th

*AP World History focuses on developing students' understanding of world history from approximately 8000 B.C.E. to the present. The course has students investigate the content of world history for significant events, individuals, developments, and processes in six historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures) that students explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania. **All students are required to take the AP exam.***

US History:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 11th

US History considers United States History from the Reconstruction to the present. The first semester will explore the events through World War I, while the second will focus on modern American History. With every unit, emphasis will be placed on the causes and effects of events and broad concepts. Students will be expected to understand why people and events influenced history rather than simply memorizing facts. This course is based on the Colorado State Standards.

CMC History 121 and 122:

Yearlong Course: 1.0 high school credit; 6 college credits; 5-pt scale

Prerequisite: Accuplacer and/or teacher approval

Grade: 11th – 12th

History 121 (3 college credits): *Explores events, trends, peoples, groups, cultures, ideas, and institutions in North America and United States history, including the multiple perspectives of gender, class, and ethnicity, between the period when Native American Indians were the sole inhabitants of North America, and the American Civil War. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline.*

History 122 (3 college credits): *Explores events, trends, peoples, groups, cultures, ideas, and institutions in United States History, including the multiple perspectives of gender, class, and ethnicity, between the period*

of the American Civil War and the present. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline.

AP US Government and Politics: (.5 credit of government is a graduation requirement)

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Teacher approval

Grade: 12th

*AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning assess causes and consequences of political events, and interpret data to develop evidence-based arguments. **All students are required to take the AP exam.***

AP Psychology:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Teacher approval

Grade: 12th

Elective

*AP Psychology introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. **All students are required to take the AP exam.***

Film Studies of American Culture:

Semester Course: .5 credit

Prerequisite: Parent permission

Grade: 12th

Elective

Film Studies of American Culture explores the use of cinema as a modern form of art and as a reflection of society's values and culture. In addition to grasping the cultural fabric of America, students will investigate the entertainment value and influence over viewers. Individual films and various genres will be viewed for instruction in the class with the purpose of students learning to analyze, critique, and create connections to society, culture, and history. Students will give written responses to each film and genre. This class is offered for seniors only because of the adult content.

History of Rock and Roll (pre 1955-1980):

Semester Course: .5 credit

Prerequisite: None

Grade Level: 11th-12th

Elective

*This course will examine the history of rock and roll from the **Roots of Rock and Roll prior to 1955 to Punk**. This course will closely examine the social context in which these songs were written. We will examine the changing technology that allowed rock and roll to diffuse from key regions in the U.S. to the rest of the world, especially the U.K.*

History of Rock and Roll (post 1980):

Semester Course: .5 credit

Prerequisite: None

Grade Level: 11th-12th

Elective

*This course will examine the history of rock and roll with the rising popularity of **Disco and Heavy Metal** in the 1980s to modern Rock and Roll and Rap. This course will closely examine the social context in which these songs were written and performed.*

Consumer Economics/Personal Finance:

Yearlong Course: 1.0 credit

Prerequisite: None

Grades: 11th – 12th

Elective

Consumer Economics/Personal Finance provides students with an understanding of the concepts and principles involved in managing one's personal finances. This course emphasizes lifespan goal-setting, individual and family decision-making, and consumer rights as well as topics that are commonly associated with personal finance so that one can become a financially responsible consumer. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection.

COURSE DESCRIPTIONS / PREREQUISITES

AP Capstone™ is a diploma program from the College Board based on two yearlong AP courses: AP Seminar and AP Research.

Rather than teaching subject-specific content, these courses develop students' skills in research, analysis, evidence-based arguments, collaboration, writing, and presenting. Students who complete the two-year program can earn one of two different AP Capstone awards, which are valued by colleges across the United States and around the world. [AP CAPSTONE Description](#)

AP Seminar: (REQUIRED COURSE BEFORE AP RESEARCH)

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Teacher approval

Grade: 11th – 12th

*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; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing 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. **All students are required to take the AP exam.***

AP Research:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: AP Seminar and teacher approval

Grade: 12th

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of 4000–5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

COURSE DESCRIPTIONS / PREREQUISITES

ART

Art Exploration (formerly Intro to Art)

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Elective

Do you have an interest in art but you are not sure exactly what you like to make? Take Art Exploration and try a variety of 2D and 3D mediums and techniques. This class teaches skills in the following areas: drawing, photography, painting, sculpture, clay, art history, and careers in art. It is a great way to explore many artmaking techniques to discover your interests.

Drawing:

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Elective

Drawing skills will be developed using a variety of materials and subject matter. Composition, principles of value, contrast, emphasis, rhythm, perspective, and proportion will be emphasized. Media covered will include graphite, charcoal, ink, conte, chalk, and pastels. Students will be introduced to a variety of artists, both historical and contemporary, to develop an understanding and appreciation of various styles, techniques, and processes.

Drawing II:

Semester Course: .5 credit

Prerequisite: Drawing

Grade: 9th – 12th

Elective

Advanced drawing skills will be explored using a variety of materials and subject matter. Composition, principles of value, contrast, emphasis, perspective, and proportion will be emphasized. Students will begin developing a portfolio. Media covered will include digital drawing, graphite, charcoal, ink, chalk, colored pencils and pastels. Students will be introduced to a variety of artists, both historical and contemporary, to develop an understanding and appreciation of various styles, techniques, and processes.

Mixed Media:

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Elective

This is a class for those who love to make works of art to be worn or used at home. We will explore many different mediums including, but not limited to, jewelry making, candle making, cross stitching, embroidery, leather working, mosaic, fabric and silk batik, weaving, holiday decorating, and maybe even cookie & cake decorating. Projects may vary depending on the interests of the class. Students will be introduced to a variety of artists, both historical and contemporary, to develop an understanding and appreciation of various art making processes.

Painting:

Semester Course: .5 credit

Prerequisite: **Drawing strongly recommended**

Grade: 9th – 12th

Elective

Students will learn techniques and develop skills in watercolor and acrylic painting. Students will be introduced to a variety of painters, both historical and contemporary, to develop an understanding and appreciation of various styles, techniques, and processes.

Painting II

Semester Course: .5 credit

Prerequisite: **Drawing , Painting**

Grade: 9th-12th

Elective

Students will learn techniques and develop skills in watercolor and acrylic painting. Students will explore more advanced painting techniques and begin to build a portfolio in painting. Students will be introduced to a variety of painters, both historical and contemporary, to develop an understanding and appreciation of various styles, techniques, and processes.

Sculpture:

Semester Course: .5 credit

Prerequisite: none

Grade: 9th – 12th

Elective

This course is a study of form and structure as they relate to three-dimensional artwork. Modeling, carving, and construction will be encouraged in the various projects. Some mediums for sculptural process will include clay, stone, wire, paper, found, objects, foam, and other materials. Students will be introduced to a variety of sculptors, both historical and contemporary, to develop an understanding and appreciation of various art making processes.

Ceramics:

Semester Course: .5 credit

Prerequisite: **Sculpture strongly recommended**

Grade: 9th – 12th

Elective

This course introduces the student to the fundamentals of clay construction. The projects will incorporate different hand building techniques as well as an introduction to the potter's wheel. Clay will be the primary medium for artistic expression. Students will be introduced to a variety of ceramic artists, both historical and contemporary, to develop an understanding and appreciation of various art making processes.

Ceramics II:

Semester Course: .5 credit

Prerequisite: **Ceramics**

Grade: 9th-12th

Elective

*This course dives in past the fundamentals of clay construction, taking knowledge gained in **Ceramics I** and pushing it to the next level . The projects will incorporate different hand building techniques as well as wheel thrown pieces from the potter's wheel. Students will be introduced to a variety of ceramic artists, both historical and contemporary, to develop an understanding and appreciation of various art making processes.*

Digital Photography:

Semester Course: .5 credit

Prerequisite: none

Grade: 9th – 12th

Elective

Requirement: We will be using Digital SLR cameras in this class. You may use your own or rent one from the school.

This class will introduce students to the basics of photography and working with digital images. We will focus on developing a strong composition, using photoshop to edit images, and printing images. Students will learn how to prepare their images for exhibition. We will also explore career options available to digital photographers. Students will be introduced to a variety of photographers, both historical and contemporary, to develop an understanding and appreciation of various art making processes.

Graphic Design:

Semester Course: .5 credit

Prerequisite: none

Grade: 9th – 12th

Elective

Graphic Design explores the elements and principles of art and design through new technology. Students wholly use digital platforms to model 3-dimensional forms and create 2-dimensional layouts, designs, and

drawings. They will use tools that include a graphics tablet, a design program used in a range of professional careers, and an ipad program that provides expressive drawing/ concept sketching. The goal of the class is to introduce students to new technology and professional art and design programs. We will also explore the expanding career options available to digital artists. Students will be introduced to a variety of photographers, both historical and contemporary, to develop an understanding and appreciation of various art making processes.

AP Studio Art:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: **4 + art classes, Teacher approval**

Grade: 11th – 12th

Elective

*AP Studio Art Program consists of three portfolio exams — 2-D Design, 3-D Design, and Drawing — corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality and artistic investigation, and breadth of work. The 2-D Design portfolio addresses two-dimensional design issues and involves decision making about how to use the elements and principles of art in an integrative way. Students' portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. The AP Studio Art focuses on practice, experimentation, revision of students' materials, processes, and ideas. Students will end the year with a body of artwork that was guided by inquiry questions of their choice. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses. This is a rigorous yet extremely rewarding class. **All students are required to submit an AP Portfolio.***

COURSE DESCRIPTIONS / PREREQUISITES

TECHNOLOGY (.5 credit of technology is a graduation requirement):

Computer Programming: (.5 credit of technology is a graduation requirement)

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Computer Programming is a basic coding class that will explore programming languages starting with foundational Blockly programs before moving on to the Pyret and Python coding languages. Engagement will also move beyond the screen as we code interactive robots and engineer systems of productivity. Final products of this semester will include self-programmed video games and educational interactives.

Media Production: (.5 credit of technology is a graduation requirement)

Yearlong Course: 1.0 credit

Prerequisite: Teacher approval

Grade: 9th – 12th

Media Production focuses on producing viable communication end products. We create videos, ads, radio spots, websites, announcements, and more. If you have a skill set in iMovie, Audacity, Photoshop, Doodly, HitFilm Express, etc., and enjoy the design process, perhaps this class is for you. Or do you want to learn the intricacies of these production programs and build your skill set? Come work with us as we learn together about what it takes to not just create, but to have students actually interested in what you've made.

Intro to CAD Design and 3D Printing:

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

CAD design and 3D printing will introduce students to the critical aspects of the engineering design process, creative and efficient design, slicing, and production while touching on aspects of marketing and the increasing world of limiting supply with instant demand.

Advanced CAD, 3D Design, & Additive Manufacturing

Semester course: .5 credit

Prerequisite: Intro to CAD/3D Printing

Grade: 11th, 12th

Students will develop an advanced understanding of Computer-Aided Design and the Engineering Design Process via a small class environment that enables students to design, develop, print, and test practical and/or technical objects, preparing students for a job market that is high on this skill set.

Robotics 1:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 9th – 12th

Elective

Robotics introduces the students to basic programming as well as problem solving strategies. This course will involve students in the development, building and programming of a LEGO Mindstorm robot. Students will work hands-on in teams to design, build, program and document their progress.

Robotics 2:

Yearlong Course: 1.0 credit

Prerequisite: Robotics 1

Grade: 10th – 12th

Elective

Students will build and program a robot according to the FIRST® Tech Challenge. Students will work together to apply real-world math and science concepts and develop problem-solving, organizational, and team-building skills. Students must be able to work well with others to achieve a common goal. Additional time will focus on the engineering process, principles of robotics, and community outreach.

COURSE DESCRIPTIONS / PREREQUISITES

WORLD LANGUAGE (1.0 credit of WL is a graduation requirement)

General ROADMAP

09TH SPANISH 1
10TH SPANISH 2
11TH CMC SPANISH 111 & 112
12TH CMC SPANISH 211 & 212

Heritage/Native Spanish Speaker ROADMAP

09TH NO CLASS
10TH SPANISH FOR HERITAGE SPEAKERS
11TH CMC SPANISH 261 & 262
12TH AP SPANISH LANGUAGE AND CULTURE

Spanish I:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 9th – 12th

Elective

Spanish I establishes basic speaking, listening, reading and writing skills in Spanish using simple vocabulary and grammatical structures. This course also introduces students to the culture of Spanish-speaking countries.

Spanish II:

Yearlong Course: 1.0 credit

Prerequisite: Spanish I

Grade: 9th – 12th

Elective

Spanish II follows Spanish I by adding a variety of new vocabulary topics, more complex grammatical structures, larger reading, writing and presentation activities, as well as cultural explorations.

CMC SPA 111 and 112:

Yearlong Course: 1.0 credit; 10 college credits (5 credits per semester); 5 pt scale

Prerequisite: Spanish I and II or Spanish Speakers

Grade: 11th – 12th

Elective

Spanish III/CMC Spanish 111 and 112 develops and expands students' interpretive, interpersonal, and presentational communicative abilities in the language and across disciplines. It also integrates these skills in the cultural contexts in which the language is used and offers a foundation in the analysis of culture.

CMC SPA 211 and 212:

Yearlong Course: 1.0 credit; 6 college credits (3 credits per semester); 5 pt scale

Prerequisite: Spanish III/CMC SPA 111 and 112 or placement exam

Grade: 11th – 12th

Elective

Spanish IV/CMC SPA 211 and 212 further develops higher-level Spanish communication skills through advanced reading, writing, listening and speaking activities that explore topics related to culture, history and student interests.

***** Upon completion of both CMC Spanish 111 and 112, and CMC Spanish 211 and 212, students will be issued a Comprehensive Spanish Proficiency Certificate from Colorado Mountain College. This certificate will enhance resumes and provide documentation of the student's proficiency in composition, reading and oral skills.***

Spanish for Heritage Speakers/Español para hispanohablantes:

Yearlong Course: 1.0 credit

Prerequisite: Speaks, hears and/or reads Spanish on a daily basis, or teacher approval

Grade: 9th – 12th

Elective

Spanish for Native Speakers is for Heritage Learners (students who speak and understand Spanish fluently from previous authentic experiences). It will focus on developing basic reading and writing skills, improving spelling and use of accents in writing, and increasing reading comprehension. Students will engage in in-depth discussions, reading, writing assignments about culture, traditions, and literature as a part of this class.

CMC SPA 261: Grammar for the Heritage Language Speaker:

Semester Course: .5 high school credit; 3 college credits ; 5-pt scale

Prerequisite: Teacher approval

Grade: 11th – 12th

Elective

Grammar for the Heritage Language Speaker provides formal grammatical instruction to Spanish language students, whether native or bilingual, who want to develop their existing proficiency in the target language.

CMC SPA 262: Composition for the Heritage Language Speaker:

Semester Course: .5 high school credit; 3 college credits; 5-pt scale

Prerequisite: Teacher approval

Grade: 11th – 12th

Elective

Composition for the Heritage Speaker provides formal composition instruction to Spanish language students, whether native or bilingual, who want to develop their existing proficiency in the target language.

AP Spanish Language and Culture:

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: Spanish III or IV, or teacher approval

Grade: 11th – 12th

Elective

*AP Spanish Language and Culture emphasizes communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. **All students are required to take the AP exam.***

<h2>COURSE DESCRIPTIONS / PREREQUISITES</h2>
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AGRICULTURE

Introduction to Agriculture, Food and Natural Resources A&B (Level 1)

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 9th – 12th

Elective

An introductory course for first year agriculture education students. This course introduces students to the foundational principles of agriculture, food and natural resources. Students will gain knowledge in career development, leadership, personal development, communications, animal science, plant science, natural resources, food science, power/structure and agribusiness.

Principles of Ag Business Management A (Level 2)

Semester: .5 credit

Prerequisite: Introduction to Agriculture, Food and Natural Resources A&B

Grades: 10th – 12th

Elective

In this course student will be comparing and contrasting business models and identifying the advantages and disadvantages to owners and customers within the agribusiness chains. Students will show an understanding of basic recordkeeping skills and applications in an agribusiness. Components include the general journal, balance sheet, cash flow statements, and financial statements, reconciliation of accounts, net worth, income statements, and profit and loss statements. Students will understand how these records can allow for business decisions within an agribusinesses or Supervised Agriculture Experience (SAE) program.

Principles of Ag. Business Management B (Level 2)

Semester: .5 credit

Prerequisite: **Principles of Ag Business Management A and Introduction to Agriculture, Food and Natural Resources A&B**

Grades: 10th – 12th

Elective

Instruction includes the use of economic principles such as supply and demand, budgeting, depreciation, ag. finance, risk management, business law, and careers in agribusiness. Students will understand how these records can allow for business decisions within an agribusinesses or Supervised Agriculture Experience(SAE) program.

Principles of Natural Resource Management A (Level 2)

Semester: .5 credit

Prerequisite: **Introduction to Agriculture, Food and Natural Resources A&B**

Grade: 10th – 12th

Elective

An introductory course for agriculture education students pursuing careers in Natural Resources and Environmental Sciences. This course expands student learning to the foundational principles of ecology including the fields of geology, meteorology, biology and chemistry related to the conservation, natural resources, and fish and wildlife management. Students will gain knowledge in career development, leadership, personal development, communications, and environmental science.

Principles of Natural Resource Management B (Level 2)

Semester: .5 credit

Prerequisite: **Introduction to Agriculture, Food and Natural Resources A&B**

Grade: 10th – 12th

Elective

An introductory course for agriculture education students pursuing careers in Natural Resources and Environmental Sciences. This course expands student learning to the foundational principles of ecology including the fields of geology, meteorology, biology and chemistry related to the conservation, natural resources, and fish and wildlife management. Students will gain knowledge in career development, leadership, personal development, communications, and environmental science.

Principles of Animal and Veterinary Science A (Level 2)

Semester: .5 credit

Prerequisite: **Introduction to Agriculture, Food and Natural Resources A&B**

Grade: 10th – 12th

Elective

Students will develop knowledge, skills and understanding in the biological processes and physiological systems found in livestock and companion animal species including anatomy and physiology, growth and development, muscular and skeletal systems, integumentary system, respiratory and circulatory systems, nervous system, lymphatic and endocrine systems and excretory system. The scientific processes of

observation, hypothesizing, data gathering, interpretation, analysis and application will be included. Career opportunities and educational preparation will be examined. Learning activities are varied with classroom, laboratory and field experiences will be included.

Principles of Animal and Veterinary Science B (Level 2)

Semester: .50 credit

Prerequisite: Introduction to Agriculture, Food and Natural Resources A&B

Grade: 10th – 12th

Elective

Students will develop knowledge, skills and understanding in the biological processes and physiological systems found in livestock and companion animal species including anatomy and physiology, growth and development, muscular and skeletal systems, integumentary system, respiratory and circulatory systems, nervous system, lymphatic and endocrine systems and excretory system. The scientific processes of observation, hypothesizing, data gathering, interpretation, analysis and application will be included. Career opportunities and educational preparation will be examined. Learning activities are varied with classroom, laboratory and field experiences will be included.

Greenhouse Production (TAKE FALL SEMESTER)

Semester: .5 credit

Prerequisite: Introduction to Agriculture, Food and Natural Resources A&B

Grade: 10th – 12th

Elective

This advanced course offers instruction in greenhouse production. Units of study include plant identification, greenhouse management, integrated pest management, propagation, growing media, growing greenhouse crops, horticulture mechanics, Agribusiness units will cover operating a horticultural business, pricing work, advertising, and sales. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Equine Science (TAKE SPRING Semester) (Level 3)

Semester: .5 credit

Prerequisite: Introduction to Agriculture, Food and Natural Resources A&B

Grade: 10th – 12th

Elective

Covers the basics of the equine industry, breeds, selection, form to function, care and management, soundness, health, reproduction, feeding, facilities, physiology, production systems and management systems

NOT AVAILABLE FOR 2022/2023 SCHOOL YEAR

Principles of Plant Science - A (Level 2)

Semester: .50 credit

Prerequisite: Introduction to Agriculture, Food and Natural Resources A&B

Grade: 10th – 12th

Elective

Plant Science provides students with knowledge and information about the growth, development, and reproduction of plants used for food, fiber, and beautification. Topics may include plant anatomy and physiology, plant growth processes such as photosynthesis, propagation (reproduction) methods, taxonomy and classification, and plant identification. The course will also highlight developing communication skills, leadership skills, and incorporate a survey of the careers within the plant science industry. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Principles of Plant Science - B (Level 2)

Semester: .50 credit

Prerequisite:

Grade: 10th – 12th

Elective

Plant Science provides students with knowledge and information about the growth, development, and reproduction of plants used for food, fiber, and beautification. Topics may include plant anatomy and physiology, plant growth processes such as photosynthesis, propagation (reproduction) methods, taxonomy and classification, and plant identification. The course will also highlight developing communication skills, leadership skills, and incorporate a survey of the careers within the plant science industry. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

COURSE DESCRIPTIONS / PREREQUISITES

MUSIC

Beat-Making 101:

Semester Course: .5 credit

Prerequisite: All Interested

Grade: 9th – 12th

Technology/Elective Credit

Ever wonder how musicians make their backing tracks? Do you have raps with no beats? Are you interested in learning how to write your own music? Then this is the course for you! In Beat-Making 101, students will learn how to electronically compose drums, melodies, chords, and bass, as well as how they work together as the elements of a beat. Using the digital audio workstation, SoundTrap, students will take a deep dive into the world of music technology and production. Along with creation, students will explore modern music theory of artists like Billie Eilish, Dua Lipa, The Weeknd, Harry Styles, and more. Leave this course with the skills and knowledge necessary to create music for years to come!

Concert Choir:

Yearlong Course: 1.0 credit

Prerequisite: Mixed-All Interested

Grade: 9th – 12th

Elective

As a member of CRHS Concert Choir, you will learn how to hone in on your vocal skills and perform. Practice posture and technique, vocal flexibility, and breath support to increase your vocal capabilities. Along with performance, students will discover elements of music theory and music history as it relates to the pieces we are working on to develop comprehensive musicianship through performance. As a choir member, you will also have travel opportunities to work with other vocalists and master clinicians. Concerts and performances outside of school hours are required.

Super Strings/Guitar:

Semester Course: .5 credit

Prerequisite: All Interested

Grade: 9th – 12th

Elective

Always had the desire to learn the guitar? Look no further! In super strings, explore a hands-on application of music education through guitar and ukulele. Students will learn the anatomy of the instruments, fingerstyle guitar and reading sheet music, chords and strum patterns, ukulele techniques, and applications to modern day music. No guitars required! CRHS will assign a guitar and ukulele to each student for their use in this class. Personal instruments are also welcome.

CRHS Band:

Yearlong Course: 1.0 credit

Prerequisite: All Interested. **Desired: Previously in Band/or be willing to take lessons**

Grade: 9th – 12th

Elective

*The CRHS Band has the opportunities to explore the many styles & genres that come with playing a musical instrument. Concert band, marching band, pep band, show band, we've got it all! Along with performance, students will discover elements of music theory and music history as it relates to the pieces we are working on to develop comprehensive musicianship through performance. As a member of CRHS band, you also will receive opportunities to travel, work with other HS musicians, and further your skills on your instrument in master classes. Contact Ms. Mason if you have never played before (**amason@garfieldre2.net**). Concerts and performances outside of school hours **are required.***

AP Music Theory (New Course)

Yearlong Course: 1.0 credit; 5-pt scale

Prerequisite: 0.5 credit HS music, **OR concurrent** enrollment in band or choir

Grade: 9th – 12th

Elective

*Open to **any student** that has at **least 1 prior semester of high school music or concurrent enrollment in band or choir!** The AP Music Theory course corresponds to one-to-two semesters of typical, introductory college music theory and aural skills coursework. Students learn to recognize, understand, describe, and produce the basic elements and processes of performed and notated music. Course content extends from the fundamentals of pitch, rhythm, timbre, and expression to concepts of harmonic function, phrase relationships, and tonicization. Students study these concepts in heard and notated music, with emphasis on identification and analysis of musical features, relationships, and procedures in full musical contexts. Repertoire for analysis on the **AP Music Theory Exam** ranges from European Baroque pieces to folk and popular music from across the globe. Students develop musicianship skills through melodic and harmonic dictation, sight singing, and error detection exercises. Writing exercises further emphasize the foundational harmonic and voiceleading procedures of Western art music.. **All students are required to take the AP Music Theory Exam at the end of the year.***

COURSE DESCRIPTIONS / PREREQUISITES

PHYSICAL EDUCATION (1.0 credit of PE is a graduation requirement)

Team and Individual Sports:

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Elective

Team and Individual Sports primary objective is to help each individual achieve the maximum fitness, which the student is capable of through the use of various activities. This class will incorporate many traditional activities to create a fun and fitness oriented class.

True Life Adventure:

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Elective

*This class involves the **dynamic sport** of indoor rock climbing, a unique combination of the physical and the mental. This is a fun and exciting top-rope climbing course for beginners, where you will be introduced to all the safety knowledge required for climbing.*

Athletic Weight Training:

Semester Course: .5 credit

Prerequisite: Participate in a CRHS athletic sport and teacher approval

Grade: 9th – 12th

Elective

*Athletic Weight Training focuses on **sport specific** weight training and is designed to develop strength and power for individuals who are serious about muscle growth and increasing their potential and athletic ability.*

Health: graduation requirement:

Semester Course: .5 credit

Prerequisite: None

Grade: 10th – 12th

Health class is a comprehensive focus on personal decision-making around emotional and social well-being, positive communication, healthy eating, physical activity, tobacco, drug, and alcohol use, abuse, and violence prevention. The standards feature important skills for navigating today's society with its complex and often confusing messages around health, beauty, and happiness.

<h2 style="margin: 0;">COURSE DESCRIPTIONS / PREREQUISITES</h2>
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General Electives

Creative Writing:

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Elective

Creative writing will allow students to explore different writing styles and genres by studying techniques used by a variety of authors. Students will keep a portfolio of projects (short stories, narratives, poems, etc), which will guide the students through a culminating multi-genre project. Students will be required to share writing with each other through writer's workshop.

Speech Communications:

Semester Course: .5 credit

Prerequisite: None

Grade: 9th – 12th

Elective

Speech Communication introduces students to principles of interpersonal communication, public speaking techniques, and competitive speech and debate. Students will learn skills in developing a dynamic verbal

profile, confidence in oral presentations, and critical thinking and analytical skills, along with impromptu speaking techniques to defend opposing sides of social issues. Students will be expected to participate in class activities, which will include a variety of speaking activities and debates.

Pre-Engineering I:

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 9th – 12th

Elective

Pre-Engineering I is project-based class delves into a sampling of the enormous world job market which is engineering. Ever wonder how something works? 100% chance that it started with someone with an engineering mindset who simply wondered if they could build it. Technical writing, the engineering design process, 3D-design and printing, and problem-solving galore are all built into the framework of this exploration into the world of engineering.

Yearbook:

Yearlong Course: 1.0 credit

Prerequisite: Digital Photography, Teacher approval

Grade: 10th – 12th

Elective

Yearbook is a yearlong commitment and only students approved by the teacher will be assigned. This course is a collaborative effort to design, document, and capture special moments that will be made into a historical document. Students will be expected to meet deadlines, conduct interviews, photograph events inside and outside of the school hours and building, work as a team, design pages in the book, build and meet goals, participate in ad campaigns and yearbook sales, and above all, learn to be professional.

<h2 style="text-align: center; color: blue; margin: 0;">COURSE DESCRIPTIONS / PREREQUISITES</h2>
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UPPERCLASSMEN ONLY:

Marketing Work:

Semester Course: .5 credit

Prerequisite: Counselor Approval

Grades: 11th – 12th

Elective

Marketing Work provides a work-study elective credit for students with a paying job. Students must have employment proof before being enrolled in this class. A pay stub or signed work hours sheet must be turned in bi-monthly for credit. Other assignments will be expected for the course completion. Students are encouraged to find employment in a cluster area of interest. Assistance is available for students looking for a

job. This may provide ability for a flexible schedule.

Student Aide:

Semester Course: .5 credit

Prerequisite: 3.5 cumulative grade-point average, completed application, guidance approval

Grade: 11th – 12th

Elective

Student aides are based on school-wide need. Student aides are assigned by Ms. Shideler in the counseling office.

Study Hall:

Semester Course: **no credit**

Prerequisite: Must be approved by counselor (**current course load most important factor**)

Grade: 11th – 12th

Study hall is an opportunity for students who carry a 'heavy' course load (AP/CMC/Advanced classes). This course is offered for no credit; therefore, school counselors must verify the credit status and schedule for those interested in signing up.

Free Period (Senior year only):

Semester Course: **no credit**

Prerequisite: 3.5 grade point average, at or above credit requirements for graduation, completed application, and must leave campus daily.

Grade: 12th

*A free period is afforded to students who meet the prerequisites above. Any student earning a free period must complete the application and have **their own** transportation to leave campus. A free period means that you do not have academic responsibilities and have earned the privilege.*

<h2 style="text-align: center; color: blue; margin: 0;">COURSE DESCRIPTIONS / PREREQUISITES</h2>
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CTE (Career and Technical Education):

Automotive Service Technology:

Offered at Rifle High School. Please talk to your counselor.

Yearlong Course: 1.0 credit

Prerequisite: None

Grade: 11th – 12th

Vocational Elective

Automotive Service Technology is designed to give the first year student a basic understanding and introduction to the occupation of automotive service and repair. This will include studies in the following areas: orientation to automotive related industries; career opportunities in the field; orientation to an automotive shop environment; shop and environmental safety; identifying and using tools related to the industry; hazardous materials and waste management; communications and public relations as it relates to

the industry; use of manuals and computers in all areas of the industry; use of precision measuring tools and automotive math; theory, presentation and evaluation of performance tasks in the areas of automobile repair.

Automotive Service Technology II:

Offered at Rifle High School. Please talk to your counselor.

Prerequisite: Automotive Service Technology I, Teacher recommendation (Limited to 18 students)

Yearlong Course: 3.0 credit

Grade: 12th

Vocational Elective

Automotive Service Technology II course is designed to give the student who successfully completed Automotive Service Technology I an opportunity to develop usable skills in the specific areas of automotive service and repair. Cognitive reasoning and manual dexterity are developed by performing diagnostic procedures and repair tasks using manufacturer's recommended procedures and professional quality tools and test equipment.

Career Academy Courses: Business

Offered at Colorado Mountain College-Rifle campus. Please talk to your counselor.

Yearlong Course: 2 high school credit; 6 college credits

Prerequisite: Accuplacer

Grade: 11th – 12th

Vocational Elective

Career Academy Courses: Health Science

Offered at Colorado Mountain College-Rifle campus. Please talk to your counselor.

Yearlong Course: 3.5 high school credit; 7.5 college credits

Prerequisite: None

Grade: 12th

Vocational Elective

Career Academy Courses: Welding

Offered at Colorado Mountain College-Rifle campus. Please talk to your counselor.

Yearlong Course: 3 high school credit; 8 college credits

Prerequisite: None

Grade: 11th – 12th

Vocational Elective

Career Academy Courses: Public Safety

Offered at Colorado Mountain College-Rifle campus. Please talk to your counselor.

Yearlong Course: 1 high school credit; 6 college credits

Prerequisite: None

Grade: 12th
Vocational Elective

Career Academy Courses: Early Childhood

Yearlong Friday Course:
Prerequisite: Accuplacer
Grade: 12th
Vocational Elective

Career Academy Courses: Applied Engineering

Yearlong Friday Course:
Prerequisite: Accuplacer
Grade: 12th
Vocational Elective

****SEE YOUR COUNSELOR FOR A COMPLETE LIST OF OPPORTUNITIES AT RIFLE HIGH SCHOOL and
COLORADO MOUNTAIN COLLEGE****