

Colorado Early Colleges

Online Campus



Course Catalog | Fall 2026 – Spring 2027

Welcome to the **Colorado Early Colleges Online Course Catalog**. This catalog is designed to help students and families explore the diverse academic opportunities available through CEC Online and plan a personalized pathway toward graduation, college readiness, career preparation, and lifelong success.

CEC Online offers a variety of courses designed to meet students' unique learning needs, goals, and interests. Students have access to multiple instructional modalities, allowing them to choose learning experiences that best support their academic growth, scheduling needs, and future aspirations.

Teacher-led courses are offered online synchronously between 7:50 a.m. and 3:30 p.m. on Monday, Wednesday, and Friday, with asynchronous learning, tutoring, intervention, and student support opportunities available on Tuesday and Thursday. Course listings identify applicable grade levels and credit values; however, students may access courses above their traditional grade level when readiness and preparedness have been demonstrated.

Middle school courses are generally offered as yearlong experiences, while most high school courses are offered as semester-based classes. Some courses may require prerequisites, placement recommendations, or advisor approval.

Student Support Services

CEC Online is committed to providing students with the support they need to succeed. In addition to teacher office hours, tutoring opportunities, and advisor support, all students have access to the CEC Online Drop-In Center, where they can receive academic assistance, assignment support, technology assistance, study skills coaching, and connections to additional resources. The Drop-In Center is available to support students across all courses and instructional modalities, ensuring that help is accessible whenever students need additional guidance.

Concurrent Enrollment Opportunities

In addition to middle school and high school coursework, CEC Online partners with multiple colleges across Colorado to provide concurrent enrollment opportunities aligned to each student's Individual Career and Academic Plan (ICAP) and post-secondary goals. Students may also have access to select college courses taught directly through Colorado Early Colleges by qualified adjunct faculty.

College-level courses (100-level and above) are approved on a case-by-case basis and may require placement scores, prerequisite coursework, or demonstrated college readiness. Students are encouraged to work closely with their academic and career advisors to explore available opportunities and determine the courses that best support their educational and career pathways. Please note that course availability may vary by semester.

Pathways to Success

The Colorado Early Colleges Online program is designed to provide flexible pathways that support:

- ✓ High School Graduation
- ✓ College Readiness
- ✓ Career Readiness

- ✓ Industry Certifications
- ✓ Workforce Preparation
- ✓ Concurrent Enrollment Success
- ✓ Individual Career and Academic Planning (ICAP)

Whether students are pursuing a college degree, exploring career interests, earning industry-recognized certifications, developing workforce skills, or seeking additional academic flexibility, CEC Online provides rigorous, supportive, and personalized learning experiences designed to help every student achieve their goals.

We encourage students and families to use this catalog as a roadmap for academic planning, career exploration, and future success. Together, we can build a pathway that prepares students for success in college, career, and life.

Course Delivery Icons

Icon	Meaning
	Self-Paced Online
	Teacher-Led Online
	Available in Multiple Formats

Graduation Requirements

Subject Area	Recommended Credits
English Language Arts	4.0
Mathematics	3.0-4.0
Science	3.0
Social Studies	3.0
Electives	6.0+
World Language	2.0 Recommended

English Language Arts

English Literature 6 ♦

This course will explore the English language and literature. Content units will explore different genres, including nonfiction, mythology, novels, grammar, and poetry. The class will incorporate hands-on activities, reading strategies, writing opportunities, and group work to promote understanding and engage students.

English Literature 7 ♦

Students will practice reading, writing, speaking, and listening. Students will read a variety of novels, short stories, poems, plays, and nonfiction texts and write fiction and research papers. Throughout the year, seventh graders will reflect on the theme of bravery and how those perceptions change with each text they will read.

English Literature 8 ♦

This course seeks to promote and develop reading, writing, speaking, and listening. This class will emphasize learning how to think in new and creative ways, how to effectively communicate both spoken and written ideas, and how to gather relevant information from various text types. Students will pursue answering the question, "What does it mean to be human?"

English 9A & B ♦

Credits: 0.5

English/Language Arts is the study of language through the interpretation and analysis of texts. You will examine a collection of diverse, authentic texts and analyze the techniques used by their authors. You will then apply that learning to your own writing, drawing on a wide range of authorial techniques to support your own development as an author and thinker. In English 9B, you will build on analysis and writing skills as you explore drama, historical documents, speeches, and shorter fictional texts.

English Foundations A & B ♦

Prerequisites: Placement based on NWEA MAP score, NextGen ACCUPLACER score, and/or teacher recommendation

Designation: College Prep **Credits:** 0.5

This course focuses on developing a strong foundation in both reading- and writing-related skills in addition to academic skills such as organization and holding oneself accountable for quality and timely work. The focus will be on communicating in a clear, structured way, both verbally and through written work, as well as understanding communication from others. This communication will be practiced in many different modes focusing on the various ways reading, writing, listening, and speaking occur in our world.

English Foundations ♦

Prerequisites: Placement based on NWEA MAP score, NextGen ACCUPLACER score, OR successful completion of Literature & Composition 060

Designation: College Prep **Credits:** 1.0

This course provides an intensive introduction to college prep English work by establishing a foundation of skills needed for all reading and writing at CEC. Students will practice analytical reading skills in a variety of genres, including short stories, poems, novels, and nonfiction. Focus will be on close reading where students use specific passages from the text to develop and support their interpretations of literary works as well as recognize how texts function as a whole and the conventions of using communication in different settings. Students will focus on the

devices used to achieve their own writing purposes and appeal to their audiences by composing various types of essays. Further, they will learn the conventions and expectations of the typical college essay.

English 10A & B ♦

Credits: 0.5

English/Language Arts is the study of language through the interpretation and analysis of texts. You will use the techniques you discover in authentic texts to improve your own skills as an author. In English 10A, you will closely read classic, modern, and world literature to explore themes, literary elements, and word choice. By reading a variety of informational texts, you will analyze the development of central ideas through the structure and vocabulary. Throughout the course you will compose your own texts and brief analyses to demonstrate your learning. In English 10B, you will closely read classic, modern, and world literature to explore themes through characterization and the structure of literary texts, including Shakespeare. You will closely read seminal documents to understand how authors develop an effective argument. In the culminating unit, you will use all the skills you have learned in this course to write a research paper from texts you select.

Literature & Analysis ♦

Prerequisites: NWEA MAP scores, NexGen ACCUPLACER score, and/or Foundational College Prep English

Designation: College Prep **Credits:** 1.0

This course provides a comprehensive overview of all college prep English skill sets. Students will be challenged to analyze and evaluate texts at a more advanced level to prepare for college-level reading tasks and to articulate—in both speech and writing—interpretations of poems, short stories, novels, and plays. They will also practice writing skills, including a focus on the sentence level as well as making intentional decisions to compose various genres of writing effectively. Students will focus on conducting research and thinking critically about how to gather, process, and use information to become thoughtful, productive citizens in the modern world.

English 11A & B ♦

Credits: 0.5

English/Language Arts is the study of the creation and analysis of literature written in the English language. In English 11A & B, you will study a variety of techniques to improve your reading comprehension and writing skills. The instruction covers many types of writing: creative, descriptive, expository, narrative, and persuasive. In this course, you will read and analyze different genres in literature with an emphasis on American literary movements over time. You will also complete writing activities to evaluate literary works with regards to literary techniques, form, and theme.

English 12A & B ♦

Credits: 0.5

English/Language Arts is the study of the creation and analysis of literature written in the English language. In English 12A, you will explore the relation between British history and literature from the Anglo-Saxon period through the neoclassical era, including the works of Shakespeare. You will read and analyze a variety of literary works from this time period by using relevant cultural and political history presented in each lesson. In English 12B, you will explore the relationship between British history and literature from the romantic period to the modern era. You will read and analyze a variety of literary works from this time in the context of relevant cultural and political history.

In this course, you will also study a variety of techniques to improve your reading comprehension, writing skills, and grammar and mechanics. The instruction covers many types of writing: creative, descriptive, expository, narrative, and persuasive.

Modernist Literature ♦

Designation: College Prep **Credits:** 1.0

This course provides a comprehensive overview of a specific movement in Literary history. With a focus on literature written during the modern period — 1900-1940s — this class will place a special emphasis on the development of critical reading skills and the relationship between a literary movement and an historical context. The first half of the semester will focus on *The Great Gatsby* by F. Scott Fitzgerald and the second half will include texts from a diverse selection of poetry and short stories. The main focus of this class will be on reading and discussion of these texts, and the students will have the opportunity to respond to the reading in a large variety of ways and assignments.

Critical Study of the Novel ♦

Designation: College Prep **Credits:** 1.0

This course provides a comprehensive overview of one or two novels by the same author. The focus for these novels will be on the classics. The main focus of this class will be on reading and discussion of these texts, and the students will have the opportunity to respond to the reading in a large variety of ways and assignments. Novel studies will include *Jane Eyre*, *Pride and Prejudice*, *Emma*, *Great Expectations*, *Dracula*, *The Grapes of Wrath*, *Beloved*, *Anna Karenina*, and more.

English Composition I ♦

Prerequisites: Accuplacer or other College Readiness Metrics

Designation: College **Credits:** 3.0

This course emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a wide variety of compositions that stress the analytical, evaluative, and persuasive/argumentative modes of writing.

English Composition II ♦

Prerequisites: Accuplacer or other College Readiness Metrics

Designation: College **Credits:** 3.0

This course emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a wide variety of compositions that stress the analytical, evaluative, and persuasive/argumentative modes of writing.

Mathematics

Math Foundations ♦

Prerequisites: Placement based on NWEA Maps scores and/or teacher recommendation

Designation: Middle School and College Prep **Credits:** 0.5

This course covers essential mathematical concepts, including operations with whole numbers, fractions, decimals, algebraic expressions, geometric shapes and measurements, data analysis, and basic probability. Students will develop critical thinking skills and a solid mathematical foundation through problem-solving exercises and real-world applications.

Math Fundamentals ♦

Prerequisites: Placement based on NWEA Maps scores and/or teacher recommendation

Designation: Middle School and College Prep **Credits:** 0.5

This course builds upon foundational concepts while introducing more advanced topics. Students will delve deeper into operations with rational numbers, expressions, equations, and inequalities. They will explore geometric concepts, including angles, area, volume, and transformations. Additionally, the course covers probability, statistics, and proportional relationships, preparing students for higher-level math courses.

Pre-Algebra ♦

Prerequisites: Placement based on NextGen ACCUPLACER score and/or teacher recommendation

Designation: College Prep **Credits:** 0.5

This course includes vocabulary, properties, operations, applications of real numbers (i.e., fractions, decimals, signed numbers), and algebraic expressions. It also covers the solution of basic first-degree equations, associated word problems, graphing on a coordinate plane, and introduction of systems.

Algebra I

Prerequisites: Pre-algebra 060

Designation: College Prep **Credits:** 1.0

The course introduces the student to the basic structure of algebra through the use and application of real numbers, inequalities, factoring, polynomials, linear and quadratic equations, and graphs. Additionally, appropriate technology will be used to study and achieve the following:

- Enhance mathematical understanding and problem-solving skills.
- Represent linear and exponential relationships using graphs, tables, equations, and contexts.
- Manipulate expressions to solve problems by factoring, distributing, multiplying polynomials, and expanding exponential expressions.
- Analyze the slope of a line graphically, numerically, contextually, and algebraically.
- Solve equations and systems of equations using a variety of strategies.
- Represent arithmetic and geometric sequences.
- Investigate square root, cube root, absolute value, piecewise-defined, step, and simple inverse functions.
- Use function notation.
- Analyze two-variable data and explain the differences between association and causation and interpret correlation in context.
- Compare distributions of one-variable data.

Geometry

Prerequisites: Algebra I 090

Designation: College Prep **Credits:** 1.0

This course covers the following skills:

- Perform geometric transformations (reflection, rotation, translation, dilation) and find symmetry.
- Determine relationships between figures (such as similarity and congruence) in terms of rigid motions and similarity transformations.
- Explain properties of plane figures.
- Execute proofs of geometric theorems and use coordinates to prove geometric theorems.
- Model with geometry and create geometric constructions (with compass and straightedge).
- Find measurements of plane figures (such as area, perimeter, and angle measure) and three-dimensional solids (such as volume and surface area).
- Apply theorems about circles, including arc lengths and areas of sectors.
- Utilize tools for analyzing and measuring right triangles, general triangles, and complex shapes (such as the Pythagorean Theorem, trigonometric ratios, and the Laws of Sines and Cosines).
- Use algebra to formulate and solve equations arising from geometric situations.
- Calculate probability (independence and conditional probability, compound events, expected value, and permutations and combinations).

Algebra II

Prerequisites: Algebra I 090; Geometry

Designation: College Prep **Credits:** 1.0

This course is designed to build on algebraic and geometric concepts. It develops advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers, and quadratics. Students will also prepare for the study of trigonometric functions. Finally, course content includes the vocabulary, systems, relations and functions, rational expressions and equations, inequalities, radical and complex numbers, and quadratic equations.

Bridge to College Algebra

Prerequisites: None

Designation: College Prep **Credits:** 1.0

Bridge to College Algebra is a post-Algebra II mathematics course designed for students who have successfully completed Algebra II but need additional preparation before enrolling in College Algebra or other college-level mathematics courses. The course strengthens advanced algebraic concepts including functions, equations, graphing, modeling, and problem-solving while developing the academic habits necessary for collegiate success. Emphasis is placed not only on the essential algebraic skills necessary to participate in a College Algebra course but also on study skills, organization, note-taking and independent learning strategies to help students build confidence and readiness for the rigor of college coursework.

Science

Earth and Space Science 6 ♦

This course will cover all Colorado state middle school earth systems standards, including natural resources, geology, weather, and space concepts. Students will investigate and evaluate the workings of our earth and its place in the universe and master the fundamentals of using basic scientific measurement tools, the metric system, and reading graphs to be prepared for future scientific explorations. Students will also apply 21st century skills in critical thinking and reasoning, innovation, collaboration, information literacy, and self-direction.

Life Science 7 ♦

This course is largely based on the study of life sciences and will include the fundamentals of biology. Students will investigate, explore, and discover various ideas using the scientific method throughout the school year. The class will also incorporate hands-on activities, experiments, and group work. It will also include a focus on reading and writing for content and understanding.

Physical Science 8 ♦

This course is largely based on physical science that will include the fundamentals of physics and chemistry. Students will investigate, explore, and discover various ideas using the scientific process throughout the year. The class will incorporate hands-on activities, experiments, and group work. It will also include a focus on reading and writing for content and understanding.

Biology A 🌐

Prerequisites: Pre-algebra 060 060; English Foundations

Designation: College Prep **Credits:** 0.5

During this course, students will practice cooperative inquiry and project-based learning in the study of molecular and cellular biology, including biochemistry, cell structure and functions, the metabolic process of respiration and photosynthesis, cellular reproduction, and the basic concepts of genetics. Laboratory experiences will encourage scientific thinking by following procedures and collecting and analyzing data.

Biology B 🌐

Prerequisites: Biology A

Designation: College Prep **Credits:** 0.5

Biology, the study of living things, exposes students to a wide range of biological processes, including molecular and cell biology, heredity and genetics, ecology, evolution, and the diversity of life. The scientific method, the process of observing, hypothesizing, measuring, and gathering data followed by analyzing and interpreting said data, will be applied. Furthermore, students will explore the large-scale biology systems, including ecology and evolution, by examining how these systems interact and how these processes shape our environment. During this course, students will practice cooperative inquiry and project-based learning within the study of environmental and evolutionary biology. Laboratory experiences will encourage scientific thinking by collecting and analyzing data.

Chemistry 🌐

Prerequisites: Algebra I 090

Designation: College Prep **Credits:** 1.0

This course covers the fundamentals of chemistry, which includes understanding the basics of chemical theory and concepts, interpreting chemical symbols and language, and solving common chemical problems. Applications of chemistry to the everyday world are also explored. During this course, students will practice

cooperative inquiry and self-guided learning in the study of matter, including matter and change, measurements, atomic theory, chemical bonding, nomenclature, and chemical reactions. These activities will include working in small groups at times to reinforce lecture material and other knowledge, utilizing various visual presentations and descriptions, and receiving direct instruction from the instructor. Laboratory experiences will encourage scientific thinking by following procedures, collecting and analyzing data, and writing lab reports.

Physical Science

Prerequisites: None

Designation: College Prep **Credits:** 1.0

Physical Science is the study of matter and energy and will offer introductory concepts in chemistry and physics. Students in this course will study the properties of matter, the periodic table, elements, mixtures, compounds, chemical reactions, and light. They will further demonstrate an understanding of the electromagnetic spectrum, including energy, heat, motion, Newton's laws, and momentum.

Integrated STEM Labs ♦

Prerequisites: None

Designation: College Prep **Credits:** 0.5

The Integrated STEM Lab class is designed with a blended science approach to enhance lab skills and scientific thinking through hands-on activities. Lessons will have both a life science and a physical science component, including — but not limited to — activities, projects, experiments, and labs in genetics, kinetic and potential energies, waves, the basics of chemistry, and Newton's Laws. The course will culminate with the students creating their own capstone experiment, subjecting it to a rigorous evaluation process, and measuring final results.

Earth Science ♦

Prerequisites: None

Designation: College Prep **Credits:** 0.5

The Earth Science curriculum builds upon the natural curiosity of students concerning the scientific world. The course will explore the systems of the earth, including its spheres and cycles. It will look further at the following:

- The history of the earth through the exploration of plate tectonics and the movement of the earth's crust.
- How the earth's surface was shaped by weather and erosion.
- Examining the causes and effects of various natural disasters.

Earth Science affects us every day through our interaction with and dependency on air, weather, water, and even the ground upon which we stand. This course will further explore the processes that have formed the Earth, the stars, the elements, and the universe. Through labs, lessons, activities, and models, students will explore how earth's atmosphere (air), hydrosphere (water), and geosphere (land) all interact with each other and affect our everyday life.

Physics ♦

Prerequisites: None

Designation: College Prep **Credits:** 1.0

Students will examine the following topics: the basic principles of mechanics, electricity and magnetism, and wave motion. Coursework will involve laboratory activities, assignments and formal assessments that will require students to demonstrate problem-solving skills in the context of a scientific scenario. Additionally, this course will introduce students to the study of astronomy, including its history and development, basic scientific laws of motion and gravity, the concepts of modern astronomy, and the methods used by astronomers to learn more about the universe. Finally, additional topics will include the solar system, the Milky Way and other galaxies, and the sun

and stars. Using online tools, students will examine the life cycle of stars, the properties of planets, and the exploration of outer space.

Human Anatomy & Physiology ♦

Prerequisites: Biology A & B

Designation: College Prep **Credits:** 1.0

Human Anatomy and Physiology provides high school students with a comprehensive introduction to the structure and function of the human body. It will explore the body's major systems – including the skeletal, circulatory, nervous and reproductive systems among others –, how they work individually and together, and how they maintain homeostasis. Students will study organs, tissues, cells, and systems that make up the body, while also gaining a deeper understanding of how anatomy and physiology influence health, wellness, and disease.

Through hands-on activities, lab experiments, and interactive learning, students will develop the ability to identify and understand the roles of various structures and functions within the human body. By the end of the course, students will have a strong foundation in the science of human biology, preparing them for more advanced studies in health-related fields or careers in medicine, nursing, sports science, and more.

Medical Terminology A ♦

Credits: .5

This one-semester course is intended to help you familiarize yourself with the medical terminology related to the human body systems. This course has fourteen lessons organized into three units, plus three Unit Activities. Each lesson contains one or more Lesson Activities. This course will cover the structure of the human body systems and their functions. It will also include medical terminology related to diseases, disorders, medical procedures, and treatment for each body system. You will submit the Unit Activities to your teacher, and you will grade your work in the Lesson Activities by comparing them with given sample responses. The Unit Activities (submitted to the teacher) and the Lesson Activities (self-checked) are the major components of this course. There are other assessment components, namely the mastery test questions that feature along with the lesson; the pre- and post-test questions that come at the beginning and end of the unit, respectively; and an end-of-semester test. All of these tests are a combination of simple multiple-choice questions and technology enhanced (TE) questions.

Intro to Microbiology with Lab ♦

Prerequisites: Biology A & B

Designation: College Prep **Credits:** 1.0

This course will introduce students to the invisible world of microorganisms and their impact on human life, ecosystems, and global health. Through a blend of engaging instruction and interactive virtual labs, students explore the structure, function, and diversity of bacteria, viruses, fungi, and protists. Key topics include cell structure, microbial genetics, disease transmission, immunity, antibiotic resistance, and the role of microbes in biotechnology and the environment. Virtual lab simulations are a central component of the course, allowing students to safely conduct experiments such as culturing microbes, performing Gram stains, identifying unknown pathogens, and testing the effectiveness of antimicrobial treatments. These labs build practical scientific skills—like data analysis, experimental design, and lab safety—without the need for physical lab equipment. By the end of the course, students will have a deeper understanding of how microorganisms influence everyday life and will be equipped with critical thinking and problem-solving skills relevant to modern science and medicine. This course is ideal for students interested in biology, healthcare, or environmental science.

Social Science/History

Social Studies: Western Hemisphere 6 ♦

This course fully aligns with the Colorado Academic Standards (CAS) for Social Studies as adopted by the Colorado Department of Education. Students study the geography, history, cultures, governments, and economies of the Western Hemisphere (North America, Latin America, Caribbean), building maps, completing source-analysis, and developing inquiry skills.

Social Studies: Eastern Hemisphere Ancient World History 7 ♦

This course fully aligns with the Colorado Academic Standards (CAS) for Social Studies (CDE). Students examine ancient civilizations across the Eastern Hemisphere—Mesopotamia, Egypt, the Indus Valley, China, Greece, Rome, and others—connecting geography, belief systems, trade, and governance through primary and secondary sources.

Social Studies: US History: The Revolutionary War to the Civil War 8 ♦

This course fully aligns with the Colorado Academic Standards (CAS) for Social Studies (CDE). Students investigate the American Revolution through the Civil War, including founding documents and constitutional principles, westward expansion, reform movements, slavery, sectionalism, and the causes and course of the war, with a strong emphasis on evidence-based historical thinking.

Civics 🌐

Prerequisites: English Foundations or higher recommended

Designation: College Prep **Credits:** 1.0

Students will study the history of the civil government of the United States and of the state of Colorado. Topics will include the history and contents of the Constitution, the functions of the three branches of government, the structure of Colorado's government, and certain key events in Colorado history. Students will also analyze and discuss current events at the national and local levels. Please note: All students who enroll into Civics will cover a unit on the Holocaust & Genocide. Students who transfer into CEC Online Campus having already completed a Civics course will take a standalone module course which covers the Holocaust & Genocide.

Geography 🌐

Prerequisites: None

Designation: College Prep **Credits:** 1.0

Geography is the study of humans and how they adjust to their environment. This course will consist of developing basic geographic skills and analyzing a regional approach to the geography of the world. Additionally, this course will examine how climate and resources impact the movement and development of human societies. Students will study the regional geographical method by analyzing how interactions between humans and their environment have impacted the characteristics of major world regions. Students will also learn to use geographic tools and resources to analyze the Earth's human systems and physical features by further investigating deeper geographic issues and concerns.

US History 1: Indigenous Societies to Reconstruction 🌐

Prerequisites: None

Designation: College Prep **Credits:** 1.0

This course will cover United States history from pre-contact Indigenous societies through the conclusion of the American Civil War using conventional primary source analysis. Key themes and areas of study include European expansion into the New World, the founding of the American Republic, Westward Expansion, Slavery, the Sectional

Crisis, and the Civil War. Students are expected and encouraged to connect historical pre-Columbian and American experiences with the current social landscape of the United States.

US History 2: Reconstruction to the Present 🌐

Prerequisites: None

Designation: College Prep **Credits:** 1.0

This course will cover United States history from the post-Civil War Reconstruction Era through the present using Hollywood and independent films as the primary source media. Key themes and areas of study include post-Civil War America, Jim Crow, American Imperialism, the “Roaring 20s,” Suffrage, the Great Depression, World War I and II, The Civil Rights Movement, the Cold War, and the turn of the new century—including the Tech Revolution. Students will enrich their understanding of the American story by contextualizing and connecting these various historical trends through the concepts of memory and critical thinking.

Early World History ♦

Prerequisites: None

Designation: College Prep **Credits:** 0.5

Students will understand the process of historical inquiry through the examination of primary and secondary sources related to various ancient and pre-modern civilizations, including Asian, African, European, and pre-contact Indigenous American cultural groups. One overarching outcome of the course includes the identification of continuity and change across time and place in the frameworks of trade, religion, gender, race, and technology. Within these continuities and changes, students will engage several historical events and eras that significantly altered, created, or evolved into modern philosophies of government, economics, and social organizations.

World History A&B ♦

Credits: 0.5

Colorado World History is a two-semester course that is aligned to the Colorado Academic Standards (CAS) for social studies. The course is designed to develop students' historical thinking skills through the exploration of significant world events and their impacts. Students will learn about European exploration, the Renaissance, the Reformation, and major world revolutions, as well as the causes and consequences of World War I, World War II, and the Cold War. They will also explore historical world events using innovative videos, timelines, and interactive maps and images to deepen their understanding of key content. In addition, the course covers the benefits and challenges of living in the modern world and encourages students to apply historical thinking skills to contemporary global issues.

Mythology ♦

Prerequisites: English Foundations or higher recommended

Designation: College Prep **Credits:** 1.0

This high school mythology course examines the myths that have shaped cultures worldwide, integrating the Colorado State Standards for a comprehensive educational framework. We delve into classical mythology, including the foundational tales of Greek and Roman gods, the epic narratives of Norse mythology, and the storied traditions of Egyptian, Japanese, British, Celtic, Native American, and Aztec cultures. Alongside key readings from Thomas Bulfinch's "The Age of Fable," our curriculum extends into modern mythology, featuring iconic works such as "Harry Potter," "Rings of Power," and "Dune." Students will analyze creation myths, heroic quests, and the significance of mythical creatures, all through the lens of the “Hero’s Journey.” This curriculum offers a deep dive into the enduring impact of mythology, from ancient stories to contemporary narratives, enriching our understanding of the universal themes that continue to influence our world.

Rome to Reformation: 500-1500 AD ♦

Prerequisites: English Foundations or higher recommended

Designation: College Prep **Credits:** 0.5

This course will cover Medieval history from the fracturing of the Roman Empire to the early stages of the Protestant Reformation using conventional primary source analysis. Key themes and areas of study include the creation and social construction of Christendom, the creation and spreading influence of Islam, urbanization, and growth of the western economy. Geographic regions covered throughout the course include North Africa, Europe, Asia Minor, Eastern Europe/Slav descendent culture areas, and the Middle East. Students are expected and encouraged to connect historical medieval themes and systems with the growth of our modern world and modern social constructions.

US History Since the Civil War ♦

Prerequisites: English Foundations or higher plus Accuplacer

Designation: College **Credits:** 3.0

Explores trends within events, peoples, groups, ideas, and institutions since the American Civil War. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity. This is a statewide Guaranteed Transfer course in the GT-HI1 category.

World Languages

Intro to Spanish ♦

Prerequisites: None

Designation: Middle School **Credits:** 0.5

This course will introduce students to Spanish and Latin American countries. Students will learn basic vocabulary, grammar, and about the diversity of Latin America. This course aims to build an appreciation for the Spanish language and of other cultures. Please note, this course is available to students in Grades 7 and 8.

Spanish I 🌐

Prerequisites: None

Designation: College Prep **Credits:** 1.0

Spanish I is a one-credit course that focuses on the development of students' communicative competence and their understanding of the cultural products, practices, and perspectives of the Spanish-speaking world. Students will communicate in real-life contexts where grammar and vocabulary are integrated according to various real-life/real-world situations. Through the language learning process, students will develop an understanding of the structure of their native language and the uniqueness of their own culture. Emphasis will be placed on the use of Spanish in the classroom as well as on the use of authentic materials to learn about the culture. Students in Spanish I will develop interpersonal, interpretive, and presentational language skills as they interact with the Spanish language. Students in Spanish I will focus on improving comprehension, comprehensibility, vocabulary usage, cultural awareness, communication strategies, and language control.

Spanish II 🌐

Prerequisites: Spanish I

Designation: College Prep **Credits:** 1.0

Spanish II is a one-credit course that focuses on the development of students' communicative competence and their understanding of the cultural products, practice, and perspectives of the Spanish-speaking world by building upon and expanding the core competencies developed in Spanish I. Students will enhance their Spanish language skills by: speaking and writing with other Spanish speakers; Reading, listening, and viewing as a receptive process in which deeper foreign language comprehension is developed; and, Speaking and writing that is focused on the organization and structure of thoughts and the awareness of their audience. Emphasis will be placed on the use of Spanish in the classroom as well as on the use of authentic materials to learn about the culture. An important component of Spanish II is the use of Spanish beyond the classroom in order to apply it in the real world.

Spanish III ♦

Prerequisites: Spanish II

Designation: College Prep **Credits:** 1.0

Spanish III is an intermediate-level course and it builds upon foundations set in Spanish I and II, requiring learners to actively apply previously learned language skills. Students will learn new vocabulary, verb tenses, and grammatical concepts that will allow them to expand their language skills.

Exploration of Spanish Speaking Countries ♦

Prerequisites: None

Designation: Middle School and College Prep **Credits:** 0.5

This course will introduce students to the diversity of Latin America. Students will learn about the culture, traditions, holidays, and geography of Spanish-speaking countries. This course aims to build an appreciation of

other cultures and develop motivation for learning another language. Through guided asynchronous instruction and independent projects, students will undertake an in-depth exploration of these countries and cultures.

Conversational Spanish ♦

Prerequisites: None

Designation: Middle School and College Prep **Credits:** 1.0

This course will allow students to practice with their speaking and listening skills. Students will engage in basic conversations with their peers and will be able to do a basic introduction of themselves. This course aims to build an appreciation for and develop motivation for learning another language.

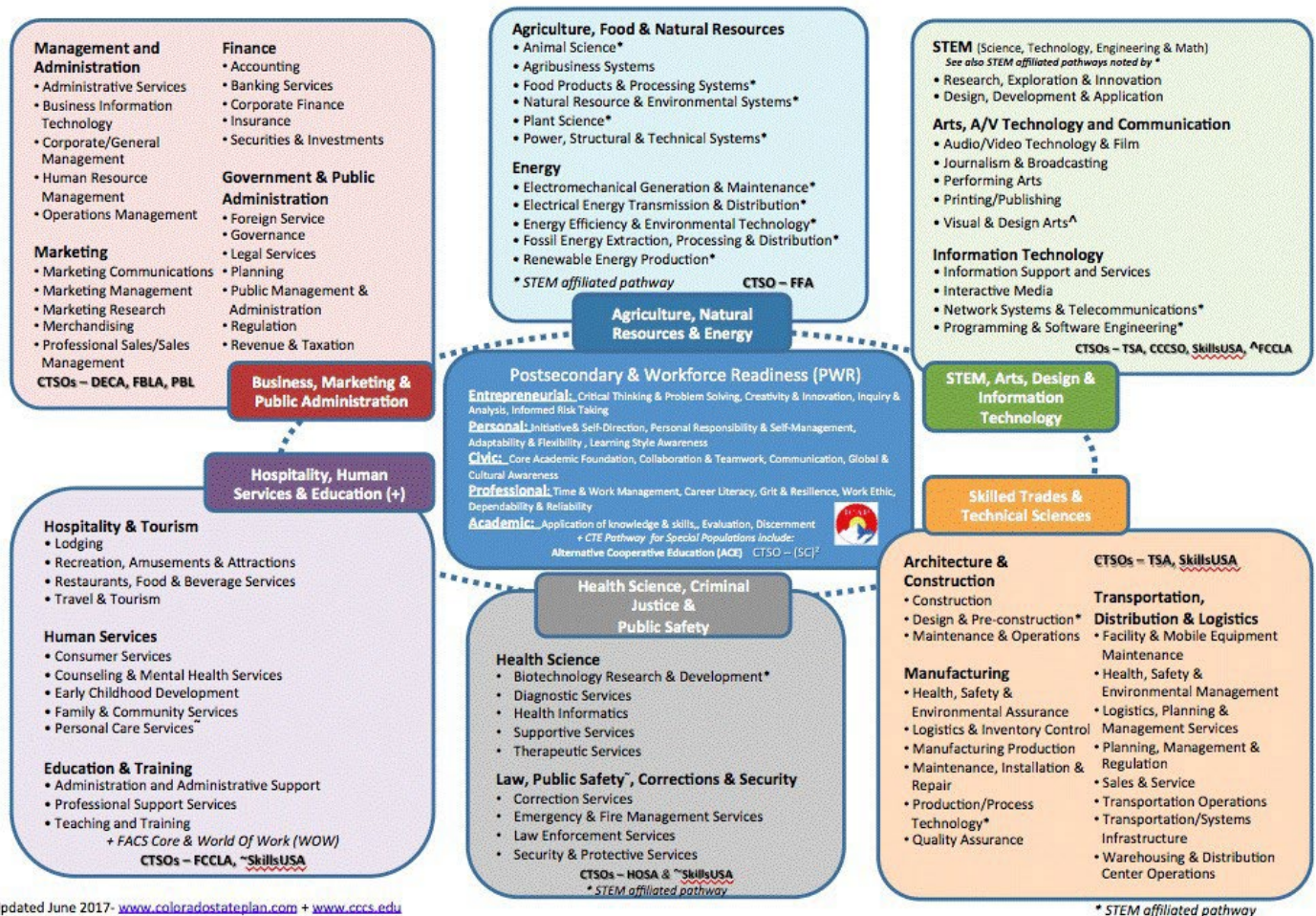
Career & Technical Education (CTE) Pathways Overview

What is a CTE Program?

Career and Technical Education (CTE) consists of programs that teach students specific career skills in middle school, high school, and post-secondary institutions. In Colorado, CTE is split into seventeen career clusters that meet the criteria of being high-wage, high-skill, and high-demand careers. CEC's Online Program offers numerous CTE pathways to allow students to achieve their educational and career goals.



Colorado Career Cluster Model



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

Structure of a CTE Program

Our CTE programs consist of a sequence of courses that are designed to teach students the skills they need to be successful academically and in the workplace within that specific career cluster. Our program begins with a class that focuses on career explorations, college and career awareness, and includes the opportunity to earn industry certifications. Most programs will include work-based learning experiences that expose students to work in that field at an early age.

Life Dimensions

Basecamp

Prerequisites: None

Designation: Essential Skills **Credit:** N/A

Basecamp is a required course for all CEC Online Program students. It is both the launching pad and the place to return over the course of a student's studies. Basecamp will provide a consistent touch point for students to engage with their teachers, advisors, and mentors. In Basecamp, students will develop essential skills to be successful in their learning, growth, and development. These skills will include self-regulated learning techniques, social and emotional learning strategies, the development of interpersonal relationships in the online/virtual environment, executive functioning skills, goal setting, and priority planning. Students in Basecamp will also be introduced to topics in Digital Literacy to enhance their experience navigating the online learning environment.

Career Exploration Capstone ♦

Credits: .5

Career Explorations is a one-semester course intended as a practical, hands-on guide to enable you to explore career opportunities in different career clusters and pathways. The course also enables you to create an academic and career plan based on your personal interests and skills and professional goals. This course consists of twenty-four lessons bunched into four units. Each lesson includes one or more activities. You will grade your work in the lesson activities by comparing them with sample responses. After completing each unit, you will work on a unit assignment and participate in a group discussion. In addition, you will complete a course assignment and a course project. You will submit the unit assignments, course assignment, and course project to your teacher for grading.

Career Interest Explorer : Plan ♦

Credits: .5

Career Interest Explorer: Plan in Grades 9–10 is a mini course designed to help students plan their high school academic journeys by identifying and maximizing opportunities that clarify their interests and prepare them for targeted career exploration. It combines the Career Interest Explorer app with interactive lessons that reveal how their interests can be transformed into goals and actions, leading to focused experiences and skill building in their chosen career paths. Unlike the more open-ended career exploration that students did in middle school, this early high school course guides students toward creating specific career paths. These paths enable students to intentionally engage in experiences that refine their goals and interests into actionable course choices and activities. Additionally, the course emphasizes essential, durable skills that are valued by all employers and applicable across all career paths. These skills include critical thinking, metacognition, and collaboration, which are crucial for personal decision-making.

College 101: The Student Experience ♦

Prerequisites: None

Designation: Essential Skills and College Only **Credit:** 0.5

This course introduces students to college culture and prepares them for the challenges they will face in higher education. Through a series of interactive seminars, students discover learning in a multicultural environment and use college and community resources to attain education and career goals.

College & Career Awareness

Prerequisites: None

Designation: College Prep and Essential Skills **Credit:** 1.0

This course is an integrated, exploratory program focusing on self-knowledge, education, and career exploration. The purpose of this course is to allow students to be involved in activity-centered lessons that explore careers, utilize technology, and develop life skills in the following potential Colorado CTE career pathways: agriculture, business, health science, health technology, marketing, technology education, and family and consumer sciences.

Consumer Math ♦

Credits: .5

In this course, you will learn practical applications of math. You will learn how to plan a budget, manage bank accounts, and figure out the cost of a good or service. You will also learn about taxes, payroll deductions, and how to invest and borrow money. This course will help you make informed decisions about buying or renting a home or car and teach you how to protect your purchases and investments with insurance. Finally, you will study economics, or the science of the creation, distribution, and consumption of goods and services. You will see how economics affects you as an individual and how it affects the country as a whole.

Digital Literacy ♦

Prerequisites: None

Designation: Essential Skills **Credit:** 0.5

Digital Citizenship is a comprehensive elective course designed to equip students with the knowledge and skills needed to navigate the digital world safely, responsibly, and thoughtfully. Through real-world scenarios, interactive activities, and reflective discussions, students will explore how their online actions shape their identity, relationships, and future opportunities. This course empowers students to become informed digital consumers, ethical creators, and respectful participants in an increasingly connected world. Students will examine topics such as digital identity and footprint, online safety and privacy, digital etiquette, media literacy, responsible technology use, and emerging issues such as artificial intelligence. By the end of the course, students will be better prepared to make informed decisions, protect themselves online, and contribute positively to digital communities.

Essential Career Skills ♦

Credits: .5

Essential Career Skills is a one-semester course that teaches the skills required to achieve success in modern-day careers. This course consists of twenty-two lessons bunched into five units. Each lesson includes one or more activities. You will grade your work in the lesson activities by comparing them with sample responses. After completing each unit, you will work on a unit assignment and participate in a group discussion. In addition, you will complete a course assignment and a course project. You will submit the unit assignments, course assignment, and course project to your teacher for grading.

Financial Literacy ♦

Prerequisites: None

Designation: College Prep **Credits:** 1.0

Description: Students will understand and explore how values, culture, and economic forces affect personal financial priorities and goals. In addition, students in this course will study a wide range of financial principles and ideas including rational decision-making processes and financial planning, the sources of income and lifetime earning power, models of saving and investment strategies, personal money management, budgeting, credit and its impact on personal finances, and the rights and responsibilities of buyers and sellers under consumer protection laws.

Life Skills ♦

Prerequisites: None

Designation: College Prep and Essential Skills **Credits:** 1.0

Have you ever asked the question, "When am I ever going to use this in life?!", this is the course for you! In this course, students will learn a number of useful skills for their everyday life. This course will cover Basic Needs, Self-Care, and Home Care. The purpose of this course is to equip students with a number of effective skills that are needed in day-to-day life, such as checking fluid levels on automobiles, finding available jobs, shopping for groceries on a budget, patching drywall holes, becoming a self-starter, and how to cope with failure. This class focuses on Life Education.

Test Prep ♦

Prerequisites: None

Designation: High School Only **Credit:** 0.5

This elective course prepares students for success on a variety of aptitude, college readiness, and career certification exams. Students will develop test-taking strategies, strengthen critical reading, writing, and mathematics skills, and practice with assessments such as the SAT, ACT, ASVAB, Accuplacer, and industry certification exams. Emphasis is placed on problem-solving, time management, study skills, and building confidence in high-stakes testing environments while exploring career and postsecondary opportunities.

WorkKeys Applied Math ♦

Credits: .5

ACT WorkKeys Applied Mathematics—Leveled aligns to the ACT WorkKeys test for Applied Mathematics. The course is divided into five units, labeled 1 through 5, with each unit corresponding to one of the five levels (3 through 7) of the ACT WorkKeys Applied Mathematics test. This course will help you develop mathematical skills with real-world applications that will be beneficial in the workplace. Some of these mathematical skills include working with fractions, decimal numbers, percentages, ratios, rates, unit conversions, perimeter, area, volume, statistical concepts, and a few out-of-the-ordinary concepts, such as finding the best deal and determining where and how mistakes occur. Each lesson carefully explains concepts in an easy-to-understand manner. Activities and tests will help you practice what you have learned.

WorkKeys Graphic Lit ♦

Credits: .5

ACT WorkKeys Graphic Literacy will help you understand how to locate, identify, and analyze information in graphics, which are key skills expected in the workplace today. The lessons within each unit of this course target the essential concepts assessed on the ACT WorkKeys test for Graphic Literacy. The graphics used in the test vary in complexity and density of information.

This single-semester course is divided into four units. In the first and second units, which correspond to levels 3 and 4 of the test, you will focus on identifying information in simple graphics. In the third unit, which corresponds to level 5, you will interpret advanced graphics. In the last unit, which corresponds to levels 6 and 7, you will use the information found in complex graphics to interpret a trend or pattern. Each lesson carefully explains concepts in an easy-to-understand manner. Activities and tests will help you practice what you have learned.

WorkKeys Production of Writing ♦

Credits: .5

Production of Writing is the study of principles of grammar and effective writing, and the application of these principles to writing. In Production of Writing, you will learn about the types of sentences, punctuation marks and grammar rules such as subject verb agreement and tenses; you will also learn about different parts of speech and

their correct usage; examine the concept of parallel structure in sentences as well as identify and correct run-on sentences. Finally, you will learn about developing paragraphs and essays.

WorkKeys Workplace Documents ♦

Credits: .5

ACT WorkKeys Workplace Documents is a single-semester course that focuses on the skills you will use to read and write documents while at work. These documents, which range from basic to complex, include emails, letters, directions, signs, bulletins, policies, websites, contracts, and regulations. This course is divided into five units that teach skills that increase in both difficulty and complexity to mirror the Workplace Documents assessment. In units 1 and 2, you will identify the main idea and specific details of straightforward, basic documents. You will need to comprehend instructions and procedures so you can apply the information to situations similar to those found in the documents. In unit 3, you will focus on developing the skills needed to use context clues to understand unfamiliar words, including jargon and technical terms. The documents in this unit will be longer and will include extraneous information. In unit 4, you will infer implied details from more complex documents and identify the rationale behind a document. Finally, in unit 5, you will use the skills you have learned throughout the course to read very complex documents that include complicated information and difficult vocabulary.

WorkKeys Writing: Expression of Ideas (SAT Writing) ♦

Credits: .5

The SAT Writing Course was developed by aligning Plato Courseware with the topics that are assessed on the 2016 SAT. Each unit aligns to one or more topics within the 2016 SAT. This course focuses on the study of different writing strategies and language skills. In this course, you will find a variety of lessons and activities to enhance your knowledge of these strategies.

Career & Technical Education (CTE) Courses

Adobe Creative Cloud Certification

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** 0.5

The future belongs to those who create. Whether it is to inform, persuade, entertain, or inspire, success in the digital age means communicating in visually rich and interactive ways. With a firm grasp on the world's most powerful creative tools, Adobe Certified Professionals are ready to make their mark.

Adobe Certification Pathway: Adobe Certified Professional is the industry-recognized certification that demonstrates mastery of Adobe Creative Cloud software and must-have knowledge for digital media careers. Each exam is integrated with an Adobe application — including Photoshop, Illustrator, and Premiere — and, designed by experts, allowing for an authentic assessment of job-ready skills.

ASK Business Institute – Certification Lab: Fundamentals of Business Concepts ♦

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** 0.5

The ASK Institute Business Certification Exams are industry leaders in ensuring students have the proper foundation in business principles and learning outcomes. The ASK Institute partners with MBA research as well as leaders in the public and private sector to create these exams that document a student's understanding of essential business skills and concepts. The certification in Fundamentals of Business Concepts focuses a students learning on the following core concepts: economic, operations, financial analysis, information management, customer relations, and strategic management.

ASK Business Institute – Certification Lab: Fundamentals of Marketing Concepts ♦

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** 0.5

The ASK Institute Business Certification Exams are industry leaders in ensuring students have the proper foundation in business principles and learning outcomes. The ASK Institute partners with MBA research as well as leaders in the public and private sector to create these exams that document a student's understanding of essential business skills and concepts. The certification in Fundamentals of Marketing Concepts focuses a student's learning on the following core concepts: marketing, product service management, promotions, market-information management, selling, and customer relations.

ASK Business Institute – Certification Lab: Concepts of Entrepreneurship ♦

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** 0.5

The ASK Institute Business Certification Exams are industry leaders in ensuring students have the proper foundation in business principles and learning outcomes. The ASK Institute partners with MBA research as well as leaders in the public and private sector to create these exams that document a student's understanding of essential business skills and concepts. The certification in Fundamentals of Business Concepts focuses a student's learning on the following core concepts: entrepreneurship, product service management, market planning, economics, strategic management, and financial analysis.

Certification Lab ♦

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** 0.5

Certification Lab houses all of our career and technical readiness courses under one banner. Certification Lab provides high school students with the chance to earn valuable, industry-recognized certifications that prepare them for college, career, and life after high school. Students can choose from professional, industry recognized credentials and certificates in Adobe Creative Cloud, Microsoft Office Specialist, IT Fundamentals, Entrepreneurship & Small Business, and QuickBooks. Employers and colleges recognize these certifications giving students a competitive edge as they plan their next steps. This course satisfies Colorado's Career Development Incentive Program (CDIP), which supports schools in offering high-value credentials and certificates that lead to post-secondary opportunities for students. By completing one or more of these industry recognized certifications, students demonstrate workplace readiness, technical skillsets, and problem-solving abilities. In Certification Lab, students will receive guided instruction and practice to prepare for certification exams, build a portfolio of technical and professional skills, gain hands-on experience with tools and software widely used in today's workplaces and learn how to connect certifications to career pathways in business, technology, design, and entrepreneurship. Certification Lab helps students graduate not just with a diploma, but with stackable credentials that open doors to entry-level job opportunities while pursuing further education or college programs where industry certifications strengthen applications. These career pathways all align with a student's Individual Career and Academic Plan (ICAP).

Cosmetology IA ♦

Credits: .5

Cosmetology I A, is the first part of a two-semester course. The course begins with an introduction to the cosmetology profession, in which you will analyze its history, evaluate its evolution, and assess the impact of key figures on modern beauty techniques. You will examine ancient beauty practices, trace key historical milestones, and investigate the evolution of tools and techniques. You will explore career pathways, identify required skills, and compare traditional and non-traditional opportunities. You will also interpret licensing requirements, outline the process of obtaining and maintaining a cosmetology license, and describe the importance of continuing education. You will apply federal and state-mandated safety, sanitation, and infection control principles to maintain industry standards. You will analyze hair structure and function and learn about common scalp diseases and disorders. You will examine the anatomy relevant to barbering for haircutting and grooming techniques. You will demonstrate proficiency in hair care services by practicing shampooing, conditioning, scalp treatments, and hairstyling techniques adapted to different hair types.

Culinary Arts A ♦

Credits: .5

Culinary Arts, Semester A, is a one-semester course that is intended to help you gain an understanding of the history and development of culinary arts. This course covers the basics of nutrition, health, safety, and sanitation. In addition, the course explains the basic science principles used in cooking and various cooking methods. Finally, the course describes culinary skills required to make a variety of items, ranging from stocks and soups to seafood and poultry to various breads and desserts.

Drafting and Design A ♦

Credits: .5

This one-semester course is intended to help you familiarize yourself with various aspects of drafting and design. This course has fifteen lessons organized into four units. Each unit has a Unit Activity and each lesson contains one or more Lesson Activities. This course covers the fundamental concepts of drafting and design, types of drafting tools, drafting conventions, sketching and drawing techniques, types of views and projections, and basic computer-aided design and drafting (CADD) operations. You will submit the Unit Activities to your teacher, and you will grade your work on the Lesson Activities by comparing them with the given sample responses. The Unit

Activities (submitted to the teacher) and the Lesson Activities(self-checked) are the major components of this course. There are other assessment components, namely the mastery test questions that feature along with the lesson; the pre- and post-test questions that come at the beginning and end of the unit, respectively; and an end-of-semester test. All of these tests are a combination of simple multiple-choice questions and technology-enhanced (TE) questions.

Engineering and Technology A&B ♦

Credits: .5

Engineering and Technology is a two-semester course designed to focus on the fundamental concepts of engineering and technology. Students will learn about important inventions and innovations in engineering and technology, engineering's contributions to society, and how fields such as science, mathematics, and technology influence engineering. They will also learn how to identify various measurement devices, use the engineering design process to create models or prototypes to address real-world problems, and employ drafting techniques—both manual and using computer-aided design (CAD) software—to produce two-dimensional drawings. In addition, the course covers the technologies, principles, and safety considerations in various engineering and technology career areas. The course will also teach students about career areas in the engineering and technology industries and the skills and education required, as well as the job outlook, demand, and projected wages of various career options in the field. Through focused mini lessons, students will be introduced to durable skills such as metacognition and critical thinking, and they will have opportunities to practice and begin applying these skills in career-specific activities

Exercise Science A ♦

Credits: .5

Exercise Science A is the first part of a two-semester course. The course begins with an introduction to the historical development of exercise physiology. You will demonstrate proficiency in the use of medical terminology. You will then describe the human body's anatomy, physiology, and stages of growth and development. You will become familiar with biomechanics and kinesiology. You will gain an understanding of various body systems: the musculoskeletal, respiratory, circulatory, nervous, endocrine, integumentary, and immune systems. Finally, you will learn about nutrition, physical activity, and wellness. This course consists of fourteen lessons organized into four units, four Unit Activities, and four Discussions. Additionally, there is one Course Activity and one Course Project that you need to work on throughout the course. Each lesson contains one or more Lesson Activities. You will grade your work in the Lesson Activities by comparing it to sample responses. You will submit the Unit Activities, Course Activity, and Course Project to your teacher for grading.

Financial Mathematics A ♦

Credits: .5

Financial Mathematics A is designed to introduce you to the basics of financial algebra. This course includes lessons that focus on planning for expenses and developing financial goals. You will learn to use algebraic expressions that model growth that is due to interest. You will also describe investments in terms of their cost, risks, and returns.

Forestry and Wildlife Management A ♦

Credits: .5

Forestry and Wildlife Management, Semester A, is the first part of a two-semester course. In this course, you will identify employment and entrepreneurial opportunities in forestry, wildlife, and natural resource management. You will learn about safety hazards and procedures. You will examine water sources and water quality. You will learn

about mineral resources, mineral extraction, types of trees, plant processes, aquatic resources, and invasive species. You will identify types of land resources. You will explain how parks are funded and managed. You will also learn about forest management methods and silviculture practices. Finally, you will learn about the carrying capacity of rangelands and the consequences of overgrazing.

IT Specialists Certification ♦

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** 0.5

The Information Technology Specialist program is a way for students to validate foundational IT skills sought after by employers. The IT Specialist program is aimed at candidates who are considering or just beginning a path to a career in information technology. Students can certify their knowledge in a broad range of IT topics, including software development, database administration, networking and security, cybersecurity, mobility and device management, and coding.

IT Fundamentals: Certification Pathway: Through Certiport's full pathway solution you can prepare your students for the cloud computing workforce with tailored learning materials, practice tests, and certification exams. Adding these materials into your curriculum is easy and seamless.

Microsoft Office Certification ♦

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** 0.5

The Microsoft Office Specialist Program provides industry-leading assessments of skills and knowledge through our project-based testing, giving students and professionals real-world exercises to appraise their understanding of Microsoft Office, notably in the applications Word, Excel, PowerPoint, and Outlook. This guarantees that every certified user can prove they have the ability to command the full features and functionality of Microsoft Office, preparing them for future academic or workforce opportunities. In the US over 1.17 million jobs request Microsoft Office skills. With MOS certification you can prove you have the skills to be more effective and productive as well as have a higher work quality.

Microsoft Academy Certification Pathway: Microsoft certification gives students and workforce candidates the power to chart their own course, fulfill their ambition, and realize their potential. See the statistics that validate that these certifications give you the tools to build a brighter future and prepare yourself for a successful career.

Principles of Architecture and Construction A ♦

Credits: .5

The Principles of Architecture and Construction A course is intended to help familiarize you with basic concepts of architecture and construction and a wide range of careers available in this field. Principles of Architecture and Construction, Semester A begins by introducing foundational concepts of architecture and construction. This course covers architectural drawings, structure and loads, materials, and equipment used in architecture and construction. In this course, you will also review career opportunities in the field of Architecture and Construction. Finally, this course will explain the important workplace ethics required in this field.

Robotics IA ♦

Credits: .5

Robotics IA is a one-semester course that explains various concepts related to robotics. This course begins by describing the evolution and applications of robotics. This course helps you identify career opportunities and important employability skills in robotics. You will explain the importance of teamwork and describe the skills needed to work in a team. You will describe Newton's laws of motion and their applications in robotics. You will

describe basic concepts of electricity, electronic circuits, Boolean algebra, magnetics, and their applicability to robotics. You will apply safety procedures and construct a simple robot.

QuickBooks Certification ♦

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** 0.5

The Intuit QuickBooks Online Certified User (QBOCU) certification is an industry-recognized credential that validates one's skills in using the Intuit QuickBooks Online accounting software. It is designed for students who are learning to use and master the QuickBooks Online software as part of their accounting, finance, entrepreneurship, or business class. The certification is proof they have acquired the knowledge and skills to effectively use the Intuit QuickBooks Online software within a business environment whether they choose to open their own business or work for an employer. The main concepts in the course will include Intuit QuickBooks Online Administration; Sales and Money-In; Vendors and Money-Out; Bank Accounts, Transaction Rules, and Receipts; and Basic Reports and Views.

Work-Based Learning 🌐

Prerequisites: None

Designation: High School and College/Career Prep **Credit:** Variable

This course provides juniors and seniors with the opportunity to earn high school credit through meaningful workplace experiences connected to their Individual Career and Academic Plan (ICAP) and post-secondary goals. Students may participate in a paid or unpaid job, internship, or apprenticeship in partnership with local businesses and community organizations. As part of Colorado's Career and Technical Education (CTE) framework, this course allows students to apply academic knowledge and technical skills in real-world settings while developing professional habits that prepare them for college, career, and life after graduation. With guidance from teachers and workplace mentors, students will set personal learning objectives, reflect on their progress, and document their growth toward future success. To be eligible, students must be in good academic standing, provide proof of employment or placement, and obtain approval from a school counselor or work-based learning coordinator. Credit will be variable and is awarded based on documented hours worked, completion of required reflections and evaluations, and demonstration of progress toward ICAP and career goals.

Liberal Arts and Sciences

American Dynasties ♦

Prerequisites: None

Designation: College Prep **Credit:** 0.5

The course will explore the idea of dynasties in American history by focusing on the Disney Brothers and the Kennedy Family. Students will examine the profound impact of the Disney Brothers and the Kennedy family on American culture, politics, and economy. Students will explore how these families built their respective empires, the challenges they faced, and their lasting legacies. The course will further explore America's development and will offer lessons on leadership, innovation, and public service through a unique blend of studies in history, economics, civics, and geography.

Astronomy ♦

Prerequisites: None

Designation: College Prep **Credit:** 0.5

Astronomy is one of the oldest sciences practiced by humankind and focuses on the study of celestial bodies such as stars, planets, comets, and galaxies. Ancient Greeks used star positioning to navigate as well as to determine what crops to plant and when. In this course, students will study a myriad of topics pertaining to the science of Astronomy, including an overview of the introduction to this scientific practice, a guide to the galaxies, an overview of our solar system, and the basic elements of the stars.

Baseball and the American Century ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

Popular and historical trends since the American Civil War – entertainment, fashion, sport, celebrity – have come and gone, as they always will. Some have unexplainable staying power though, and baseball is one of them. “The one constant through all the years,” said the late, great, James Earl Jones (*The Field of Dreams*), “has been baseball. America has rolled by like an army of steamrollers. It has been erased like a blackboard, rebuilt, and erased again. But baseball has marked the time . . . this game – it’s a part of our past.” This class will explore American history and culture since the Civil War through the lens of our very own, and unique, pastime.

Fail Better ♦

Prerequisites: None

Designation: College Prep **Credit:** 0.5

Failure is not the opposite of success - it is the foundation of growth. This elective helps students examine, experience, and reframe failure as a powerful learning tool. Through readings, media, real-life challenges, and guided reflection, students will learn to embrace productive struggle, develop resilience, and build lifelong habits of curiosity and courage. By the end of the course, students will be able to: Explain the five fundamental sides of failure; identify personal patterns related to fear, avoidance, resilience, and motivation; apply structured approaches to taking risks and learning from setbacks; complete real-world challenges and analyze outcomes; and, develop a personal “Failure Portfolio” documenting growth, insights, and next steps.

Fantasy Literature ♦

Prerequisites: None

Designation: College Prep **Credit:** 0.5

This class will study Brandon Sanderson's epic fantasy novel, *The Way of Kings*. In this class we will analyze complex characters, epic fantasy world-building, and identify themes of leadership and morality by applying critical thinking skills to the reading.

Food Science ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

This introductory course explores the fundamental principles of food science, including food chemistry, microbiology, processing, and nutrition. Students will examine the science behind food production, safety, and quality, and gain insights into current issues such as food sustainability and innovations in food technology. Designed for both students of science and non-, the course combines recorded lectures, hands-on lab activities, and real-world case studies to provide a comprehensive understanding of the science that shapes the modern food system.

Forensic Science I ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

This engaging online course introduces students to the fundamentals of forensic science through real-world applications and investigative techniques. Students will develop critical observation and deductive reasoning skills while exploring topics such as eyewitness testimony, the Innocence Project, and the investigative process. They will learn how to analyze different types of evidence, document crime scenes through sketching and photography, and understand the importance of proper evidence collection and chain of custody. The course also examines the journey of forensic evidence from the crime scene to the courtroom and explores the history of forensic science. Through interactive lessons and case studies, students will gain a deeper understanding of how forensic science plays a crucial role in the justice system.

Forensic Science II ♦

Prerequisites: Forensic Science I

Designation: College Prep **Credit:** 0.5

Please note: This course is only available to students who have passed Forensic Science I and due to mature content is only available to high school students. Forensic Science II builds upon the foundational skills and concepts introduced in Forensic Science 1, offering students the opportunity to explore more advanced topics in evidence analysis and human investigation. Continuing with Items of Interest (Evidence), students will delve into the study of DNA profiling, blood evidence, ballistics, and arson investigation - learning how science helps uncover the truth behind violent crimes. The course then transitions into The Body as Evidence, examining toxicology, the stages of decomposition, death investigation, forensic entomology, and forensic anthropology. Students will analyze how experts use biological and chemical evidence to determine time and cause of death, culminating in a virtual autopsy experience. Throughout this course, students will continue to sharpen their analytical and critical-thinking skills, building confidence as forensic investigators. Step once again into the world of forensic science, where curiosity drives discovery and every piece of evidence has a story to tell.

Health Science A ♦

Credits: .5

This one-semester course is intended to help you understand the basic structure and function of the human body. This course has sixteen lessons organized into four units, plus four Unit Activities. Each lesson contains one or more Lesson Activities. This course will cover the structure of the human body systems and their functions. It will also cover diseases and medical procedures related to each body's system.

Horticulture: Ready, Set, Grow! ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

In this course, green thumbs will meet creative minds! In this hands-on class, you will dig deep into the fascinating world of plants, learning everything from soil science to sustainable gardening practices. Whether you are cultivating flowers, vegetables, or trees, you will gain the skills needed to grow healthy, thriving plants while exploring the environmental impact of gardening. This class is all about making a difference – not just in your garden, but in the world around you. We will cover the basics of plant biology, eco-friendly pest management, and innovative landscaping techniques, all while fostering a love for nature and sustainability. Plus, get ready to roll up your sleeves and put your learning into practice through exciting projects, like designing and maintaining a school garden and even experimenting with hydroponics. By the end of the course, you will not only have a green thumb but also a deeper appreciation for how plants play a vital role in our ecosystem. Ready to plant the seeds for a future full of growth? Ready, Set, Grow!

Intro to Fashion Design ♦

Credits: .5

Introduction to Fashion Design is a one-semester course intended to introduce you to the basics of fashion design. This course is designed to provide your insight on the history of fashion and its place in the modern world and to help you understand terms and concepts related to fashion. From the inspiration for a garment to creating sketches until the final product takes shape is a long process that involves various activities such as fashion forecasting, predicting consumer demand, drafting the designer's worksheet, pricing, etc.

Intro to Film Practice ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

Intro to Film Practice will provide students with the opportunity to explore the theoretical aspects of filmmaking through the hands-on experience of bringing their creative visions to life. Designed to complement Intro to Film Theory and only available to students who have passed that course, Intro to Film Practice will guide students through every stage of the production process — from scriptwriting and storyboarding to lighting, cinematography, and editing — through the opportunity of creating bare bones film projects. Students will plan, shoot, and edit their own short films while learning how visual and technical choices shape storytelling. By the end of the course, students will have developed both the creative and practical skills needed to craft short form cinematic stories. Please note, students must have access to some form of small camera or smart phone or device capable of recording video and have passed Intro to Film Theory.

Introduction to Film Theory ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

Intro to Film Theory offers an engaging exploration of the key ideas and frameworks that shape our understanding of cinema. This course introduces students to foundational concepts such as auteur theory, genre analysis, spectatorship, and the politics of representation, examining how films create meaning and influence culture. Additionally, blending both cultural study and history, Intro to Film Theory will offer students a survey of the major developments and movements that have shaped moviemaking and the history of cinema for the last 145 years. Through screenings, readings, and discussions, students will develop critical tools to analyze film form, narrative structure, and visual style, gaining deeper insight into the artistic and social significance of cinema. Students who take Intro to Film Theory in the fall will be eligible to take Intro to Film Production in the spring with a chance to put theory into practice.

Intro to Forensic Science ♦

Credits: .5

This one-semester course is intended for you to familiarize yourself with the knowledge and skills required for a career in Forensic Science. This course has fifteen lessons organized into four units, plus four Unit Activities. Each lesson contains one or more Lesson Activities. In Introduction to Forensic Science, you will learn about the importance and limitations of forensic science and explore different career options in this field. You will also learn to process a crime scene, collect, and preserve evidence, and analyze biological evidence such as fingerprints, blood spatter, and DNA. Moreover, you will learn to determine the time and cause of death in homicides and analyze ballistic evidence and human remains at a crime scene. Finally, you will learn about forensic investigative methods used in arson, computer crimes, financial crimes, and forgeries.

Intro to Marine Biology ♦

Credits: .5

This one-semester course is intended to help you familiarize yourself with the knowledge and skills required for a career in marine biology. This course has fifteen lessons organized into four units. Each unit has a Unit Activity, and each lesson contains one or more Lesson Activities. In the Introduction to Marine Biology course, you will explore the fundamental concepts of marine biology. You will learn about the formation and characteristic features of the oceans. You will also learn about scientific methods and explore careers available in marine biology. The course will introduce you to the characteristic features of different taxonomic groups found in the ocean. You will learn about the different habitats, life forms, and ecosystems that exist in the oceans and explore the different types of adaptations marine creatures possess to survive in the ocean. You will learn about succession and the flow of energy in marine ecosystems. Finally, you will also learn about the resources that oceans provide and the threats that oceans face from human activities.

Intro to Vet Science ♦

Credits: .5

This one-semester course is intended for you to familiarize yourself with the knowledge and skills required for a career in the veterinary industry. This course has thirteen lessons organized into three units, plus three Unit Activities. Each lesson contains one or more Lesson Activities. In the Introduction to Veterinary Science course, you will explore the history of veterinary science, and the skills and requirements for a successful career in the veterinary industry. You will also explore the physiology and anatomy of animals, learn how to evaluate their health, and determine effective treatment for infectious and noninfectious diseases. Additionally, you will learn about zoonotic diseases, and the impact of toxins and poisons on animal health.

Philosophy ♦

Prerequisites: None

Designation: College Prep **Credit:** 0.5

This course provides students with an engaging and thought-provoking exploration of fundamental philosophical ideas. Students will analyze and discuss major philosophical themes, including logic, metaphysics, epistemology, ethics, political philosophy, the philosophy of religion, and existentialism. Through primary texts, critical discussions, and written reflections, students will develop strong analytical and reasoning skills, allowing them to question assumptions, construct logical arguments, and explore the relevance of philosophy in their daily lives. This course is ideal for students interested in deepening their understanding of human thought and inquiry.

Psychology ♦

Credits: .5

This one-semester course is intended for you to familiarize yourself with various theories of psychology and analyze human behavior. In Psychology, Semester B, you will explain the established theories of cognitive, psychosocial, and moral development. You will identify the factors that influence interpersonal relationships, recognize the origins and effects of violence, and describe prevention and treatment options for addictive behavior. You will explain abnormal behavior and describe different types of psychological disorders. You will trace the history of psychological counseling and therapy and describe strategies used for problem solving and coping with stress. You will describe some key statistical concepts used in psychological research and testing and identify career opportunities in psychology.

Business

Entrepreneurship A WBL ♦

Credits: .5

This one-semester course is intended to help you identify the components of a business plan, describe ideation and innovation in products and pricing, explain the market research process, and list various management functions of operations management. The course has eighteen lessons organized into four units. Each unit has a Unit Activity and each lesson contains one or more Lesson Activities. Additionally, the course includes a comprehensive Course Activity. This course will cover the roles and attributes of an entrepreneur, marketing and its components, the selling process, and operations management. You will submit the Unit Activities to your teacher, and you will grade your work on the Lesson Activities by comparing them with the given sample responses. The Unit Activities (submitted to the teacher) and the Lesson Activities (self-checked) are the major components of this course. There are other assessment components, namely the mastery test questions that feature along with the lesson; the pre- and post-test questions that come at the beginning and end of the unit, respectively; and an end-of-semester test. All of these tests are a combination of simple multiple-choice questions and technology-enhanced (TE) questions.

Entrepreneurship B WBL ♦

Credits: .5

This one-semester course is intended to help you familiarize yourself with various aspects of drafting and design. This course has seventeen lessons organized into four units. Each unit has a Unit Activity and each lesson contains one or more Lesson Activities. This course will cover the different types of capital that a business needs at different stages, the nature of legally binding contracts, the different functions of the human resources division of a company, and the types of risks that entrepreneurs face. You will submit the Unit Activities to your teacher, and you will grade your work on the Lesson Activities by comparing them with the given sample responses. The Unit Activities (submitted to the teacher) and the Lesson Activities (self-checked) are the major components of this course. There are other assessment components, namely the mastery test questions that feature along with the lesson; the pre- and post-test questions that come at the beginning and end of the unit, respectively; and an end-of-semester test. All of these tests are a combination of simple multiple-choice questions and technology-enhanced (TE) questions.

Intro to Entrepreneurship ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

In this introduction to the principles of entrepreneurship, students will learn the fundamental concepts of how to turn an idea into a successful business. Topics will include, writing a business plan, conducting market research, designing marketing and promotional plans, undertaking cost analysis plans and generating a financial analysis, and understanding the basics of networking.

Computer Sciences

Computer Programming I ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

The vast digital world in which we live is constructed by coders. In this course, students will gain the knowledge necessary to understand programming vocabulary and concepts. Topics covered in the course will include the programming languages HTML, CSS, and JavaScript and complete coding exercises that apply these languages.

Computer Programming II ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

In this course, students will build upon the fundamentals that they established in Computer Programming I and elevate those skills to higher level of understanding and application with a particular focus on mastering the Python computer programming language. Topics of study will include functions and exceptions, strings, creating and altering and extending data structures, among other concepts.

Designing Games with Minecraft ♦

Prerequisites: None

Designation: College Prep **Credit:** 0.5

Designing Games with Minecraft is a project-based middle school course that introduces students to the fundamentals of game design while exploring careers in the gaming and esports industries. Using Minecraft Education, students create their own interactive worlds, design game mechanics, and work in teams to build playable challenges. Throughout the course, students develop creativity, collaboration, communication, and problem-solving skills. The course concludes with students organizing and participating in a Minecraft tournament using the games they have designed.

Esports ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

In this course, students will practice the fundamentals of Esports. This introductory course provides students with a digital framework through an Esports lens. Students will explore the history of Esports, practice good gamer mental and physical health, participate in journaling and reflection practices, and will practice active Esports skillsets with their teammates. The curricular content is a standards-based, peer-reviewed, and peer-approved curriculum, which employs CTE, ISTE and STEM accredited resources.

Foundations of Artificial Intelligence A ♦

Credits: .5

Foundations of Artificial Intelligence, Semester A, is the first part of a two-semester course. In this course, you will learn about the key concepts of artificial intelligence (AI). You will outline the history of AI and examine key AI areas, such as machine learning, natural language processing, and computer vision. You will examine data types and data storage and create databases. You will organize and analyze data and create visual representations. You will evaluate sensing mechanisms and perception systems. You will evaluate various machine learning model types. You will learn how to train and evaluate a classification model. You will also examine datasets and address data bias in models. Finally, you will examine neural network types and their real-world applications.

Game Design Development

Prerequisites: None

Designation: College Prep **Credit:** 0.5

In this course, students will be introduced to the world of Game Design through hands-on projects in Unreal Engines. Students will build video games in 3D and create an online portfolio — all preparing for a career in Game Design. Units will include How to Build a Rube Goldberg Machine, How to Analyze Video Games, and How to Build Virtual Worlds, among others.

Art, Music, and Writing

Creative Writing ♦

Designation: Middle School and College Prep **Credits:** 1.0

Creative Writing is a year-long elective course for students who are interested in learning how to cultivate the habit, attitude, and responsibility of the creative writer. Students will learn how to create, develop, and refine original forms of descriptive and aesthetic writing. As they read and write, students will become familiar with a variety of genres, including short stories, poetry, and screenplays. Students will focus on developing their use of a variety of creative writing techniques to improve their craft.

Music Appreciation ♦

Credits: .5

Music Appreciation introduces students to the history, theory, and genres of music, from the most ancient surviving examples to the most contemporary in the world at large. The course is offered in a two-semester format. The first semester covers primitive musical forms and classical music. The second semester presents rich modern traditions, including American jazz, gospel, folk, soul, blues, Latin rhythms, rock and roll, and hip-hop. The course explores the interface of music and social movements and examines how global society and the internet bring musical forms from around the world together in new ways.

Music Makers Lab I (Synthase) ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 1.0

This class is perfect for those who dream of making their own music but are not sure where to start. You will take songs apart and try to put them back together, and in the process learn tools and concepts that can help you make new songs of your own. By the end, you will have original tracks to share with the world, plus an understanding of music technology that can help you get to the next level. This class is based in a Digital Audio Workstation and prior experience with music is not required.

Music Makers Lab II (Synthase) ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 1.0

When musical artists have the basic skills of working with a Digital Audio Workstation under their belt, they can focus on developing their craft and artistic voice by repeating the process of making and learning until their ability matches their taste. In our case, this will happen through the creation of an EP of highly original, highly polished tracks, which you will have the option to release on Soundcloud or Bandcamp. This requires independent, self-paced work and includes one-on-one meetings with the instructor as well as peer feedback sessions.

Operation Echo (Synthase) ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 1.0

Music-makers: What would you do if you could work together with your peers and a professional musician mentor, dream up something awesome, and build it together? Would you re-score a favorite movie? Send the Mars astronauts a personalized soundtrack? Try to collab with one of your musical heroes? Reach across the world for musical material, turn it into something awesome, and send it back? Here is your chance to propose, plan, research, and create something musical that you will be talking about for years. Bring a collaborative spirit, some experience with a Digital Audio Workstation (such as Soundtrap or FL Studio), a computer, and your craziest ideas, and let us see what we can make happen.

Visual Arts

Adobe Digital Art & Graphic Design ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

In this course, students will be introduced to the basic principles and elements of graphic design. They will learn how to use Adobe Photoshop and Illustrator to create and edit images, posters, logos, patterns, icons, and more.

Digital Photography ♦

Prerequisites: None

Designation: Middle School and College Prep **Credit:** 0.5

Digital Photography is a beginner-friendly course designed to help students explore the creative power of photography using something they already carry every day — their phone. No professional camera or prior experience is required; students simply need curiosity and a willingness to see the world differently. Throughout the course, students will learn foundational photography skills such as composition, filling the frame, texture, black-and-white photography, color, framing, lines, shapes, form, and light and shadow while also studying famous photographers and how they use these techniques to tell stories and capture emotion. Students will complete a short introduction to Photopea, a free web-based editing program, where they will learn basic photo editing skills including cropping, resizing, color adjustments, layers, and simple image corrections. By the end of the course, students will feel more confident using their phone camera creatively, understand key photography principles, and develop a small portfolio of images they are proud of while learning to see more beauty, creativity, and meaning in the world around them.

Graphic Design and Illustration ♦

Credits: .5

This one-semester course is intended as a practical, hands-on guide to help you understand graphic design concepts, graphic image creation, and image manipulation. This course has fourteen lessons organized into four units, plus 4 Unit Activities. Each lesson contains one or more Lesson Activities. This course covers careers you can pursue in graphic design. It also covers training and skills required for a graphic designer. In addition, this course describes how to create images using color and typography and how to manipulate images. It also guides you how to create images using design elements and principles. Finally, this course covers copyright laws and ethics related to the use of graphic design.

Professional Photography A ♦

Credits: .5

This one-semester course is intended as a practical, hands-on guide to help you understand the skills required to achieve success in careers in photography. This course has fourteen lessons organized into four units, plus four Unit Activities. Each lesson contains one or more Lesson Activities. This course will cover various topics in photography, such as history of photography, types of photography, types of cameras, camera support equipment, types of camera lenses, exposure, lighting setups, rules of composition, color photography, storing and manipulating images, copyright laws and fair use, and printing photos.

Health and Nutrition

Health ♦

Credits: .5

Everyone needs to take care of their body, but we are not necessarily born with the knowledge of how to go about it. It is important to invest time and energy into understanding what it means to be healthy. There are many activities you can engage in which are dangerous for your long-term health, so you need to know how to identify and avoid these activities. It is also important to identify lifestyles which will lead to a longer, more enjoyable life. This course will guide you through lifestyle choices you will make which will impact your life in meaningful ways.

Nutrition A ♦

Credits: .5

In Nutrition A, you will explore the foundational principles of nutrition science as you prepare for a career in nutrition, dietetics, or a related health field. You will learn how professionals evaluate and address dietary needs across diverse populations. Throughout the course, you will assess dietary guidelines, analyze nutrient functions, and evaluate food choices in relation to health outcomes. You will also study digestion, metabolism, and energy balance to understand how the body processes and uses nutrients. Additionally, you will examine food safety, cooking techniques, meal planning strategies, and dietary modifications for individuals with specific health conditions. Through critical analysis of nutritional research and application of evidence-based practices, you will develop the skills necessary to guide clients in making informed dietary choices and promoting long-term health.

Physical Education ♦

Credits: .5

Your body is a machine that has certain needs—if you treat it well, it should be able to serve you well. But what can you do to promote a fit and healthy body? A course in physical education can show you. By definition, physical education is instruction in exercise and physical activity. It teaches you how to maintain your personal fitness, how to measure different aspects of physical fitness, and how to avoid injury while exercising. It is all about getting active and setting your body in motion. By measuring health and fitness with objective data, it is possible to improve your health in a methodical way. Exercise helps you feel good about yourself and helps you sidestep the health problems that often accompany poor levels of fitness.