

# Colorado Early Colleges

## *Online Campus*

Course Catalog | Fall 2024 - Spring 2025



# ONLINE CAMPUS

## Course Offerings | Fall 2024 - Spring 2025

The CEC Online Campus offers a variety of courses designed to meet our students' needs. Classes are offered online synchronously between the hours of 7:50am and 3:30pm MWF with asynchronous learning and tutoring TR. Courses are noted with credit hours and applicable school level appropriateness; however, middle school students may access high school level courses when readiness and preparedness are demonstrated.

High school classes are typically one semester in length. All middle school classes are yearlong courses. College-level courses (100-level and above) are approved on a case-by-case basis based on applicable placement scores, prerequisites, and college readiness. Please note, course availability will vary on a semester-by-semester basis.

College level credits follow our college partner conventions for credits and hours. New courses as they are developed will be added to the program.

### ENGLISH

English Literature 6, 7, 8 (*Middle School*)  
Literature & Composition 060 (*High School*)  
Literature & Composition 090 (*High School*)  
Literature & Composition 095 (*High School*)  
Modernist Literature (*High School*)  
Expository Composition (*College level*)  
Intermediate Research Writing (*College level*)

### MATH

Math Basics 020 (*Middle and High School*)  
Math Basics 030 (*Middle and High School*)  
Pre-algebra 060 (*Middle and High School*)  
Algebra I 090 (*Middle and High School*)  
Geometry (*Middle and High School*)  
Algebra II 099 (*Middle and High School*)  
Financial Literacy (*Middle and High School*)  
College Algebra (*College level*)  
Pre-Calculus (*College level*)

### SCIENCE

Science 6, 7, 8 (*Middle School*)  
Integrated STEM Lab (*Middle and High School*)  
Earth Science (*High School*)  
Physical Science (*High School*)  
Biology A (*High School*)  
Biology B (*High School*)  
Chemistry (*High School*)  
Physics (*High School*)  
Intro to Chemistry 1 with Lab (*College level*)

### WORLD LANGUAGES

Spanish I (*Middle and High School*)  
Spanish II (*Middle and High School*)

### LIFE DIMENSIONS

Base Camp (*Middle and High School*)  
College & Career Awareness (*High School*)  
Financial Literacy (*Middle and High School*)  
Life Skills (*High School*)  
Digital Literacy (*Middle and High School*)

### SOCIAL SCIENCE

Social Science 6, 7, 8 (*Middle School*)  
Geography (*High School*)  
Mythology (*High School*)  
US History 1 (*High School*)  
US History 2 (*High School*)  
Civics (*High School*)  
Microeconomics (*College level*)  
The World: 1500-Present (*College level*)  
Intro to Philosophy (*College level*)  
General Psychology (*College level*)

### CAREER AND TECHNICAL ED CERTIFICATIONS

Adobe Creative Cloud (*Middle and High School*)  
IT Specialists (*Middle and High School*)  
Microsoft Office (*Middle and High School*)  
Entrepreneurship & Small Business (*Middle and High School*)

### LIBERAL ARTS AND SCIENCES

Astronomy (*Middle and High School*)  
Journalism (*College level*)  
Intro to Philosophy (*College level*)  
Psychology (*College level*)  
Sociology (*College level*)  
Economics of Social Issues (*College level*)

### BUSINESS

Financial Literacy (*Middle and High School*)  
Intro to Entrepreneurship (*Middle and High School*)

### COMPUTER SCIENCE

Computer Programming Foundations (*Middle and High School*)  
Esports (*Middle and High School*)

### ART, MUSIC, AND WRITING

Creative Writing (*Middle and High School*)  
Music Makers Lab: I (Synthase) (*Middle and High School*)  
Music Makers Lab: II (Synthase) (*Middle and High School*)  
Musicianship (Synthase) (*Middle and High School*)  
Music Appreciation (*College level*)

**AUDIO/VISUAL ARTS**

Adobe Digital Art *(Middle and High School)*

Digital Photography *(Middle and High School)*

Esports *(Middle and High School)*

Music Makers Lab: I (Synthase) *(Middle and High School)*

Music Makers Lab: II (Synthase) *(Middle and High School)*

**PHYSICAL EDUCATION**

Health and Fitness *(Middle and High School)*

## ENGLISH

### **6th Grade English Literature**

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.

### **7th Grade English Literature**

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, 7th graders will reflect on the theme of bravery and how perceptions change with each text they will read.

### **8th Grade English Literature**

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?"

### **Literature & Composition 060**

**Description:** 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.

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

**Designation:** College Prep

**Credits:** 0.5

### **Literature & Composition 090**

**Description:** 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.

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

**Designation:** College Prep

**Credits:** 1.0

### **Literature & Composition 095**

**Description:** 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.

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

**Designation:** College Prep

**Credits:** 1.0

## **Modernist Literature**

**Description:** 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.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0

## **Expository Composition**

**Description:** This course emphasizes critical reading, writing, and thinking skills through writing-intensive workshops. The course explores writing situations as a complex process focusing specifically on idea generation relative to audience and purpose, working through multiple drafts, peer collaboration and revision, and includes rhetorical analysis.

**Prerequisites:** NexGen ACCUPLACER score and teacher recommendation

**Designation:** Community College

**College Credits:** 3.0

## **Intermediate Research Writing**

**Description:** Students will build on the skills learned in Expository Composition in this intermediate writing course designed to improve students' reading, writing, research, and critical thinking skills. The course may include expository, persuasive, and/or argumentative writing emphases. The course will require several research-oriented writing assignments. Students must achieve a C- or higher in this course to receive credit.

**Prerequisites:** Expository Composition

**Designation:** Community College

**College Credits:** 3.0

## MATH

### **Math Basics 020**

**Description:** 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.

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

**Designation:** Middle School and College Prep

**Credits:** 0.5

### **Math Basics 030**

**Description:** 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.

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

**Designation:** Middle School and College Prep

**Credits:** 0.5

### **Pre-algebra 060**

**Description:** 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.

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

**Designation:** College Prep

**Credits:** 0.5

### **Algebra I 090**

**Description:** 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.

**Prerequisites:** Pre-algebra 060

**Designation:** College Prep

**Credits:** 1.0

## Geometry

**Description:** 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).

**Prerequisites:** Algebra I 090

**Designation:** College Prep

**Credits:** 1.0

## Algebra II 099

**Description:** 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.

**Prerequisites:** Algebra I 090; Geometry

**Designation:** College Prep

**Credits:** 1.0

## Financial Literacy

**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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credits:** 1.0

## College Algebra

**Description:** This course focuses on a variety of functions and the exploration of the graph of functions. Topics will include equations and inequalities, operations on functions, exponential and logarithmic functions, linear and non-linear systems, and an introduction to conic sections. This course provides essential skills for Science, Technology, Engineering, and Math (STEM) pathways. College Algebra is designed to prepare students for trigonometry and calculus. In this course, students will study several types of functions including polynomial, rational, exponential, and logarithmic functions. Additional topics may include graphing technology, sequences and series, conic sections, matrices, modeling, and the binomial theorem.

**Prerequisites:** Algebra II 099 and NexGen ACCUPLACER

**Designation:** Community College

**College Credits:** 4.0

**Pre-Calculus**

**Description:** Extends algebraic concepts and explores the subject of trigonometry. Topics include: polynomial, rational, logarithmic, and exponential functions, trigonometric and inverse trigonometric functions and their graphs, trigonometric identities, and applications. This course provides essential skills for Science, Technology, Engineering, and Math (STEM) pathways.

**Prerequisites:** College Algebra

**Designation:** Community College

**College Credits:** 5.0



## SCIENCE

### **6th Grade Earth and Space Science**

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 21<sup>st</sup> century skills in critical thinking and reasoning, innovation, collaboration, information literacy, and self-direction.

### **7th Grade Life Science**

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.

### **8th Grade Physical Science**

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.

### **Integrated STEM Labs**

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.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### **Earth Science**

**Description:** 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 further look 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 weathering 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.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

## **Physical Science**

**Description:** 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.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

## **Biology A**

**Description:** 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.

**Prerequisites:** Pre-algebra 060 060; Literature & Composition 090

**Designation:** College Prep

**Credits:** 0.5

## **Biology B**

**Description:** 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 systems of biology, 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.

**Prerequisites:** Biology A

**Designation:** College Prep

**Credits:** 0.5

## **Chemistry**

**Description:** 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.

**Prerequisites:** Algebra I 090

**Designation:** College Prep

**Credits:** 1.0

## **Physics**

**Description:** 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.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0

## **Intro to Chemistry 1 with Lab**

**Description:** Includes the study of measurements, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acid and base, gas laws, and condensed states. Laboratory experiments demonstrate the above concepts qualitatively and quantitatively. Designed for non-science majors, students in occupational and health programs, or students with no chemistry background.

**Prerequisites:** Biology A/Biology B; Algebra II 099; Literature & Composition 090

**Designation:** Community College

**College Credits:** 5.0

## SOCIAL SCIENCE / HISTORY

### **6th Grade Ancient World History**

Following the Colorado State 6th Grade Social Studies Standards, students will cover four main areas: History, Geography, Economics, and Civics. Each area emphasizes critical thinking, analytical skills, and understanding the Western Hemisphere's historical, geographical, economic, and political contexts. Students will analyze primary and secondary sources, use geographic tools, understand different economic systems, and explore governmental structures within the Western Hemisphere.

### **7th Grade Modern World History**

Following the 7th grade Colorado State Social Studies Standards, students focus on analyzing historical contexts, geographic features, economic systems, and governmental structures within the Eastern Hemisphere. Students will explore primary and secondary sources, examine interactions and contributions of various peoples and cultures, and understand the impact of geography on civilizations.

### **8th Grade US History**

Following the 8th grade Colorado State Social Studies Standards, students are provided with a deep understanding of U.S. history, geography, economics, and civics following the historical backbone of the Revolutionary War to the Civil War. This course will examine the origins, key events, and historical themes of the United States.

### **Geography**

**Description:** 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.

**Prerequisites:** None **Designation:** College Prep **Credits:** 0.5

### **Early World History**

**Description:** 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.

**Prerequisites:** None **Designation:** College Prep **Credits:** 0.5

### **US History 1: Indigenous Societies to Reconstruction**

**Description:** 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.

**Prerequisites:** None **Designation:** College Prep **Credits:** 1.0

## **US History 2: Reconstruction to the Present**

**Description:** This course will cover United States history from the post-Civil War Reconstruction Era through the present date 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.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0

## **Civics**

**Description:** 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.

**Prerequisites:** Literature & Composition 090 or higher recommended

**Designation:** College Prep

**Credits:** 1.0

## **Mythology**

**Description:** 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.

**Prerequisites:** Literature & Composition 090 or higher recommended

**Designation:** College Prep

**Credits:** 1.0

## **Principles of Microeconomics**

**Description:** Focuses on the study of individual decision making, emphasizing households, business firms and industry analysis. Explores market models, including competition, monopoly, monopolistic competition and oligopoly. Examines market failure and related efficiency criteria for government intervention. Explores public policy, including labor market issues, poverty and the environment.

**Prerequisites:** Algebra I 090; Literature & Composition 090

**Designation:** Community College

**College Credits:** 3.0

## **The World: 1500-Present**

**Description:** Explores trends within events, peoples, groups, ideas, and institutions in World History since 1500 as well as on common cultural trends. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through the perspectives such as gender, class, religion, and ethnicity.

**Prerequisites:** Literature & Composition 090

**Designation:** Community College

**College Credits:** 3.0

## **Introduction to Philosophy**

**Description:** This course is designed to help students better understand themselves and their relationship to the world by reading various points of view related to questions about morality, politics, religion, and approaches to truth.

**Prerequisites:** Literature & Composition 090

**Designation:** Community College

**College Credits:** 3.0

## **General Psychology**

**Description:** Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory.

**Prerequisites:** Literature & Composition 090

**Designation:** Community College

**College Credits:** 3.0

## WORLD LANGUAGES

### **Spanish I**

**Description:** Spanish I is a year-long 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credits:** 1.0

### **Spanish II**

**Description:** Spanish II is a year-long 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 (the Interpersonal mode).
- Reading, listening, and viewing as a receptive process in which deeper foreign language comprehension is developed (the Interpretive mode).
- Speaking and writing that is focused on the organization and structure of thoughts and the awareness of their audience (the Presentational mode).

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.

**Prerequisites:** Spanish I

**Designation:** Middle School and College Prep

**Credits:** 1.0

### **Exploration of Spanish Speaking Countries**

**Description:** 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 a combination of direct instruction, research and independent projects, students will undertake an in depth exploration of these countries and cultures.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credits:** 1.0

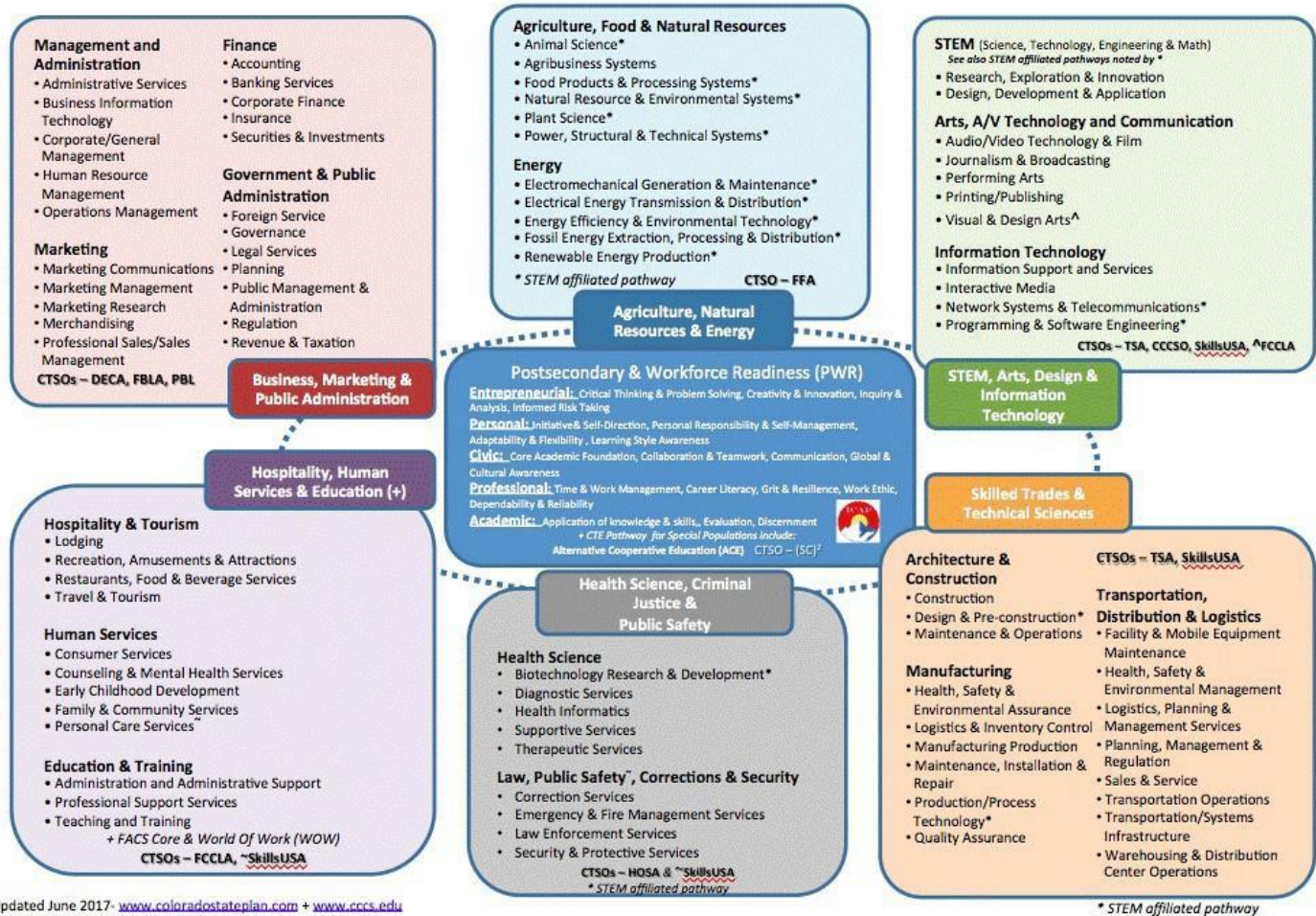
# CAREER & TECHNICAL EDUCATION (CTE) PATHWAY OVERVIEW

## 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 17 career clusters that meet the criteria of being high-wage, high-skill, and high-demand careers. CEC's Online Program has CTE programs in STEM (Science, Technology, Engineering, and Math), Arts, Design & Information Technologies, Business, Performing Arts, and Health Sciences.



## Colorado Career Cluster Model



Updated June 2017- [www.coloradostateplan.com](http://www.coloradostateplan.com) + [www.cccs.edu](http://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 the work in that field at an early age.



## LIFE DIMENSIONS

### **Basecamp**

**Description:** 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.

**Prerequisites:** None

**Designation:** Essential Skills

**Credit:** N/A

### **College & Career Awareness**

**Description:** 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.

**Prerequisites:** None

**Designation:** College Prep and Essential Skills

**Credit:** 1.0

### **Financial Literacy**

**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.

**Prerequisites:** None

**Designation:** Middle School, College Prep and Essential Skills

**Credits:** 1.0

### **Life Skills**

**Description:** 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 is focused on Life Education.

**Prerequisites:** None

**Designation:** College Prep and Essential Skills

**Credits:** 1.0

**Digital Literacy**

**Description:** This course is designed to equip students with the many needed computer skills to excel in the digital world. Students will be exposed to a broad range of technology concepts from basic computer hardware/software to computer systems, the Internet, and safe online habits. Students will also learn the basics of programming, algorithms, cybersecurity, and cryptography. After taking this course, students will have the foundational skills necessary to troubleshoot basic computer problems, use Google Apps, and write their own computer code. A class designed for beginners looking to get started in the digital world.

**Prerequisites:** None

**Designation:** Essential Skills

**Credit:** 0.5

## CAREER & TECHNICAL EDUCATION (CTE) COURSES

**Certification Lab Description:** Certification labs are designated class periods for students to work on earning a certificate needed to meet graduation requirements. Certificate labs are two days per week. Students are placed in certification labs with the advisor approval. Students will meet with their advisor to determine which certifications they need to complete to meet the various requirements. These certifications may count as their graduation achievement. Certification labs are self-paced with minimum weekly pacing expectations.

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Adobe Creative Cloud Certification**

**Description:** The future belongs to those who create. Whether it's 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.

### **IT Specialists Certification**

**Description:** 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**

**Description:** 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 a 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.

## **Entrepreneurship and Small Business Certification**

**Description:** Entrepreneurship and Small Business is a certification track that ensures tomorrow's leaders are prepared with the toolkit they need to get ahead in today's competitive landscape. ESB validates a students' understanding of core business principles, including the essentials needed to launch and maintain a successful business. The ESB certification is built to test and validate foundation-level concepts and knowledge in entrepreneurship and small business management. These core concepts include entrepreneurship; recognizing and evaluating opportunities; planning for, starting, and operating a business; marketing and sales; and financial management.

*Entrepreneurship and Small Business Certification Pathway:* Candidates for ESB certification will be expected to have key conceptual knowledge of entrepreneurial and small business principles, although it is not required for students to have — or any prerequisite experience of — real-world experience as a small business manager in order to take and pass the exam. Successful completion of this certification will validate skills and knowledge for those students interested in working in a middle-skill trade profession as their own boss and those with entrepreneurship and small business career aspirations.

## LIBERAL ARTS AND SCIENCES

### **Astronomy**

**Description:** 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Journalism**

**Description:** In this course, students will learn or refine the skills of journalistic writing and overview of layout principles. Furthermore, the course features an examination and practice of the fundamentals of news gathering, interviewing and news writing, features, sports, and editorial writing, advertising copy, and layout, editing, proofing, printing, and typography. This course is intended to strengthen a student's reading, writing, speaking, listening, and language for college and career preparation and readiness with the use of grade-level text.

**Prerequisites:** None

**Designation:** Community College

**Credit:** 3.0

### **Intro to Philosophy**

**Description:** Introduces significant theoretical and practical questions and emphasizes understanding the meaning and methods of philosophy. Includes: the human condition, logic, reality, knowledge, freedom, history, ethics, and religion.

**Prerequisites:** None

**Designation:** Community College

**Credit:** 3.0

### **Psychology**

**Description:** Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory.

**Prerequisites:** None

**Designation:** Community College

**Credit:** 3.0

### **Sociology**

**Description:** This course examines the basic concepts, theories, and principles of sociology, including topics of culture, race, class, gender, sexuality, social groups, and deviance through a local and global lens. Analyzes and interprets socio-historic as well as contemporary issues by using critical thinking skills and linking individual experiences to social structures.

**Prerequisites:** None

**Designation:** Community College

**Credit:** 3.0

### **Economics of Social Issues**

**Description:** Examines major contemporary socio-economic issues and policies such as drugs and crime, education, health care, poverty and inequality, and globalization. These issues will be explored using economic tools and methods.

**Prerequisites:** None

**Designation:** Community College

**Credit:** 3.0

## BUSINESS

### **Financial Literacy**

**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. This course will teach the financial secrets of monetarily successful people. Students will learn the best practices of money management, how to make their money work for them, how to research possible investments and avoid risky ones, and will additionally learn some common pitfalls of credit cards. Finally, students will learn the best practices of money management to ensure a greater likelihood of financial success and independence in the future.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Intro to Entrepreneurship**

**Description:** 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Economics**

**Description:** Economics is a social science that studies how people satisfy unlimited wants and needs with scarce resources. Characteristics of the market economy of the United States and its function in the world will be explored. Students will learn methods of applying economics to one's life. In addition, this course will study areas of interest relating to a career in management, real estate, merchandising, and entrepreneurship as well as starting and operating a business. Topics covered in the course include the stock market, supply and demand, competition, production, taxes, and government.

**Designation:** Community College

**Credit:** 3.0

## COMPUTER SCIENCES

### **Computer Programming Foundations**

**Description:** 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Esports**

**Description:** In this course, students will practice the fundamentals of Esports. This introductory course provides students 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

## ART, MUSIC, AND WRITING

### **Creative Writing**

**Description:** 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 1.0

### **Music Makers Lab I (Synthase)**

**Description:** This class is perfect for those who dream of making their own music but aren't sure where to start. You'll 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'll 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 1.0

### **Music Makers Lab II (Synthase)**

**Description:** 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.

**Prerequisites:** Music Makers Lab I

**Designation:** Middle School and College Prep

**Credit:** 1.0

### **Musicianship (Synthase)**

**Description:** This innovative and exclusive curriculum is designed to help beginners from any background engage creatively in a wide variety of genres, from pop and electronic to jazz and classical. You'll develop aural, theoretical, and creative skills, and apply them to the music you want to make, earning certificates and compiling a portfolio of creative projects along the way. This intro-level class focuses on hearing, playing, singing, and using the building-blocks of melody.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 1.0

### **Music Appreciation**

**Description:** Introduces the study of music focusing on intelligent listening skills, the elements of music and their relationships, the musical characteristics of representative works and composers, common musical forms and genres of various Western, and non-Western historical style periods.

**Prerequisites:** None

**Designation:** Community College

**College Credits:** 3.0



## AUDIO/VISUAL ARTS

### **Adobe Digital Art & Graphic Design**

**Description:** 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Adobe Video Production**

**Description:** In this course, students will acquire the skills necessary to produce videos that will instruct, market, and/or entertain your intended audience. The course will require the use of Adobe Premiere Pro and students will learn how to import and edit video, add effects and transitions, and export video projects.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Digital Photography**

**Description:** Students will learn basic principles of photography and how to apply them in producing photos with an artistic flair. Topics in this course include knowledge of the camera, the basic elements and principles of photography, methods of shooting and developing black and white film, darkroom procedures, and the introduction of special effects to the photographic or development process. Students will be expected to generate a portfolio of their work by the end of the course.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Esports**

**Description:** In this course, students will practice the fundamentals of Esports. This introductory course provides students 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 0.5

### **Music Makers Lab I (Synthase)**

**Description:** This class is perfect for those who dream of making their own music but aren't sure where to start. You'll 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, the student 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.

**Prerequisites:** None

**Designation:** Middle School and College Prep

**Credit:** 1.0

## **Music Makers Lab II (Synthase)**

**Description:** 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.

**Prerequisites:** Music Makers Lab I

**Designation:** Middle School and College Prep

**Credit:** 1.0

## HEALTH & PHYSICAL EDUCATION

### **Health and Fitness**

**Description:** This course will study basic health, wellness, and fitness. The course will further introduce students to the basic concepts of healthy living and wellness, including nutrition, exercise, and the power of positive daily habits. Additionally, this course is designed to encourage and provide exercise opportunities for students in a variety of ways which include — but are not limited to — yoga, fitness and calisthenics, running, and other individual athletic competitions and programs. Wearable technologies and other devices may be implemented or utilized to help assist core competencies within the fitness units of the course.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

## WORK-BASED LEARNING

### **Work-Based Learning**

**Description:** This course allows students to pursue internships, paid work, on the job training, or apprenticeships that align with ICAP goal for course credit. In order to qualify and earn the credit, students must participate in an opportunity that offers a minimum of 60 hours of work experience and be completed within the semester. Students are required to meet weekly with the WBL Coordinator and submit the number of hours worked each week.

**Designation:** College Prep

**Credits:** 0.50 for 60 hours, or 1.0 for 120 hours of work experience