



COLORADO
Early Colleges
Inverness

CECI Course Offerings | Spring 2021

All courses are semester-long courses. Although CECI structures its course times very intentionally, there is always the possibility that adjustments will be made leading up to the first day of the semester. **Course offerings and schedules are subject to change.**

ENGLISH

ENG 090- Literature & Composition

ENG 099 – English 099

ENG 121- English Composition I

ENG 122 – English Composition II

COM 125 – Interpersonal Communication

MATH

MAT 090 – Algebra I

Geometry and Statistics

MAT 099 – Algebra II

MAT 121 – College Algebra

SCIENCE

Biology B (Spring Only)

Chemistry with Lab (Spring Only)

Bio 111 – General College Biology w/ lab

COLLEGE & CAREER READINESS

AAA 109 Advanced Academic Achievement

WORLD LANGUAGES

Spanish II

SOCIAL SCIENCE

American Government

HIS 122 – US History since the Civil War

HIS 247 – 20th Century World History

POS 125 – American State and Local Government

ELECTIVES

Robotics

Microsoft Applications

Engineering Design

ART 110 – Art Appreciation

MUS 120 – Music Appreciation

ART 132 -Visual Concepts 3D Design

BUS 217 - Business Communication and Report Writing

HWE 100 Human Nutrition

CIS 220 Fundamentals of Unix

Homework Expectations For every hour of college

prep class time, students should expect an average of half an hour of homework. - E.g. A student taking 6 hours of college prep classes a day should expect an average of 3 hours of homework a night or 15 hours of homework per week. Students should expect an average of 2-3 hours of homework per college credit per week. Students should expect a heavier workload for classes with 4 or 5 credit hours. - E.g. A student taking four 3 credit hour college classes (12 credits total) should expect an average of 24- 36 hours of studying per week.

COURSE CATALOG

ENGLISH

Literature and Composition 090 (LIT and COMP 090)

Description: Focuses on paragraph structure and development and introduces the formal essay. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations. Focuses on strategies for vocabulary development, improved reading comprehension, and enrichment

Prerequisites: Literature & Composition Foundations (ENG 060) or appropriate ACCUPLACER scores

Designation: College Prep

Credits: 2.0 High School

English 099 (ENG 099)

Description: The emphasis of English 099 will be reading nonfiction and writing. The writing will be more academic in that the objective is to synthesize the reading material and writing to advance critical thinking skills, enhance the student's ability to engage with sophisticated texts, and to find and infer connections among a variety of texts with various purposes and audiences. Students can expect to read several nonfiction texts and write five major papers in preparation for ENG 121. It is highly recommended that students take this course in order to bridge the gap between high school courses and the demand of college-level work. English 099 provides students additional time to grow and achieve the academic prowess and acumen to be successful in ENG 121.

Prerequisites: Literature & Composition Foundations (ENG 090) and/or appropriate ACCUPLACER scores

Designation: College Prep

Credits: 1.0 High School

English Composition I (ENG 121 | GT-CO1)

Description: Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative, and persuasive/argumentative writing.

Prerequisites: English 099 or English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

College Credits: 3 College Credits / 1 High School

English Composition II (ENG 122 | GT-CO2)

Description: Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and argumentative compositions.

Prerequisites: English Composition I (ENG 121) and college ready English ACCUPLACER scores

Designation: Arapahoe Community College

College Credits: 3 College Credits / 1 High School

Interpersonal Communication (COM 125)

Description: Examines the communication involved in interpersonal relationships occurring in family, social, and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict.

Prerequisites: College ready English ACCUPLACER scores

Designation: Arapahoe Community College

Credits: 3 college credits / 1 high school

MATH

Algebra I (MAT 090)

Description: Includes first-degree equations, inequalities, formulas, polynomials, factoring polynomials, solving quadratic equations by factoring, graphing linear equations, and applications. Algebraic fractions and systems of linear equations may be included.

Prerequisites: Pre-Algebra (MAT 060), and/or placement via the ACCUPLACER.

Designation: College Prep

Credits: 1 High School

Geometry and Statistics

Description: Geo/Stats begins the exploration of math as an art; both from a visual perspective and an intellectual perspective. We will learn to identify various geometric figures and prove theorems associated with them. Principles of reasoning will be learned to aid in making conjectures and proving theorems. An important concept in Statistics is interpreting and extrapolating information from graphical representations of data. A large part of the course will introduce concepts by exploratory means, where the student will get a chance to create mathematics.

Prerequisites: Algebra I (MAT 090), and/or placement via the ACCUPLACER

Designation: College Prep

Credits: 1 High School

Algebra II (MAT 099)

Description: Emphasizes problem solving with further study of equations, slope, inequalities, systems of equations, polynomials, quadratic equations, rational expressions, rational exponents, radical expressions, graphing, and applications.

Prerequisites: MAT 090 & Geometry and/or college ready on the ACCUPLACER

Designation: College Prep

Credits: 1 High School

College Algebra (MAT 121 | GT-MA1)

Description: Includes a brief review of intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations.

Prerequisites: Geometry and MAT 099 (Algebra II on an outside transcript) and college ready math ACCUPLACER scores.

Designation: Arapahoe Community College

College Credits: 4 College credits / 1.5 High School

SCIENCE

Biology A (Fall Only)

Description: Focuses on cellular metabolic activities, photosynthesis and cellular respiration, cells, tissues, organs, and organ systems, and genes.

Prerequisites: None

Designation: College Prep

Credits: 0.5 high school

Biology B (Spring Only)

Description: Focuses on ecosystems, interactions of populations within ecosystems, and the theory of evolution.

Prerequisites: None

Designation: College Prep

Credits: 0.5 High School

Physics with Lab (Fall Only)

Description: Students will examine the following topics: Motion, Newtonian Mechanics, Forces, Energy, Work and Power, Trigonometry, and Torque. Coursework involves laboratory activities, in-class assignments and formal assessments that require students to demonstrate problem-solving skills in the context of a science scenario.

Prerequisites: Biology/Physical Science

Credits: 1.0 High School

Chemistry with Lab (Spring Only)

Description: Students in this course will examine the fundamental properties of elements, compounds, and mixtures. Chemical reactions and chemical processes are observed and explained at the atomic and molecular level using the scientific method. Students will integrate conceptual understandings, algebra skills, and an ongoing laboratory experience to develop the fundamentals of problem solving, laboratory work, and the practical application of Chemistry.

Prerequisites: Biology/Physical Science

Designation: College Prep

Credits: 1.0 High School

BIO 111 General College Biology with Lab (BIO 111 | GT-SC1)

Description: Examines the fundamental molecular, cellular and genetic principles characterizing plants and animals. Includes cell structure and function and the metabolic processes of respiration and photosynthesis, as well as cell reproduction and basic concepts of heredity. This course includes laboratory experience.

Prerequisites: High School Biology, Lit/Comp 090 or higher, and QAS 265+

Designation: Arapahoe Community College

Credits: 5 college credits / 2 high school

SOCIAL SCIENCE

US History I (Fall Only)

Description: United States history from founding of North American colonies to 1877 Reconstruction era.

Prerequisites: None.

Designation: College Prep

Credits: 0.5 High School

US History II (Spring Only)

Description: United States from 1877 Reconstruction era to contemporary era.

Prerequisites: None.

Designation: College Prep

Credits: 0.5 High School

American Government

Description: Basic processes in American politics. Principles and structure of national governments.

Prerequisites: None.

Designation: College Prep

Credits: 0.5 High School

US History since the Civil War (HIS 122 | GT-HI1)

Description: Explores events, trends, peoples, groups, cultures, ideas, and institutions in United States History, including the multiple perspectives of gender, class, and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline.

Prerequisites: English 099 or English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

Credits: 3 college credits / 1 high school

20th Century World History (HIS 247 | GT-HI1)

Description: Investigates the major political, social, and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states.

Prerequisites: English 099 or English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

Credits: 3 college credits / 1 high school

American State and Local Government (POS 125 | GT-SS1)

Description: Emphasizes the structure and function of state, county, and municipal governments including their relations with each other and with national government. Includes a study of Colorado government and politics.

Prerequisites: English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

College Credits: 3 College Credits / 1 High School

WORLD LANGUAGES

Spanish I

Description: Develops students' interpretive, interpersonal, and presentational communicative abilities in the language. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture.

Prerequisites: None.

Designation: College Prep

Credits: 1 High School

Spanish II

Description: Expands students' interpretive, interpersonal, and presentational communicative abilities in the language across the disciplines. Integrates these skills with the study of the cultures in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

Prerequisites: Spanish I

Designation: College Prep

Credits: 1 High School

COLLEGE AND CAREER READINESS

Advanced Academic Achievement (AAA 109)

Description: Examines theories and practices associated with successful learning to enhance college success. Techniques covered include academic proficiency, personal management, effective collegiate communication, critical and creative thinking, development of community, awareness of diverse identities, and educational and career planning.

Prerequisites: None.

Designation: Arapahoe Community College

Credits: 3 college credits / 1 high school

ELECTIVES

Microsoft Applications

Description: This course is designed as a self-paced course that will allow students to earn various certifications in Microsoft Office Programs. Certifications will be offered in Microsoft Word, PowerPoint, and Excel. While this course is self-paced, it is the expectation that students will earn all three certifications before the end of the semester.

Prerequisites: None.

Designation: College Prep

Credits: 0.5 High School

Robotics

Description: Robotics is a high school level course for students who are interested in the design, engineering and programming of robots. This is a lab-based course that uses a hands-on approach to introduce the basic concepts of robotics, documenting in an engineering notebook and focusing on the construction and programming of mobile robots. Students will work in various groups to document, build, program and test increasingly more complex mobile robots, culminating in an end-of-semester robot contest. The robotics platform that we will use is the VEX Robotic Design System.

Prerequisites: None.

Designation: College Prep

Credits: 0.5 High School

Engineering Design

Description: Introduction to Engineering Design is the second level course in the Engineering Career Pathway for students interested in developing their skills in preparation for careers in engineering and technology. The course covers essential knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to describe various engineering disciplines, as well as admissions requirements for postsecondary engineering and engineering technology programs in Colorado. They will also be able to identify simple and complex machines, calculate various ratios related to mechanisms, explain fundamental concepts related to energy, understand Ohm's Law, follow the steps in the engineering design process to complete a team project, and effectively communicate design solutions to others.

Prerequisites: Principles of Engineering

Designation: College Prep

Credits: 0.5 High School

Fundamentals of UNIX (CIS 220)

Description: Covers the structure and fundamentals of the UNIX operating system. Includes the files system and file processing, various utility programs, and shell, multiuser operation, text processing and communications. Level 2 of Information Technology Pathway.

Prerequisites: None

Designation: Arapahoe Community College

Credits: 3 College Credits / 1 High School

Music Appreciation (MUS 120 | GT-AH1)

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: English 099 or English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

Credits: 3 College Credits / 1 High School

Art Appreciation (ART 110 | GT-AH1)

Description: Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology.

Prerequisites: English 099 or English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

Credits: 3 College Credits / 1 High School

Visual Concepts 3-D Design (ART 132)

Description: Focuses on learning to apply the elements and principles of design to three-dimensional problems.

Prerequisites: None

Designation: Arapahoe Community College

Credits: 3 College Credits / 1 High School

Drawing I (ART 121) (Fall Only)

Description: Investigates the various approaches and media that students need to develop drawing skills and visual perception.

Prerequisites: English 099 or English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

Credits: 3 College Credits / 1 High School

Human Nutrition (HWE 100)

Description: Introduces basic principles of nutrition with emphasis on personal nutrition. This course focuses on macro and micro nutrients and their effects on the functions of the human body. Special emphasis is placed on the application of wellness, disease, and lifespan as it pertains to nutrition.

Prerequisites: English 099 or English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

Credits: 3 College Credits / 1 High School

Business Communication and Report Writing (BUS 217)

Description: Emphasizes effective business writing and covers letters, memoranda, reports, application letters, and resumes. Includes the fundamentals of business communication and an introduction to international communication. Level 2 of Business Pathway.

Prerequisites: English 099 or English 090 (preferred) and college ready English ACCUPLACER scores (required).

Designation: Arapahoe Community College

Credits: 3 College Credits / 1 High School

CAREER PATHWAYS

Introduction to Business (Fall Only)

Description: Focuses on the operation of the American business system. It covers the fundamental of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business and social responsibilities, and finance.

Prerequisites: None.

Designation: College Prep

Credits: 1.0 High School

Engineering Technology (Fall Only)

Description: Principles of Engineering and Technology is designed to introduce students to the STEM cluster for students interested in learning more about careers in engineering and technology. This course covers basic skills required for engineering and technology fields of study. Upon completion of this course, students are able to identify and explain the steps in the engineering design process. They can evaluate an existing engineering design, use fundamental sketching and engineering drawing techniques, complete simple design projects using the engineering design process, and effectively communicate design solutions to others.

Prerequisites: None.

Designation: College Prep

Credits: 1.0 High School

Principles of Biomedical Science (Fall Only)

Description: This course introduces students to different topics related to the medical field. Topics covered will include safe practices in the workplace, interactions of the human body systems, homeostatic balance, protection, support, movement, infectious diseases, medical treatment, research processes, bioinformatics, HIPAA and human medicine. Human Medicine areas of study will include prevention, diagnosis, treatment, genetics, public health, and biomedical engineering. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Prerequisites: None.

Designation: College Prep

Credits: 1.0 High School

Computer Science Foundations (Fall Only)

Description: Computer Science Foundations (CSF) is a course intended to provide students with exposure to various information technology occupations and pathways such as Networking Systems, Coding, Web Design, and Cybersecurity. Upon completion of this course, proficient students will be able to describe various information technology (IT) occupations and professional organizations. Moreover, they will be able to demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Depending on the focus area, proficient students will also demonstrate an understanding of electronics and basic digital theory; project management and teamwork; client relations; causes and prevention of Internet security breaches; and writing styles appropriate for web publication. Upon completion of the CSF course, students will be prepared to make an informed decision about which Information Technology program of study to pursue.

Prerequisites: None.

Designation: College Prep