



COLORADO
Early Colleges
— Fort Collins —

COLORADO EARLY COLLEGES
FORT COLLINS MIDDLE SCHOOL
COURSE DESCRIPTION HANDBOOK
2022-2023*

*Course descriptions are accurate as of March 2022. Elective offerings and upper-level math and honors classes may vary based on interest and availability. Grade level, core classes (Elevate, English, Math, Science, and Social Science) are consistently offered at CECFC MS; however, content and curriculum are often revised and modified during the summer.

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INTRODUCTION

This course description handbook is intended to provide general information about course offerings at Colorado Early Colleges Fort Collins Middle School. Not every course will be offered each year. Curriculum at CECFC is aligned with the Colorado State Academic Standards.

Middle school students do not meet with an advisor. Returning students typically request electives through their Elevate classes. New students attend a Wolf Welcome session to complete a course request sheet and take a math placement test. Any schedule changes or course requests are handled by middle school staff within the first two-three weeks of school.

Part-time students' schedules are finalized in July after the majority of full-time students are placed into classes and the master schedule is finalized.

PERFORMING ARTS/ MUSIC (Elective Classes)

Beginning Band

Students will learn music reading & theory skills. New students will be placed in beginning band but may test into the intermediate band. *Instruments:* flute, clarinet, saxophone, trumpet, horn, trombone, euphonium, oboe, tuba, and percussion instruments; CECFC does not provide musical instruments for students. Band members must attend four mandatory evening performances (two each semester).

Intermediate Band

Students will continue to develop their music reading & theory skills. *Instruments for band:* flute, clarinet, saxophone, trumpet, horn, trombone, euphonium, oboe, tuba, and percussion instruments; CECFC does not provide musical instruments for students. Band members must attend four mandatory evening performances (two each semester).

Choir

This class is for students who want to sing all styles of music. Participants will be singing two, three, and four-part harmony. Students will learn the foundations of music notation, sight reading, chord structure, and music composition. Chorus members must attend four mandatory evening performances (two each semester).

Drama

Drama is an elective course which will explore the creativity, imagination, and self-expression that make up the art of acting. We will discuss many aspects of theater, but will focus on group games, memorized scene work, monologues, improvisation, and class plays. This class will contribute to the development of 21st Century Learning Skills such as critical thinking, problem solving, communication and collaboration. There will be a performance in the spring, which will occur one evening, and one weekend afternoon.

Beginning Orchestra

Students in this class will learn music reading & theory skills. *Instruments for Orchestra:* violin, viola, cello, double bass; CECFC does not provide musical instruments for students. Orchestra members must attend four mandatory evening performances (two each semester).

Intermediate Orchestra

This class is for students who know how to play their instrument and read music well. We will play Grade 2 – 3+ music. *Instruments for Orchestra:* violin, viola, cello, double bass; CECFC does not provide musical instruments for students. Orchestra members must attend four mandatory evening performances (two each semester).

VISUAL ARTS (Elective Classes)

Art I

Students will study the Elements of Art & Principles of Design through art making. Fundamental skills in drawing, painting, and sculpting will be taught while using a variety of mediums. Art history from a multicultural perspective and art careers will be integrated throughout the curriculum. Students will also work on their observation skills to become better artists.

Art II

Building on previous knowledge and skills from Visual Art I, students will continue to develop skills in drawing, painting, and sculpting skills while using a variety of mediums. They will also continue

to learn art history from a multicultural perspective. Students will begin to critique works of art and learn how society influences artists to create art for social change.

Art III

In this course, students will explore advanced technical and conceptual art skills and processes. Students may choose more art competition and exhibition opportunities and explore creative career exploration. This class is for students who have demonstrated advanced art readiness by earning at least an 88% on all projects in previous CEC middle school art courses and have historically shown maturity and respect in class.

3-D Art and Design

Students will further their creativity in three-dimensional form by working with media such as clay, wire, cardboard, papier-mâché, foam core, and recycled materials. Students will be expected to show a high level of quality, craftsmanship, and complexity in their artwork. There will be a focus on the Elements of Art and Principles of Design while also learning about famous sculptors.

COMPUTER SCIENCE (Elective Classes)

Computer Science I

This elective course introduces students to Computer Science. This course is suitable for students with little to no knowledge of Computer Science. Topics will include, but are not limited to: Learning how to use Microsoft Office (the suite of products students will use with their school-issued account), the very early years of Computer Science history, foundational problem-solving techniques used within Computer Science, coding / programming with block-based Scratch, learning about the Design Process, and creating an app.

Computer Science II

This elective course teaches students about Computer Science on a more in-depth level. This course is suitable for students who have an intermediate amount of knowledge of Computer Science. Topics will include, but are not limited to, the middle years of Computer Science history, coding / programming with Python, coding / programming with HTML and CSS, learning about data representation and how it affects society, and binary-based systems and functionalities within those systems.

Computer Science III

This elective course builds upon extensive previous knowledge and challenges students to take their Computer Science skills to the next level. This course is suitable for students with a high level of Computer Science knowledge - typically 8th graders and select 7th graders who are interested in pursuing Computer Science in high school. Topics will include, but are not limited to, the modern years of Computer Science history, coding / programming with JavaScript, coding / block-based programming via TinkerCad, creating an interactive video game, learning about physical computing / hardware platforms, the history of the internet and how it was formed and how it works, cybersecurity and global impacts, and major impacts of Computer Science, both positive and negative, on society.

ELEVATE

Elevate is a unique course designed specifically to teach middle schoolers executive functioning skills, as well as supplement and support the core curriculum. Students take a grade-level specific Elevate course every year.

ENGLISH LITERATURE CLASSES

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, research papers, 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. The texts we study in 7th grade cover a wide range of time periods, themes, and lessons. Through each text, students will reflect on the impact that others can have on us.

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 our ideas both spoken and written, and how to gather relevant information from various text types. Students will pursue answering the question, "What does it mean to be human?"

7th or 8th grade Honors English

These are invitation only classes which require higher level critical thinking and significantly above-average writing skills. Instructor approval is needed to enroll. The 8th grade Honors English course will mirror the content of English 090, as taught at CECFC HS; students may earn HS credit.

LEADERSHIP CLASS

This elective course will develop leadership skills in students, providing them with opportunities to demonstrate leadership to their peers, their school, and their community. This is a proposed course which has not been taught previously; the curriculum will be developed during the summer.

MATH CLASSES

Supplemental Math

Students who are below grade level in mathematics may be assigned to this individualized class in addition to their regular math class. Students will be assigned customized content designed to teach missed concepts and allow students to master grade-level standards. The class will take the place of an elective; successful students might test out of Supplemental Math at the semester.

Math Course 1

In this course, students will be learning, practicing, applying, and mastering foundational mathematics skills and understandings, including fractions, decimals, percentages, and introductory integers. Students who test below grade level will also be assigned to computer-based Supplemental Math, which allows students individualized instruction to master grade-level standards.

Math Course 2

The units covered in this course will include algebraic reasoning, integers, rational numbers, proportions, graphs, percent, geometry, and probability. Students who test below grade level will also be assigned to computer-based Supplemental Math which allows students individualized instruction to master grade-level standards.

Math Course 3

The units covered in this course will include algebraic reasoning, order of operations, linear equations, systems of equations, basic exponent rules, proportions, graphs, geometry, and probability. Students who test below grade level will also be assigned to computer-based Supplemental Math, which allows students individualized instruction to master grade-level standards.

Geometry

This course will mirror the content of Geometry as taught at CECFC High School. The units covered in this course will include reasoning, proofs, lines, congruency, triangles, polygons, quadrilaterals, similarity, trigonometry, transformations, area, surface area, volume, and circles. Successful students may earn HS credit.

Math 090 (Algebra I)

This course will mirror the content of Math 090 as taught at CECFC High School. The units covered in this course will include expressions, equations, inequalities, number operations, graphs, functions, exponents, roots, statistics, probability, and polynomials. Successful students may earn HS credit.

Math 099 (Algebra II)

This semester-long course is taught at CECFC High School. Students will need to qualify for this course with the ACCUPLACER test.

PHYSICAL EDUCATION (Elective Class)

This course will teach skills in a variety of sports to create lifelong fitness. Content units will include soccer, football, handball, nutrition, kickball, volleyball, speedball, ultimate frisbee, basketball and fitness. The class will incorporate hands on activities, fitness, and group work to promote understanding and engage students in physical education.

ROBOTICS (Elective Classes)

Introduction to Robotics

This elective class will allow students to develop skills in the robotics field by studying programming, electronics, hydraulics, and mechanical systems. Students will apply Physical Science, Mathematics, and Technology while getting hands on experience designing, constructing, and testing robots.

Competitive Robotics

This elective class will allow students to develop skills in the robotics field by studying programming, electronics, hydraulics, and mechanical systems. Students will apply Physical Science, Mathematics, and Technology while getting hands on experience designing, constructing,

and testing robots. This class will lead to REQUIRED competitions on weekends. *Parents will be responsible for transporting their students to Saturday competitions from December through-April, normally 2-3 competitions per month.*

SCIENCE

6th Grade Science (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.

7th Grade Science (Life Science)

This course is largely based on life science that will include the fundamentals of biology. We will investigate, explore and discover various ideas using the scientific method throughout the year. The class will incorporate hands on activities, experiments, group work along with reading and writing for content and understanding.

8th Grade Science (Physical Science)

This course is largely based on physical science that will include the fundamentals of physics and chemistry. We 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, along with reading and writing for content and understanding.

7th or 8th Grade Honors Science

These are invitation only classes which will move at a faster pace than the regular science classes. Instructor approval is needed to enroll in honors courses. These courses will mirror the content of Biology and Physical Science classes taught at CECFC High School; students will be able to earn HS credit.

Animal Studies

This elective class is intended for students interested in exploring veterinary medicine, wildlife biology, zoology, or other natural sciences. Students will learn about the animal kingdom including physiology, natural history, behavior, epidemiology, and environmental interactions. The course delivery will be based on student-driven research, group projects, and hands-on activities.

S.T.E.M. (Science, Technology, Engineering & Math) (Elective Classes)

INTRO TO STEM

This elective class is open to 6th graders or anyone who has little to no experience with STEM. This is a hands-on, inquiry based, and project driven class. Students will learn to utilize the Engineering Design Process through project-based activities. This course will cover, but is not limited to, Simple Machines, Green Energy, Groundwater investigation, and Hydraulics.

STEM 1

This elective course is open to students who've taken intro to stem or to 7th- and 8th-graders with some STEM experience. This is a hands-on, inquiry-based, and project driven class. Students will learn to utilize the Engineering Design Process throughout the year. This course will cover, but is not limited to, Intro to Electricity, Soldering, Flight, Environmental Science (Keystone Species), TinkerCad, 3D printing, Intro to Arduino Programming, and Solar Cars. Students will be given the

opportunity to fine-tune some of their projects to compete in State Technology Student Association competitions (optional).

STEM 2

This elective course is open to students that have completed STEM 1. This is a hands-on, inquiry based and project driven class. Students will learn to utilize the Engineering Design Process throughout the year. This course will cover, but is not limited to, Basic Structures, Bridge Building, 3-D Printing, Arduino wiring and programming, Physics of Roller Coasters, and CO₂ Cars. Students will be given the opportunity to fine tune some of their projects to compete in state Technology Student Association competitions (optional).

SOCIAL SCIENCES

6th Grade Ancient World History

Students will explore the world through the eyes of archeologists, explorers, citizens, and consumers. We will examine the origins of mankind and discover how the rise of civilizations have shaped the world we live in today. In addition, we will determine how geography, economics and civics contribute to the development of those civilizations. Content units include the fundamentals of history, geography, economics, and civics.

7th Grade Modern World History

This course will explore Modern World History from the Renaissance through World War II. Content units will be taught in accordance with Colorado State Academics Standards for Social Studies and will include an analysis of history, geography, economics, and civics at an intermediate level. The class will incorporate investigative and critical thinking skills, inquiry activities, hands-on opportunities, reading and writing, and group work to promote understanding of all cultures and engage students.

8th Grade US History

This course examines the origins, key events, and themes of the United States. Content units will be taught in accordance with Colorado State Academics Standards for Social Studies and will include an analysis of history, geography, economics, and civics at an advanced level. Themes explored in this class include regional issues, continuity and change, rule of law, diffusion, and trade.

STUDY HALL (Elective)

Study hall is offered as an elective 8th period for students who need additional time for academic instruction (READ plans, etc.) or for those who cannot enroll in an 8th period class all year due to sports schedules. Study hall students do not earn a grade.

WORLD LANGUAGES (Elective Classes)

French, Latin, Mandarin, or Spanish

These are introductory elective language courses. These courses will include spoken and written language. Students must have earned a B or better in English the previous semester to be enrolled in a world language. Students will take the HS final exam to possibly earn HS credit.