



# **Colorado Early Colleges Fort Collins**

## **Course Catalog**

# Course Offerings | Fall 2022

CECFC offers a variety of courses designed to meet our students' needs. All courses are semester-long and offered on-campus between the hours of 7:50 a.m. and 3:30 p.m. *Although we work hard to finalize the schedule in a timely manner, course offerings and times are subject to change.*

## ENGLISH

COMP/LIT 060—Fundamental English  
COMP/LIT 090—Foundational College Prep English 1  
COMP/LIT 090.2—Foundational College Prep English 2  
COMP/LIT 095—Comprehensive College Prep English  
COMP/LIT 099—Cumulative College Prep English  
Fringe Voices of American Literature  
Screenwriting  
LIT 115—Introduction to Literature  
ENG 121—English Composition I  
ENG 122—English Composition II  
COM 115—Public Speaking  
COM 125—Interpersonal Communication

## MATH

MAT 060—Pre-Algebra  
MAT 090A—Algebra I (Semester 1)  
MAT 090B—Algebra I (Semester 2)  
Geometry  
Geometry A- (Semester 1)  
Geometry B- (Semester 2)  
Applied Geometry  
MAT 099—Algebra II  
Personal Finance  
MAT 121—College Algebra  
MAT 135- Introduction to Statistics  
MAT 166—Pre-Calculus  
MAT 201—Calculus I  
MAT 202—Calculus II

## COLLEGE AND CAREER READINESS

Career Pathways  
Wolf Connection  
Student Success  
BUS 217—Business Communication

## SCIENCE

Biology A (Macro)  
Biology B (Micro)  
BIO 105- Science of Biology with Lab  
BIO 111—General College Biology I with Lab  
Chemistry A  
Chemistry B  
CHEM 101—Principles of Chemistry & Lab  
Physical Science  
Earth and Space Science  
GEY 111—Physical Geology with Lab  
GEY 135—Environmental Geology with Lab  
PHY 105—Conceptual Physics with Lab  
Science Olympiad  
Food Science

## SOCIAL SCIENCE AND HUMANTIES

Civics  
Geography  
Early World History  
CRJ 110—Introduction to Criminal Justice  
HIS 112—The World: 1500 to Present  
HIS 121—US History to Reconstruction  
PHI 112—Ethics  
PHI 113—Logic  
POS 125—American State and Local Government  
PSY 102—General Psychology II  
PSY 235—Human Growth and Development

## **WORLD LANGUAGES**

Mandarin Chinese I  
Spanish I

## **VISUAL ARTS**

High School Art Foundations  
Textiles  
ART 110—Art Appreciation  
ART 121—Drawing I  
ART 221—Drawing II  
ART 122—Drawing for the Graphic Novel  
ART 161—Ceramics  
ART 261—Ceramics II  
ART 262—Ceramics III  
Foundations of Design, Multimedia Arts, and Digital  
Communication  
MGD 111— Adobe Illustrator  
Yearbook

## **PERFORMING ARTS**

Beg Guitar  
Int/Adv Guitar  
Choir  
MUS 100- Music Theory Fundamentals I  
MUS 120  
MUS 122- Music History Romantic to Present  
MUS 131—Piano I  
MUS 132—Piano II  
Orchestra  
Band (MUS 151/152—Ensemble for qualified students)

## **COMPUTER SCIENCE**

Computer Science Foundations  
CSC 160—Computer Science I (C++)  
CSC 161—Computer Science II (Java)  
CIS 118—Introduction to PC Applications  
PC Apps Lab

## **CAREER AND TECHNICAL ED**

Robotics 1  
Robotics 2  
Drone Basics  
Career Pathways  
Woodworking I  
Woodworking II  
Woodworking III  
Applied Geometry  
BUS 115—Introduction to Business  
BUS 216—Legal Environment of Business  
BUS 217—Business Communication  
Basics in Emergency Medicine

## **PHYSICAL EDUCATION**

Functional Fitness  
Intro to Weightlifting  
Intro to Team Sports  
Basic Yoga  
PED 143—Yoga I



## Course Offerings | Spring 2023

CECFC offers a variety of courses designed to meet our students' needs. All courses are semester-long and offered on-campus between the hours of 7:50 a.m. and 3:30 p.m. *Although we work hard to finalize the schedule in a timely manner, course offerings and times are subject to change.* Courses designated with no numbers or numbers to 99 are college prep courses; courses designated with numbers above 100 are college courses.

### ENGLISH

COMP/LIT 060.2—Fundamental English  
COMP/LIT 090—Foundational College Prep English 1  
COMP/LIT 090.2—Foundational College Prep English 2  
COMP/LIT 095—Comprehensive College Prep English  
COMP/LIT 099—Cumulative College Prep English  
LIT 115—Introduction to Literature  
ENG 121—English Composition I  
ENG 122—English Composition II  
COM 115—Public Speaking  
COM 125—Interpersonal Communication

### MATH

MAT 060—Pre-Algebra  
MAT 090A—Algebra I (Semester 1)  
MAT 090B—Algebra I (Semester 2)  
MAT 090—Algebra I  
Geometry  
Geometry A- Semester 1  
Geometry B- Semester 2  
Applied Geometry  
MAT 099—Algebra II  
Personal Finance  
MAT 121—College Algebra  
MAT 166—Pre-Calculus  
MAT 201—Calculus I  
MAT 202—Calculus II

### SCIENCE

Biology A (Macro)  
Biology B (Micro)  
BIO 112—General College Biology II with Lab  
Chemistry A  
Chemistry B  
CHEM 101—Principles of Chemistry & Lab  
Physical Science  
Earth and Space Science  
GEY 112—Historical Geology with Lab  
GEY 135—Environmental Geology with Lab  
PHY 105—Conceptual Physics with Lab  
Science Olympiad

### SOCIAL SCIENCE AND HUMANITIES

Geography  
Civics  
Early World History  
CRJ 110—Introduction to Criminal Justice  
HIS 112—The World: 1500 to Present  
HIS 122—US History Since the Civil War  
PHI 112—Ethics  
PHI 113—Logic  
POS 125—American State and Local Government  
PSY 101—General Psychology I

## **COLLEGE AND CAREER READINESS**

SAT Prep Math  
SAT Prep English  
Career Pathways  
Student Success  
BUS 217—Business Communication

## **WORLD LANGUAGES**

Mandarin Chinese II  
Spanish II

## **VISUAL ARTS**

High School Art Foundations  
Textiles  
ART 110—Art Appreciation  
ART 121—Drawing I  
ART 221—Drawing II  
ART 131—Visual Concepts 2-D Design  
ART 161—Ceramics  
ART 261—Ceramics II  
ART 262—Ceramics III  
Foundations of Design, Multimedia Arts, and Digital  
Communication  
MGD 111—Adobe Photoshop  
Yearbook

## **PERFORMING ARTS**

Beg Guitar  
Int/Adv Guitar  
Choir  
MUS 120—Music Appreciation  
MUS 131—Piano I  
MUS 132—Piano II  
Orchestra  
Band  
Jazz Band  
Acting and Directing

## **COMPUTER SCIENCE**

Computer Science Foundations  
Network+ Certification  
CSC 160—Computer Science I  
CSC 161—Computer Science II  
CIS 118—Introduction to PC Applications

## **CAREER AND TECHNICAL ED**

Robotics 1  
Robotics 2  
Drone Basics  
Career Pathways  
Woodworking I  
Woodworking II  
Woodworking III  
Applied Geometry  
BUS 115—Introduction to Business  
BUS 217—Business Communication  
Basics in Emergency Medicine

## **PHYSICAL EDUCATION**

Functional Fitness  
Intro to Team Sports  
Intro to Weightlifting  
Health and Fitness  
Basic Yoga  
PED 143—Yoga I

# Course Descriptions\*

Graduation Requirements .....	7
FRCC Associates of Arts: Degree Requirements .....	8
FRCC Associates of Science: Degree Requirements .....	9
AIMS Associates of Arts: Degree Requirements .....	10
AIMS Associates of Science: Degree Requirements.....	11
ENGLISH .....	12
MATH .....	15
SCIENCE .....	18
SOCIAL SCIENCE AND HUMANTIES .....	22
COLLEGE AND CAREER READINESS .....	25
WORLD LANGUAGES.....	27
CAREER AND TECHNICAL EDUCATION PATHWAYS.....	30
CAREER AND TECHNICAL EDUCATION COURSES .....	31
COMPUTER SCIENCE .....	36
VISUAL ART.....	38
PERFORMING ARTS.....	41
PHYSICAL EDUCATION.....	43

\*Note about offerings:

*Not every class is offered every semester. Courses described below are for reference only and may not be currently available. Semester course offerings are subject to change based on student interest and instructor availability. Please refer to the above list for courses offered this semester and/or talk to your advisor with any concerns. CECFC is committed to providing course variety each semester.*

\*College vs. College Prep credits:

- 1.0 credit college course= 0.5 college prep level credit*
- 2.0 credit college course= 0.5 college prep level credit*
- 3.0 credit college course= 1.0 college prep level credit*
- 4.0 credit college course= 1.5 college prep level credits*
- 5.0 credit college course= 2.0 college prep level credits*

# Graduation Requirements



## HIGH SCHOOL REQUIREMENTS

### **English**

4 credits

### **Math**

4 credits

### **Science**

3 credits

### **Social Science**

2.5 credits

### **Civics**

0.5 credits

### **World Languages**

2 credits

### **College and Career Readiness**

1 credit

### **Electives**

3 credits

<b>Natural &amp; Physical Science</b> <i>(7 semester credits) Take two courses, Credits over 7 will be applied to electives</i>			
AST 101 (4)	BIO 204 (4)	ENV 101 (4)	PHY 105 (4)
AST 102 (4)	BIO 208 (5)	GEO 111 (4)	PHY 107 (4)
BIO 105 (4)	BIO 221 (5)	GEO 112 (4)	PHY 111 (5)
BIO 111 (5)	CHE 101 (5)	GEY 111 (4)	PHY 112 (5)
BIO 112 (5)	CHE 102 (5)	GEY 112 (4)	PHY 211 (5)
BIO 201 (4)	CHE 111 (5)	GEY 135 (4)	PHY 212 (5)
BIO 202 (4)	CHE 112 (5)	MET 150 (4)	SCI 155 or 156 (4)
<b>Arts &amp; Humanities</b> <i>(6 semester credits) Take any two courses from two different categories</i>			
Arts	Literature	Ways of Thinking	Foreign Languages
ART 110 (3)	HUM 115 (3)	PHI 111 (3)	FRE 211 (3)
ART 111 (3)	HUM 121 (3)	PHI 112 (3)	FRE 212 (3)
ART 112 (3)	HUM 122 (3)	PHI 113 (3)	GER 211 (3)
ART 207 (3)	HUM 123 (3)	PHI 114 (3)	GER 212 (3)
DAN 125 (3)	LIT 115 (3)	PHI 115 (3)	ITA 211 (3)
MUS 120 (3)	LIT 201 (3)	PHI 116 (3)	ITA 212 (3)
MUS 121 (3)	LIT 202 (3)	PHI 214 (3)	JPN 211 (3)
MUS 122 (3)	LIT 205 (3)	PHI 218 (3)	JPN 212 (3)
MUS 123 (3)	LIT 211 (3)	PHI 220 (3)	RUS 211 (3)
MUS 125 (3)	LIT 212 (3)		RUS 212 (3)
THE 105 (3)	LIT 221 (3)		SPA 211 (3)
THE 108 (3)	LIT 222 (3)		SPA 212 (3)
THE 211 (3)	LIT 225 (3)		
THE 212 (3)	LIT 259 (3)		
THE 215 (3)	LIT 268 (3)		
<b>Social &amp; Behavioral Sciences</b> <i>(6 semester credits) Take any two courses from two different categories</i>			
Economics & Political Systems	Human Behavior, Culture, or Social frameworks		
ECO 101 (3)	ANT 101 (3)	PSY 101 (3)	SOC 207 (3)
ECO 201 (3)	ANT 102 (3)	PSY 102 (3)	SOC 215 (3)
ECO 202 (3)	ANT 103 (3)	PSY 205 (3)	SOC 216 (3)
ECO 211 (3)	ANT 104 (3)	PSY 217 (3)	SOC 218 (3)
ECO 245 (3)	ANT 107 (3)	PSY 226 (3)	SOC 220 (3)
POS 105 (3)	ANT 108 (3)	PSY 227 (3)	SOC 231 (3)
POS 111 (3)	ANT 111 (3)	PSY 235 (3)	SOC 237 (3)
POS 125 (3)	ANT 201 (3)	PSY 238 (3)	WST 200 (3)
POS 205 (3)	ANT 215 (3)	PSY 249 (3)	WST 225 (3)
POS 215 (3)	ANT 250 (3)	PSY 265 (3)	WST 240 (3)
POS 225 (3)	COM 220 (3)	SOC 101 (3)	WST 249 (3)
GEO 105 (3)	ETH 200 (3)	SOC 102 (3)	
GEO 106 (3)	JOU 105 (3)	SOC 205 (3)	
CRJ 110 (3)			
<b>Subtotal (OC, ENG, MAT, HIS, SC, N&amp;PS, A/H, S/B): 37 credits required</b>			
<b>Additional Electives</b> <i>(23 semester credits) Electives selected from the Approved Electives List.</i>			
<ul style="list-style-type: none"> <li>○ _____</li> <li>○ _____</li> <li>○ _____</li> <li>○ _____</li> <li>○ _____</li> <li>○ _____</li> </ul>			

<b>Oral Communication</b> <i>(3 credits) Take one course</i>
<ul style="list-style-type: none"> <li>○ COM 115 (3)</li> <li>○ COM 125 (3)</li> <li>○ COM 220 (3)</li> </ul>
<hr/> <b>English</b> <i>(6 credits) Take one pair</i>
<ul style="list-style-type: none"> <li>○ ENG 121 (3)</li> <li>○ ENG 122 (3)</li> <li>○ ENG 122 (3)</li> <li>○ ENG 201 (3)</li> </ul>
<b>Mathematics</b> <i>(3 semester credits) Credits over 3 will be applied to electives</i>
<ul style="list-style-type: none"> <li>○ MAT 120 (4)</li> <li>○ MAT 121 (4)</li> <li>○ MAT 122 (4)</li> <li>○ MAT 123 (4)</li> <li>○ MAT 125 (4)</li> <li>○ MAT 135 (3)</li> <li>○ MAT 166 (5)</li> <li>○ MAT 201 (5)</li> <li>○ MAT 202 (5)</li> <li>○ MAT 203 (4)</li> <li>○ MAT 204 (5)</li> <li>○ MAT 263 (4)</li> </ul>
<b>History</b> <i>(3 semester credits) Take one course</i>
<ul style="list-style-type: none"> <li>○ HIS 101 (3)</li> <li>○ HIS 102 (3)</li> <li>○ HIS 111 (3)</li> <li>○ HIS 112 (3)</li> <li>○ HIS 121 (3)</li> <li>○ HIS 122 (3)</li> <li>○ HIS 205 (3)</li> <li>○ HIS 207 (3)</li> <li>○ HIS 208 (3)</li> <li>○ HIS 215 (3)</li> <li>○ HIS 236 (3)</li> <li>○ HIS 243 (3)</li> <li>○ HIS 244 (3)</li> <li>○ HIS 245 (3)</li> <li>○ HIS 247 (3)</li> <li>○ HIS 249 (3)</li> <li>○ HIS 250 (3)</li> <li>○ HIS 255 (3)</li> <li>○ HIS 260 (3)</li> </ul>
<b>Student Choice</b> <i>(3 semester credits) One additional course from Arts &amp; Hum., History, or Social &amp; Behavioral Sciences.</i>
<ul style="list-style-type: none"> <li>○ _____</li> </ul>
<b>Total: 60 credits needed for AA Degree</b>



# FRCC Associates of Science: Degree Requirements

<p><u>Written Communication</u> (6 semester credits) Take one pair</p> <p>ENG 121 (3) and ENG 122 (3) OR ENG 121 (3) and ENG 201 (3)</p>	<p><u>Oral Communication</u> (3 semester credits) Take one</p> <p>COM 115 (3) COM 125 (3) COM 220 (3)</p>	<p><u>Mathematics</u> (3 semester credits) Take One Course. Credits over 3 will be applied to the elective category.</p> <p>MAT 121 (4)      MAT 202 (5) MAT 122 (3)      MAT 203 (4) MAT 166 (5)      MAT 204 (5) MAT 201 (5)      MAT 265 (3)</p>	<p><u>Science &amp; Math Electives</u> (8 semester credits) Additional electives credits must be selected from the approved math and science electives list below.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <p>ANT    111    GEY    111 or higher AST    101, 102                                        MAT    120 or higher BIO    105 or higher                                     (not 155, 156) CHE    101 or higher                                         MET    150 CSC    119 or higher                                        PHY    105 ENV    101    SCI    105 or higher GEO    111, 112, 160</p>
<p><u>Natural &amp; Physical Science</u> (12 semester credits) Take one pair of lab courses in sequence and an additional N&amp;PS lab course. Credits over 12 will be applied to electives category.</p>			
<p>ANT 111 (4)    BIO 105 (4)    BIO 204 (4)    BIO 208 (5)</p>	<p>BIO 221 (5)    CHE 101 (5)    CHE 102 (5)    CHE 105 (5)</p>	<p>ENV 101 (4)    MET 150 (4)    GEY 135 (4)    PHY 105 (4)</p>	<p>PHY 107 (4)</p> <p>AST 101 (4)    CHE 111 (5)    PHY 111 (5) AST 102 (4)    CHE 112 (5)    PHY 112 (5)</p> <p>BIO 111 (5)    GEO 111 (4)    PHY 211 (5) BIO 112 (5)    GEO 112 (4)    PHY 212 (5)</p> <p>BIO 201 (4)    GEY 111 (4) BIO 202 (4)    GEY 112 (4)</p>
<p><u>Arts &amp; Humanities</u> (6 semester credits) Take any two courses from two different categories</p>			
<p><u>Arts</u></p> <p>ART 110 (3) ART 111 (3) ART 112 (3) ART 207 (3) DAN 125 (3) MUS 120 (3) MUS 121 (3) MUS 122 (3) MUS 123 (3) MUS 125 (3) THE 105 (3) THE 108 (3) THE 211 (3) THE 212 (3) THE 215 (3)</p>	<p><u>Literature</u></p> <p>HUM 103 (3) HUM 115 (3) HUM 121 (3) HUM 122 (3) HUM 123 (3) LIT 115 (3) LIT 201 (3) LIT 202 (3) LIT 205 (3) LIT 211 (3) LIT 212 (3) LIT 221 (3) LIT 222 (3) LIT 225 (3) LIT 246 (3) LIT 259 (3) LIT 268 (3)</p>	<p><u>Ways of Thinking</u></p> <p>PHI 111 (3) PHI 112 (3) PHI 113 (3) PHI 114 (3) PHI 115 (3) PHI 116 (3) PHI 205 (3) PHI 214 (3) PHI 218 (3) PHI 220 (3)</p>	<p><u>Foreign Languages</u></p> <p>FRE 211 (3) FRE 212 (3) GER 211 (3) GER 221 (3) ITA 211 (3) ITA 212 (3) JPN 211 (3) RUS 211 (3) RUS 212 (3) SPA 211 (3) SPA 212 (3)</p>
<p><u>Social &amp; Behavioral Sciences</u> (6 semester credits) Take any two courses from any category</p>			
<p><u>Economic &amp; Political Systems</u></p> <p>ECO 101 (3) ECO 201 (3) ECO 202 (3) ECO 211 (3) ECO 245 (3) POS 105 (3) POS 111 (3) POS 125 (3) POS 205 (3) POS 215 (3) POS 225 (3)</p>	<p><u>Geography</u></p> <p>GEO 105 (3) GEO 106 (3)</p>	<p><u>Human Behavior, Culture, or Social Frameworks</u></p> <p>ANT 101 (3) ANT 102 (1) ANT 103 (1) ANT 104 (1) ANT 107 (3) ANT 108 (3) ANT 201 (3) ANT 215 (3) ANT 225 (3) ANT 250 (3) COM 220 (3)</p>	
		<p>CRJ 110 (3) ETH 200 (3) JOU 105 (3) PSY 101 (3) PSY 102 (3) PSY 205 (3) PSY 217 (3) PSY 226 (3) PSY 227 (3) PSY 235 (3) PSY 238 (3)</p>	<p>PSY 249 (3) PSY 265 (3) SOC 101 (3) SOC 102 (3) SOC 205 (3) SOC 207 (3) SOC 215 (3) SOC 216 (3) SOC 218 (3) SOC 220 (3) SOC 231 (3)</p>
		<p>Or Additional History Course:</p>	
<p><u>History</u> (3 semester credits) Take one course:</p>			
<p>HIS 101 (3) HIS 102 (3) HIS 111 (3) HIS 112 (3) HIS 259 (3)</p>		<p>HIS 121 (3) HIS 208 (3) HIS 236 (3) HIS 247 (3) HIS 260 (3)</p>	
<p>HIS 122 (3) HIS 215 (3) HIS 243 (3) HIS 249 (3)</p>		<p>HIS 203 (3) HIS 218 (3) HIS 244 (3) HIS 250 (3)</p>	
<p>HIS 205 (3) HIS 225 (3) HIS 245 (3) HIS 251 (3)</p>		<p>HIS 207 (3) HIS 235 (3) HIS 246 (3) HIS 255 (3)</p>	

ANT    111  
AST    101, 102  
BIO    105 or higher  
CHE    101 or higher  
CSC    119 or higher  
ENV    101  
GEO    111, 112, 160

GEY    111 or higher  
MAT    120 or higher  
         (not 155, 156)  
MET    150  
PHY    105  
SCI    105 or higher

Approved Additional Electives (13 Semester Credits)  
Additional 13 credits of electives selected from the Approved Electives List (see reverse side)

Remaining AS Requirements

Total Credits:

Remaining Credits:





## ENGLISH

### **Literature and Composition 060—Fundamentals**

**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 and Composition 060.2—Fundamentals Semester 2**

**Description:** This course is a continuation of the 060 class with a focus on fundamental skills. This course is designed to support students in a way that sets them up for success in college prep courses at CEC. 060.2 emphasizes reading strategies for both fiction and nonfiction texts, writing and communicating clearly for a variety of audiences and purposes, and overall academic skills like organization, accountability, and time management.

**Prerequisites:** Composition and Literature 060; teacher recommendation

**Designation:** College Prep

**Credits:** 0.5

### **Literature and Composition 090—Foundational College Prep English 1**

**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. The 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 and learning the conventions and expectations of the typical college essay. Students will be challenged to grow not only in their reading and composition capabilities but also as students and individuals pursuing their individual pathways in life through various reading, writing, and discussion activities.

**Prerequisites:** Placement based on NWEA MAP score, NextGen ACCUPLACER score, OR successful completion of 060/060.2.

**Designation:** College Prep

**Credits:** 1.0

### **Literature and Composition 090.2—Foundational College Prep English 2**

**Description:** This course is a continuation of 090 courses. The curriculum will focus on different themes and assignments but continue to improve upon the same skill set as 090. This class is designed to assist students in developing the foundation of writing, reading, and communicating skills. Students will be asked to critically read, analyze, and evaluate various fiction and nonfiction texts. They will also practice writing skills including a focus on the sentence level as well as recognizing elements of effective writing. Students will focus on themselves as individuals in the world and as developing readers and writers.

**Prerequisites:** C or below in Composition 090 and Literature 090 or by teacher/advisor recommendation

**Designation:** College Prep

**Credits:** 1.0

### **Literature and Composition 095—Comprehensive College Prep Composition**

**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, ACCUPLACER scores, and/or COMP and LIT 090

**Designation:** College Prep

**Credits:** 1.0

### **Literature and Composition 099—Cumulative College Prep English**

**Description:** This course is a culmination of all college prep skill sets and is designed to assist students in becoming independently capable of college communication tasks and critical thinking. Students will be asked to refine their critical reading, analysis, and evaluation abilities with various fiction and nonfiction texts. They will also perfect 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 their semester around a passion project which will serve as a capstone at the conclusion of college prep English coursework.

**Prerequisites:** COMP and LIT 095; teacher recommendation

**Designation:** College Prep

**Credits:** 1.0

### **Fringe Voice of American Literature**

**Description:** In just over 400 years, the United States has transformed from British colonies into the global powerhouse it is today. In the grand scheme of history, this evolution happened remarkably fast. Many voices of literature have been overlooked, even forgotten. In this course we will pay homage to some of the most important voices of our nation, some of which have been overlooked by teachers and students alike.

**Prerequisites:** Recommended L/C 095 or higher

**Designation:** College Prep

**Credits:** 0.5

### **Screenwriting**

**Description:** This course is an English elective where student learn how to write screenplays and writing for film. It will be a workshop environment that builds on skills they've learned in their English classes.

**Prerequisites:** Recommended L/C 095 or higher

**Designation:** College Prep

**Credits:** 0.5

### **LIT 115—Introduction to Literature**

**Description:** The purpose of Literature 115 is to provide students with a general overview of literature. Lit 115 asks students to read and analyze at a level that is consistent with deeper understanding of the material and its broader purpose in society. It also asks students to articulate how such literature is created and why an author would choose specific devices to create meaningful effects for his audience. To gain this understanding over a broad spectrum, students will be asked to read multiple genres including fiction, drama, and poetry. Overall, students should use this class as an opportunity not just to learn about literature but to see how literature applies to society at large and why literature can serve such an important role in the general fabric of what a society becomes.

**Prerequisites:** LIT 090; ACCUPLACER

**Designation:** Front Range Community College

**Credits:** 3.0

### **ENG 121—English Composition I**

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

**Prerequisites:** ACCUPLACER score and teacher recommendation

**Designation:** Front Range Community College

**Credits:** 3.0

### **ENG 122—English Composition II**

**Description:** This course introduces the student to the fundamental features of academic inquiry, reinforces student knowledge of source material and MLA format, and assists the student in becoming a stronger and more confident writer, arguer, thinker and citizen. Students will draw on the knowledge and skills gained in ENG121 and refine the drafting and revising process, progressing along the continuum that began in 121.

**Prerequisites:** ENG 121

**Designation:** Front Range Community College

**Credits:** 3.0

**ENG 221—Creative Writing**

**Description:** Teaches techniques for creative writing. Explores imaginative uses of language through creative genres (fiction, poetry, and other types of creative production such as drama, screenplays, graphic narrative, or creative nonfiction) with emphasis on the student's own unique style, subject matter and needs.

**Prerequisites:** ENG 121

**Designation:** Front Range Community College

**Credits:** 3.0

**COM 115—Public Speaking**

**Description:** Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

**Prerequisites:** ENG 121

**Designation:** Aims Community College

**Credits:** 3.0

**COM 125—Interpersonal Communication**

**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:** COMP 090

**Designation:** Aims Community College

**Credits:** 3.0

# MATH

## MAT 060—Pre-Algebra

**Description:** This course's content 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 coordinate plane, and introduction of systems.

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

**Designation:** College Prep

**Credits:** 0.5

## 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:** Pre-Algebra

**Designation:** College Prep

**Credits:** 1.0

## Geometry A

**Description:** This course covers the first half of the skills listed under the "Geometry" course and is paired with Geometry B which covers the second half of the skill set.

**Prerequisites:** Pre-Algebra

**Designation:** College Prep

**Credits:** 0.5

## Geometry B

**Description:** This course covers the second half of the skills listed under the "Geometry" course and should be taken after "Geometry A".

**Prerequisites:** Geometry A

**Designation:** College Prep

**Credits:** 0.5

## Applied Geometry

**Description:** This course is paired with a Geometry course to focus on learning the same concepts but in an application format. Students will spend this second hour of the course in the Innolab working on hands-on projects that directly apply the Geometry skill sets learned that week. Geometry begins the exploration of math as an art. In this course, students will learn to identify and construct various geometric figures and prove theorems associated with them. Principles of reasoning will be learned to aid in making conjectures and proving theorems, as well as applications of those theorems in a Euclidean geometry setting. To allow students to begin to appreciate some of the subtle beauties of mathematics, the course will explore concepts through real-world applications within the construction industry.

**Designation:** College Prep

**Credits:** 0.5

### **MAT 090A—Algebra I (Semester 1)**

**Description:** This course spans two semesters to better grasp the Algebra I content. 090A covers the following:

- 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.

**Prerequisites:** MAT 060

**Designation:** College Prep

**Credits:** 0.5

### **MAT 090B—Algebra I (Semester 2)**

**Description:** This course spans two semesters to better grasp the Algebra I content. 090B covers the following:

- Represent linear, quadratic, 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 inequalities and systems of inequalities using a variety of strategies
- Represent arithmetic and geometric sequences and use exponential models to solve problems
- Investigate square root, cube root, absolute value, piecewise-defined, step, and simple inverse functions
- Compare distributions of one-variable data

**Designation:** College Prep

**Credits:** 0.5

### **MAT 099—Algebra II**

**Description:** This course's content includes the vocabulary, systems, relations and functions, rational expressions and equations, inequalities, radical and complex numbers, and quadratic equations.

**Prerequisites:** Algebra I; Geometry

**Designation:** College Prep

**Credits:** 1.0

### **Personal Finance**

**Description:** Surveys the basic personal finance needs of most individuals and introduces the personal finance tools useful in planning and instituting a successful personal financial philosophy. The course emphasizes the basics of budgeting, buying, saving, borrowing, career planning, investing, retirement planning, estate planning, insurance, and income taxes.

**Prerequisites:** This course is designed for 11<sup>th</sup> and 12<sup>th</sup> grade students

**Designation:** College Prep

**Credits:** 1.0

### **MAT 121—College Algebra**

**Description:** Focuses on a variety of functions and the exploration of their graphs. Topics 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.

**Prerequisites:** MAT 099 and ACCUPLACER

**Designation:** Front Range Community College

**Credits:** 4.0



### **MAT 135- Introduction to Statistics**

**Description:** Introduces descriptive and inferential statistics, with an emphasis on critical thinking and statistical literacy. Topics include methods of data collection, presentation and summarization, introduction to probability concepts and distributions, and statistical inference of one and two populations. This course uses real world data to illustrate applications of a practical nature.

**Prerequisites:** Algebra II and Accuplacer

**Designation:** Front Range Community College

**Credits:** 3.0

### **MAT 166—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:** MAT 121

**Designation:** Front Range Community College

**Credits:** 5.0

### **MAT 201—Calculus I**

**Description:** Introduces single variable calculus and analytic geometry. Includes limits, continuity, derivatives, and applications of derivatives as well as indefinite and definite integrals and some applications.

**Prerequisites:** MAT 122 OR MAT 166

**Designation:** Front Range Community College

**Credits:** 5.0

### **MAT 202—Calculus II**

**Description:** Continues the study of single variable calculus which will include techniques of integration, analytic geometry, improper integrals, convergence of infinite numerical series and power series. This is a statewide Guaranteed Transfer course in the GT-MA1 category.

**Prerequisites:** MAT 201

**Designation:** Front Range Community College

**Credits:** 5.0

## SCIENCE

### **Biology A (Micro) with Lab**

**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 function, the metabolic process of respiration and photosynthesis, cellular reproduction and the basic concepts of genetics. Laboratory experiences will encourage scientific thinking by following procedures, collecting, and analyzing data.

**Prerequisites:** MAT 060

**Designation:** College Prep

**Credits:** 0.5

### **Biology B (Macro) with Lab**

**Description:** Students will explore large scale systems of biology: Ecology and Evolution. Students will examine how these systems interact and the processes that shape our environments. During this course students will practice cooperative, inquiry and project-based learning in the study of environmental and evolutionary biology. Laboratory experiences will encourage scientific thinking by collecting and analyzing data.

**Prerequisites:** Biology A (Micro)

**Designation:** College Prep

**Credits:** 0.5

### **BIO 105—General College Biology with Lab**

**Description:** Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Explores biology as a science, a process of gaining new knowledge, and the impact of biological science on society. This course includes a laboratory experience. Designed for non-science majors. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

**Prerequisites:** COMP 090

**Designation:** Front Range Community College

**Credits:** 4.0

### **BIO 111—General College Biology I with Lab**

**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. The course includes laboratory experience. This is a statewide Guaranteed Transfer course in the GT-SC1 category.

**Prerequisites:** College Prep Biology; College Prep Chemistry; COMP 090

**Designation:** Front Range Community College

**Credits:** 5.0

### **BIO 112—General College Biology II with Lab**

**Description:** Examines the fundamental principles of ecology, evolution, classification, structure, and function in plants and animals. This course includes a laboratory experience. This is a statewide Guaranteed Transfer course in the GT-SC1 category.

**Prerequisites:** BIO 111

**Designation:** Front Range Community College

**Credits:** 5.0

### **Chemistry A with Lab**

**Description:** Chemistry A is the first semester of a year-long course in Chemistry. 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. The course will be structured around a mix of lecture, group activities and labs. These activities will include working in small groups to provide the opportunity to reinforce the lecture material through various visual presentations and descriptions and receive help from the instructor. Laboratory experiences will encourage scientific thinking by following procedures, collecting and analyzing data and writing lab reports. Homework will emphasize the concepts being studied in class and provide opportunities for the student to use source material, including the textbook, to master the material. Successful completion of Chemistry A is the prerequisite for Chemistry B. This course sequence will prepare the student for higher level science courses including college biology and college-level general chemistry. The two-semester sequence is strongly recommended for any student planning to pursue a science or engineering degree.

**Prerequisites:** Geometry and MAT 090A *OR* Alg 1 and concurrently enrolled in Geometry

**Designation:** College Prep

**Credits:** 0.5

### **Chemistry B with Lab**

**Description:** Chemistry B is the second semester of a year-long course in Chemistry. During this course, students will practice cooperative, inquiry and self-guided learning in the study of matter including: chemical reactions, stoichiometry, states of matter, the gas laws, properties of water and solutions, thermochemistry, acid-base chemistry and nuclear chemistry. The course will be structured around a mix of lecture, group activities and labs. These activities will include working in small groups to provide the opportunity to reinforce the lecture material through various visual presentations and descriptions and receive help from the instructor. Laboratory experiences will encourage scientific thinking by following procedures, collecting and analyzing data and writing lab reports. Homework will emphasize the concepts being studied in class and provide opportunities for the student to use source material, including the textbook, to master the material. Successful completion of Chemistry A and concurrent enrollment in Algebra II or higher are the prerequisite for Chemistry B. This course sequence best prepares the student for higher level science courses including college biology and college-level general chemistry and is strongly recommended for any student seeking an associate of science degree or bachelor of science degree.

**Prerequisites:** Continuing progress in math sequence; Chemistry A with C or better

**Designation:** College Prep

**Credits:** 0.5

### **CHEM 101—Principles of Chemistry & Lab**

**Description:** Introduction to Chemistry I is a 5-credit course designed for non-science majors, students in occupational and health programs, and students with no chemistry background. Topics covered include the study of measurements, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acids and bases, gas laws, and condensed states. Laboratory experiments will demonstrate the above concepts qualitatively and quantitatively. This course is one of the Statewide Guaranteed Transfer courses, GT-SC1.

This course will also help students develop problem-solving techniques and gain a greater appreciation of the impact science has on our daily lives.

**Prerequisites:** MAT 050 or higher within the last 7 years AND Prerequisite or Co-Requisite: CCR 092 or CCR 093 or CCR 094

**Designation:** Front Range Community College

**Credits:** 5.0

### **Physical Science with Lab**

**Description:** This course is designed to help students develop the skills and abilities necessary to be successful in science classes. The course will do so through the study of scientific measurement, data analysis focusing on chemistry and physics. Students will learn both general problem solving and laboratory techniques, as well as specific concepts from each field, throughout several lectures and laboratory assignments in each section. Students will leave the course with a set of tools for future science classes as well as an indication of which sciences most appeal to their interests.

**Prerequisites:** MAT 060

**Designation:** College Prep

**Credits:** 0.5

### **Earth and Space Science**

**Description:** The Earth and Space Science course is a course focusing on the study of space, geologic structures and forces, the waters on our planet, and the atmospheric forces that shape our world. Students will explore the Earth's spheres including the geosphere, hydrosphere, cryosphere, atmosphere, and the cycles of the Earth. Students will learn scientific inquiry, geologic time, space exploration, the solar system, and the universe.

**Prerequisites:** MAT 060

**Designation:** College Prep

**Credits:** 1.0

### **Science Olympiad**

**Description:** Students will explore the 23 events of Science Olympiad. Students will learn topics ranging from Chemistry to Astronomy, Anatomy to Structural Engineering. You will meet these challenges through hands-on problem solving, careful study, and thinking outside the box in preparation for competition.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### **Food Science**

**Description:** This course focuses on applying principles of nutrition, biology, chemistry and human behavior to the food we eat every day. Students will refine skills in measurement, following recipes, interpreting food labels and identifying safe storage and processing techniques. Students will also learn about the food processing industry with emphasis on plant growth along with food handling and processing and marketing. In addition, understand procedures that ensure safety, sanitation and quality of food products. Students will develop knowledge and skills regarding career opportunities, entry requirements and industry expectations.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 (Science or Elective Credit)

### **GEY 111—Physical Geology with Lab**

**Description:** Introduces the major topics of geology. Course content encompasses Earth's materials, structure, and surface landforms. Geologic time and the geologic processes responsible for Earth's internal and external features are covered. This course includes laboratory experience.

**Prerequisites:** CCR 092, CCR 093, CCR 094 or ENG 121 or higher

**Designation:** Front Range Community College

**Credits:** 4.0

### **GEY 112—Historical Geology with Lab**

**Description:** Covers the development of Earth through the vast span of geologic time. Emphasis is on the investigation and interpretation of sedimentary rocks and features, the record of ancient environments, fossil life forms, and physical events in Earth's history within the framework of plate tectonics. This course includes laboratory experience.

**Prerequisites:** GEY 112

**Designation:** Front Range Community College

**Credits:** 4.0

### **GEY 135—Environmental Geology with Lab**

**Description:** Environmental Geology introduces the subject of geology as it relates to human activities. Geologic hazards such as floods, landslides, earthquakes, and volcanoes are investigated. Mineral, energy, soil and water resources are discussed in terms of their geologic formation and identification, usage by society and associated environmental impacts. Land use issues, waste and pollution are also examined.

**Prerequisites:** CCR 092, CCR 093, CCR 094 or ENG 121 or higher

**Designation:** Front Range Community College

**Credits:** 4.0

### **PHY 105—Conceptual Physics with Lab**

**Description:** Focuses on mechanics, heat, properties of matter, electricity and magnetism, light, and modern physics. Incorporates laboratory experience. /This is a statewide Guaranteed Transfer course in the GT-SC1 category.

**Prerequisites:** MAT 050 or above and undergraduate level CCR 092, minimum grade of S/C or above.

**Designation:** Front Range Community College

**Credits:** 4.0

## **SOCIAL SCIENCE AND HUMANITIES**

### **Geography**

**Description:** This course examines how climate and resources impact the movement and development of human societies. We will take a regional approach, studying 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 Earth's human systems and physical features to investigate and address geographic issues.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0

### **Civics**

**Description:** Students will study the history and civil government of the United States and of the state of Colorado. Topics include the history and contents of the Constitution, the functions of the three branches of government, structure of Colorado's government, and key events in Colorado history. Students will also discuss current events at the national and local levels.

**Prerequisites:** Comp/Lit 090 or higher recommended

**Designation:** College Prep

**Credits:** 1.0

### **Early World History**

**Description:** Early World History is a semester-long survey of world history from beginning of human societies to 1000 CE. An emphasis will be placed on vocabulary, critical thinking skills, and interpretation of original documents. Besides listening to traditional lectures on important themes in world history, students are expected to participate in class through discussions, small group interactions, and partner work. Students will demonstrate mastery of content and understanding of cause and effect, change over time, and similarities and differences between civilizations through homework, quizzes, and projects.

**Prerequisites:** Comp/Lit 060 or higher recommended

**Designation:** College Prep

**Credits:** 1.0

### **HIS 101—Western Civilization: Antiquity-1650**

**Description:** Explores events, peoples, groups, ideas, institutions, and trends that have shaped Western Civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion, and ethnic groups. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.

**Prerequisites:** COMP/LIT 095

**Designation:** Front Range Community College

**Credits:** 3.0

### **HIS 112—The World: 1500-Present**

**Description:** Explores peoples, groups, ideas, institutions, and trends that have shaped World History from 1500 to the present. Reflects the multiple perspectives of gender, class, religion, and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.

**Prerequisites:** COMP/LIT 095

**Designation:** Front Range Community College

**Credits:** 3.0

### **HIS 121—US History to Reconstruction**

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

**Prerequisites:** COMP/LIT 095

**Designation:** Front Range Community College

**Credits:** 3.0

### **HIS 122—US History Since the Civil War**

**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:** COMP/LIT 095

**Designation:** Front Range Community College

**Credits:** 3.0

### **HUM 122— Medieval to Modern**

**Description:** Introduces the interdisciplinary study of ideas that have defined cultures through a survey of the visual, performing, and literary arts, emphasizing connections among global cultures from the medieval to the early modern era.

**Prerequisites:** COMP/LIT 090

**Designation:** Front Range Community College

**Credits:** 3.0

### **Business Entrepreneurship**

**Description:** Business Entrepreneurship will provide students with a basic overview of the necessary components needed to launch their own business. The culmination of this class is a pitch competition with prizes to help students further develop their business ideas. We will cover failure as a positive opportunity, The Lean Startup Method, competitor and environmental analysis, pivoting, as well as prototyping, marketing and financial strategies. These topics will be covered in lecture, practiced through group activities, and then applied to your own businesses. As a class, we will be using the Precious Plastics model during group activities to apply lecture concepts to a business, students can familiarize themselves with the company at: <https://preciousplastic.com>

**Prerequisites:** A minimum of one BUS course (preferably two or more)

**Designation:** College Prep

**Credits:** 1.0

### **CRJ 110—Introduction to Criminal Justice**

**Description:** Introduces students to the basic components of the criminal justice system in the United States. Concepts of crime, perspectives and views of crime, crime data, theory, victimization, and law are discussed. Particular attention to the criminal justice process, interaction and conflict between criminal justice agencies, and current criminal justice issues are examined.

**Prerequisites:** COMP/LIT 090

**Designation:** Aims Community College

**Credits:** 3.0

### **PHI 112—Ethics**

**Description:** Examines human life, experience, and thought to discover and develop the principles and values for pursuing a more fulfilled existence. This course examines ethical theories designed to both justify moral judgments, as well as apply these ethical theories to a selection of personal and social issues in the world today. This is a statewide Guaranteed Transfer course in the GT-AH3 category.

**Prerequisites:** COMP/LIT 090

**Designation:** Aims Community College

**Credits:** 3.0

### **PHI 113—Logic**

**Description:** Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking and the formal analysis of arguments. Emphasizes the development of decision-making and problem-solving. This is a statewide Guaranteed Transfer course in the GT-AH3 category.

**Prerequisites:** COMP/LIT 090

**Designation:** Aim Community College

**Credits:** 3.0

### **POS 125—American State and Local Government**

**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. This is a statewide Guaranteed Transfer course in the GT-SS1 category.

**Prerequisites:** Comp/LIT 090

**Designation:** Aims Community College

**Credits:** 3.0

### **PSY 101—General Psychology I**

**Description:** Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

**Prerequisites:** COMP/LIT 095 or higher recommended

**Designation:** Aims Community College

**Credits:** 3.0

### **PSY 231—Positive Psychology**

**Description:** Focuses on human strengths and explores strengths-based research and concepts of life satisfaction, well-being, happiness, helpfulness, resiliency, post-traumatic growth, and improving emotional, psychological, and social functioning.

**Prerequisites:** COMP/LIT 095 or higher recommended

**Designation:** Aims Community College

**Credits:** 3.0

### **PSY 235—Human Growth/Development**

**Description:** Examines human development from conception through death, emphasizing physical, cognitive, emotional, and psychosocial factors.

**Prerequisites:** COMP/LIT 095 or higher recommended

**Designation:** Aims Community College

**Credits:** 3.0



## COLLEGE AND CAREER READINESS

### Wolf Connection

**Description:** Wolf Connection is designed to help students discover their unique place at CECFC and to provide the tools needed for a successful transition into high school. Students will connect with staff and peer mentors to discuss and improve various skills, including organization, study skills, effective communication, conflict resolution, and ethical use of technology. Additionally, students will create measurable short and long-term goals for academic success.

**Prerequisites:** Required for all 9<sup>th</sup> graders and recommended for new 10<sup>th</sup> graders

**Designation:** College Prep

**Credits:** 0.25

### Student Success

**Description:** Student Success is a support class designed to help students to be successful in their other courses and at CECFC. Students will meet with a small group and have individual check in time with a mentor to work on the following: tracking and prioritizing work, establishing healthy academic habits, structuring a productive work environment, and specific academic support and/or tutoring when applicable.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.25

### Mindfulness for Life

**Description:** Do you get anxious about school or about life in general? Would you like to have better control of your moods? Do you know there are self-care practices that can help you in all aspects of your daily life? Mindfulness is one of these self-care practices! It teaches you to be in the present moment by paying attention to your thoughts, feelings, and sensations without judgement. This process often results in improved mental wellness and self-esteem, enhanced concentration, and strengthened resilience. You can cultivate Mindfulness by focusing on your breath, by connecting with others openly just as you are, and by nourishing your mind and body to regulate nervous energy and anxiety. This course is based on ancient wisdom and scientific evidence, and it provides a clear map to navigate the difficult challenges of life in a safe and supportive environment. Mindfulness for life will help you develop social skills and other resources to weather stress and find a sense of peace and joy on your journey as a High School student and beyond.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### SAT Prep

**Description:** This course will help students discover strategies to work through the English and math portions of the SAT quickly and confidently- even in questions covering topics a student may not yet have covered in class. Students will learn and practice test-taking skills in preparation for their chosen test date.

**Prerequisites:** 11<sup>th</sup> grade students

**Designation:** College Prep

**Credits:** 0.25

### College and Career Prep

**Description:** This course will help students discover strategies to work through the English and math portions of the SAT quickly and confidently- even in questions covering topics a student may not yet have covered in class. Students will learn and practice test-taking skills in preparation for their chosen test date. This course also focuses on cover letters, application and interviewing strategies, exploring jobs and college options, and resume writing.

**Prerequisites:** 11<sup>th</sup> grade students

**Designation:** College Prep

**Credits:** 1.0

## **Career Pathways**

**Description:** Students will explore career pathways through three approaches in this course. The first is identifying the strengths, values, and interests the student has. From there, students will learn about different career “clusters” that exist and chose an area that matches best with what they currently know about themselves. Through the vehicle of “Professional Learning Communities” and industry specific mentors, students will further explore careers and long-term skill sets needed to be successful. The last component is a passion project related to these identified skill areas and strengths that students will continue to adapt as a final project that brings them one step closer to understanding their potential career journey as well as developing “professional skills” necessary post-graduation to be successful in college and/or career.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0

## **BUS 217—Business Communication**

**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.

**Prerequisites:** NextGen ACCUPLACER score (Comp/Lit 095 or higher recommended)

**Designation:** Aims Community College

**Credits:** 3.0

## WORLD LANGUAGES

### ASL 121—American Sign Language I

**Description:** Exposes the student to American Sign Language. Readiness activities are conducted focusing on visual/receptive skills and basic communication. Utilizes the direct experience method.

**Prerequisites:** COMP 090

**Designation:** Aims Community College

**Credits:** 5.0

### ASL 122—American Sign Language II

**Description:** Develops a basic syntactic knowledge of American Sign Language (ASL), basic vocabulary and basic conversational skills. Incorporates vital aspects of Deaf culture and community. The direct experience method is used to enhance the learning process.

**Prerequisites:** ASL 121

**Designation:** Aims Community College

**Credits:** 5.0

### French I

**Description:** French I is a semester long course that focuses on the development of students' communicative competence and their understanding of the cultural products, practice and perspectives of the Francophone world. Communicative competence is divided into three modes: speaking and writing as an interactive process in which students learn to communicate with other speakers of French-(Interpersonal mode); reading, listening and viewing as a receptive process in which comprehension is developed-(Interpretive mode); and speaking and writing in a presentational context in which students are focused on organization of thoughts and awareness of their audience when delivering information-(Presentational mode). Students communicate in real-life contexts where grammar and vocabulary are integrated according to various real-life situations in which they are required to function. Many of these tasks also connect to other content areas. Through the language learning process, students develop an understanding of how their own language is structured and how their own culture has unique aspects. Emphasis is placed on the use of French in the classroom as well as on the use of authentic materials to learn about the culture. A continued important component of language classes is the use of the language beyond the classroom in order to apply knowledge of the language in the real world.

**Prerequisites:** COMP/LIT 060

**Designation:** College Prep

**Credits:** 1.0

### French II

**Description:** French II is a semester long course that focuses on the development of students' communicative competence and their understanding of the cultural products, practice and perspectives of the Francophone world. Communicative competence is divided into three modes: speaking and writing as an interactive process in which students learn to communicate with other speakers of French-(Interpersonal mode); reading, listening and viewing as a receptive process in which comprehension is developed-(Interpretive mode); and speaking and writing in a presentational context in which students are focused on organization of thoughts and awareness of their audience when delivering information-(Presentational mode). This course builds on grammar and vocabulary learned in French I, where students learned to communicate in the present indicative, to include communication in imperative, future and past tenses.

**Prerequisites:** French I

**Designation:** College Prep

**Credits:** 1.0

### Mandarin Chinese I

**Description:** This is a beginner Chinese class focused on learning Chinese culture and simple words for greetings, names, family members, numbers, days, dates, time, directions, weather, food, cloth, transportation, etc.

**Prerequisites:** COMP/LIT 060

**Designation:** College Prep

**Credits:** 1.0

## **Mandarin Chinese II**

**Description:** This is a second level Chinese class focused on daily communications. Students will learn how to express their needs, opinions, comments, etc.

**Prerequisites:** Mandarin Chinese I

**Designation:** College Prep

**Credits:** 1.0

## **Mandarin Chinese III**

**Description:** This is a third level Chinese class

**Prerequisites:** Mandarin Chinese II

**Designation:** College Prep

**Credits:** 1.0

## **Spanish I**

**Description:** Spanish I is a semester 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. Communicative competence is divided into three modes: speaking and writing as an interactive process in which students learn to communicate with other Spanish-speakers (Interpersonal mode); reading, listening, and viewing as a receptive process in which comprehension is developed (Interpretive mode); and speaking and writing in a presentational context in which students are focused on organization of thoughts and awareness of their audience when delivering information (Presentational mode). Students communicate in real-life contexts where grammar and vocabulary are integrated according to various real-life situations in which they are required to function. Many of these tasks also connect to other content areas. Through the language learning process, students develop an understanding of how their own language is structured and how their own culture has unique aspects. Emphasis is 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 this course is the use of Spanish beyond the classroom in order to apply it in the real world.

**Prerequisites:** COMP/LIT 060

**Designation:** College Prep

**Credits:** 1.0

## **Spanish II**

**Description:** Spanish II is a semester 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. Communicative competence is divided into three modes: speaking and writing as an interactive process in which students learn to communicate with other Spanish-speakers (Interpersonal mode); reading, listening, and viewing as a receptive process in which comprehension is developed (Interpretive mode); and speaking and writing in a presentational context in which students are focused on organization of thoughts and awareness of their audience when delivering information (Presentational mode). Students communicate in real-life contexts where grammar and vocabulary are integrated according to various real-life situations in which they are required to function. Many of these tasks also connect to other content areas. Through the language learning process, students develop an understanding of how their own language is structured and how their own culture has unique aspects. Emphasis is 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 this course is the use of Spanish beyond the classroom in order to apply it in the real world.

**Prerequisites:** Spanish I

**Designation:** College Prep

**Credits:** 1.0

## **Spanish III**

**Description:** Spanish III is a semester long course that will focus on various topics such as art, music, literature, etc. in order to comprehend, respect and appreciate the Hispanic World. Students will continue to develop their proficiency in speaking, listening, writing and reading by reviewing content they learned in Spanish I and II, as well as learning new vocabulary and grammatical structures. The course will implement the three modes of communication: interpretive, interpersonal, and presentational. Each unit consists of a variety of tasks to understand written and spoken passages, to communicate with others through informal/formal speaking and writing interactions, and to express their thoughts and opinions in both formal and informal spoken and written contexts.

The course will also touch on the importance of foreign languages as a career and will provide students with the opportunity to explore those options as with translation techniques, interpretation projects, etc. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

**Prerequisites:** Spanish II

**Designation:** College Prep

**Credits:** 1.0

### **SPA 111—College 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:** College Prep Spanish I

**Designation:** Aims Community College

**Credits:** 5.0

### **SPA 112—College 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:** SPA 111

**Designation:** Aims Community College

**Credits:** 5.0

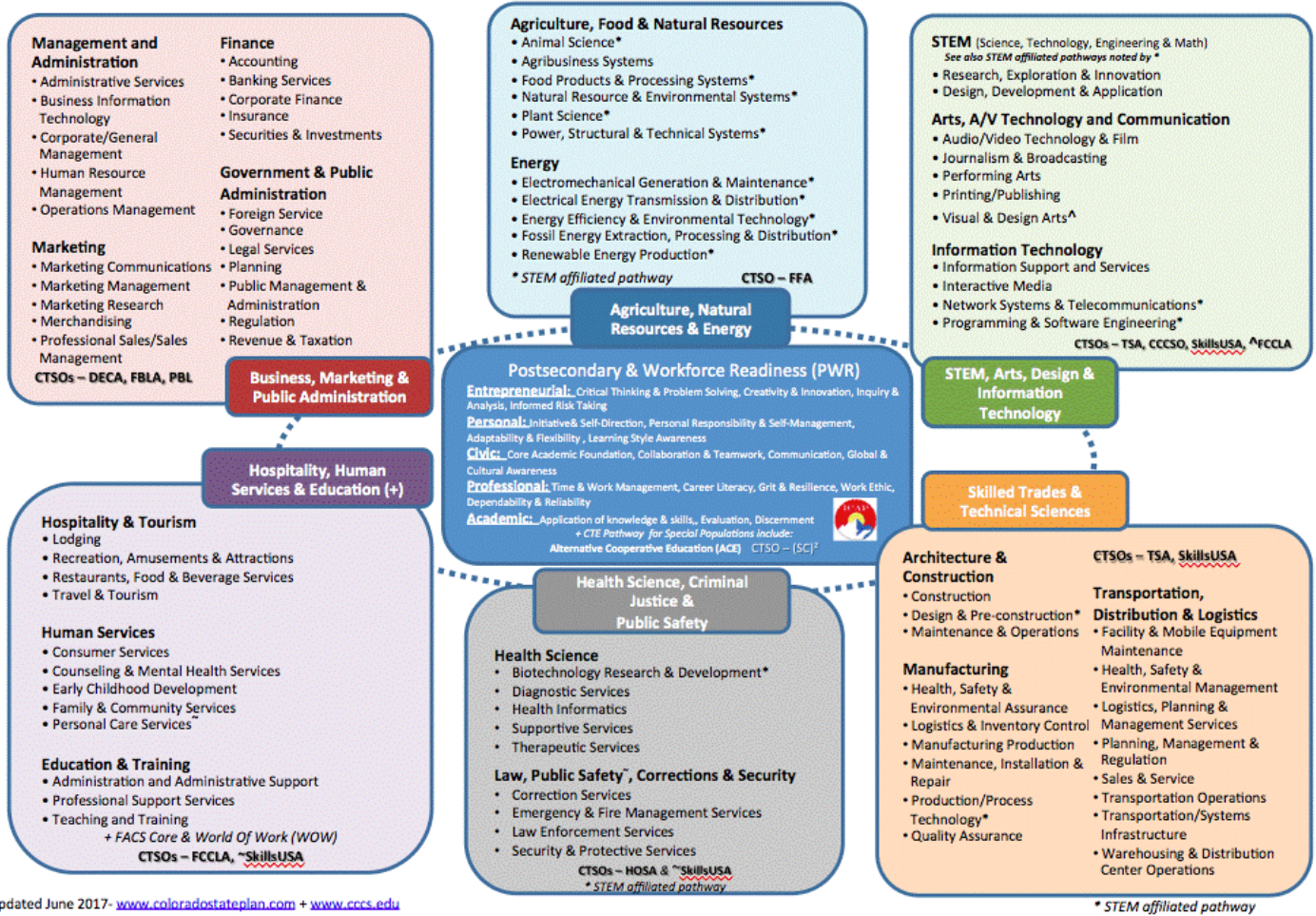
# CAREER AND TECHNICAL EDUCATION PATHWAYS

## What is a CTE Program?

Career and technical education (CTE) consists of programs teaching specific career skills to students 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. CECFC has CTE programs in STEM, Construction, Art, Information Technology and Agriculture and are looking to add Manufacturing, Business and Family and Consumer Science in the future.



# 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

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 in that career cluster. All programs have a sequence of four courses that students can take while at CECFC. All of our programs start with a class that focuses on career exploration, includes the opportunity to earn industry certifications, and has an associated student organization. Most programs level 4 course is a capstone project or work-based learning experience that exposes students to what work in that field would be. Programs are guided by an advisory board made up of industry, education partners and other stakeholders.

## CAREER AND TECHNICAL EDUCATION COURSES

### Introduction to Agriculture

**Description:** This conceptual course will cover a wide range of topics concerning agriculture and natural resources, including plant and animal science, production, and processing; environmental science and conservation; ecology; agricultural mechanics; food production for a growing global population, business operations and management; and the careers available in the agricultural/natural resources industry. This course will also cover major historical events and current events in agriculture, as well as learning the importance of leadership, communications and public speaking as they relate to agriculture. There will be an opportunity for leadership development, work experiences, friendly competitions, volunteer hours, and travel through an associated student organization.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### Principles of Animal and Veterinary Science

**Description:** This course covers the basic anatomy and physiology of domestic animals (large and small), genetics, reproduction, animal health and welfare, evaluation and selection of animals, land stewardship and marketing. Students explore the necessary elements to create humane, ecologically and economically sustainable animal production systems. Participation in FFA student organization activities and Supervised Agriculture Experience (SAE) projects is an integral course component.

**Prerequisites:** Introduction to Agriculture preferred

**Designation:** College Prep

**Credits:** 1.0

### Animal Production

**Description:** Students will develop understanding and proficiency in the areas of Animal Production Systems, “Farm to Table”, Animal Reproduction and Genetics, Animal Nutrition and Feeding, Animal Behavior and Management, the business side of animal production, and research current Issues facing Animal Agriculture. Participation in FFA student organization activities and Supervised Agriculture Experience (SAE) projects is an integral course component.

**Prerequisites:** Principles of Animal and Veterinary Science preferred

**Designation:** College Prep

**Credits:** 0.5

### Principles of Horticulture Science

**Description:** This course covers the basics of plant care. Students will investigate plant anatomy and physiology, plant growth processes (such as photosynthesis), propagation methods, taxonomy and classification, and plant identification. The course will also highlight developing communication skills, leadership skills, and incorporate an exploration of the careers within the plant science industry. Participation in FFA student organization activities and Supervised Agriculture Experience (SAE) projects is an integral course component.

**Prerequisites:** Introduction to Agriculture preferred

**Designation:** College Prep

**Credits:** 1.0

### Greenhouse Production

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

**Prerequisites:** Principles of Horticulture Science preferred

**Designation:** College Prep

**Credits:** 0.5

## **Food Science**

**Description:** This course focuses on applying principles of nutrition, biology, chemistry and human behavior to the food we eat every day. Students will refine skills in measurement, following recipes, interpreting food labels and identifying safe storage and processing techniques. Students will also learn about the food processing industry with emphasis on plant growth along with food handling and processing and marketing. In addition, understand procedures that ensure safety, sanitation and quality of food products. Students will develop knowledge and skills regarding career opportunities, entry requirements and industry expectations.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 (Science or Elective Credit)

## **Principles of Manufacturing**

**Description:** Gives students a broad understanding of manufacturing and the role of the advanced manufacturing. Students learn how manufacturing is important to Colorado and the U.S. Topics covered include manufacturing concepts, principles, and processes, cost elements, tools and techniques, safety, current trends and manufacturing in the future. This course provides the student an overview of the different methods, tools and machines which are used to manufacture industrial and consumer product

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

## **Principles of Engineering and Technology**

**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:** 0.5

## **Applied Engineering Design**

**Description:** Applied Engineering Design is an applied course for students interested in further developing their skills as future engineers. This course covers knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to explain the differences between scientists and engineers, understand the importance of ethical practices in engineering and technology, identify components of control systems, create simple free body diagrams, use measurement devices employed in engineering, conduct basic engineering economic analysis, follow the steps in the engineering design process to complete a team project, and effectively communicate design solutions to others.

**Prerequisites:** Principles of Engineering and Technology

**Designation:** College Prep

**Credits:** 0.5

## **Applied Geometry**

**Description:** This course is paired with a Geometry course to focus on learning the same concepts but in an application format. Students will spend this second hour of the course in the Innolab working on hands-on projects that directly apply the Geometry skill sets learned that week. Geometry begins the exploration of math as an art. In this course, students will learn to identify and construct various geometric figures and prove theorems associated with them. Principles of reasoning will be learned to aid in making conjectures and proving theorems, as well as applications of those theorems in a Euclidean geometry setting. To allow students to begin to appreciate some of the subtle beauties of mathematics, the course will explore concepts through real-world applications within the construction industry.

**Designation:** College Prep

**Credits:** 0.5



## **Robotics 1**

**Description:** Robotics & Automated Systems is an applied course for students who wish to explore how robots and automated systems are used in industry. Upon completion of this course, students will have an understanding of the historical and current uses of robots and automated systems; programmable circuits, interfacing both inputs and outputs; ethical standards for engineering and technology professions; and testing and maintenance of robots and automated systems.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

## **Robotics 2**

**Description:** Robotics will allow students to develop skills in the robotics field by studying programming, electronics, pneumatics, hydraulics, and mechanical systems. Robotics applications and career exploration in the robotics industry are incorporated in this course. Students will apply Physical Science, Mathematics, and Technology while getting hands-on experience designing, constructing and testing robots. This course will be of interest to students planning careers in automated manufacturing and engineering. Students will have the opportunity to compete in several Saturday competitions throughout the semester with teams from around the state. These competitions are not required as part of the class and participation does not affect grades.

**Prerequisites:** Robotics and Automated Systems or previous Robotics experience

**Designation:** College Prep

**Credits:** 0.5

## **Drone Basics**

**Description:** This course introduces students to rules and regulations required for them to pass the UAS Remote Pilot Certification. Students will also have the opportunity to have hands-on experience piloting a drone. Students that successfully complete this course will have the information necessary for them to pass the FAA's "Part 107" airman knowledge test. The FAA Part 107 is a set of rules for operating a drone commercially. Topics include but are not limited to: Certification Pathway, Drone Theory and Aeronautics, Regulations and Operating Rules, Airspace Classification, Weather, sUAS Loading and Performance, Crew Management, Radio Communications, Airport Operations, and Maintenance and Inspection Procedures. Students must be 16 to take the Part 107 exam but do not need to be 16 to take the course.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

## **Principles of Construction**

**Description:** Explores the expanding array of careers within the construction industry. Students will be exposed to the construction industry through job site tours, hands-on experience, and classroom activities. Math and science application will be established through the academic integration of jobsite technical skills and classroom theory.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

## **Applied Construction**

**Description:** Carpentry Technology prepares students for careers in residential and commercial carpentry. Students will be able to frame floors, walls, ceilings, roofs, and stairs while safely employing tools and interpreting construction drawings to complete projects. Emphasis is placed on demonstrating proper measurement and application of mathematical concepts. Students to gain an understanding of wood grades and construction methods and to learn skills such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction, finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and safely, erect buildings from construction lumber, perform finish work inside of buildings, and do limited cabinet work. Carpentry courses may also include career exploration, good work habits, and employability skills.

**Prerequisites:** Principles of Construction

**Designation:** College Prep

**Certification:**

**Credits:** 4.0

## **Woodworking I**

**Description:** Woodworking 1 will cover basic concepts of woodworking, providing a student with the knowledge to apply their skills to progressively more intricate projects. Students enrolled in the course will learn how to design, plan and construct wood projects, including a project of their own design. We will be covering proper use of both power and hand tools, with a paramount focus on safe operation of these tools, as well as shop safety procedures. All students will have to pass a rigorous safety test before using any equipment, and abide by strict safety rules in the shop. Students explore precision measurement of wood fabrication through careful and thorough project planning. Students will also earn their OSHA 10 Certification in this class.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

## **Woodworking II**

**Description:** Woodworking 2 is designed to build upon the basic concepts of woodworking, providing a student with the knowledge to apply their skills to intricate projects. Students enrolled in the course will improve their skills designing, planning and constructing wood projects, including a project of their own design. We will be covering proper use of both power and hand tools, with a paramount focus on safe operation of these tools, as well as shop safety procedures. All students will have to pass a rigorous safety test before using any equipment and abide by strict safety rules in the shop. A final project incorporates all skills a student has developed over Woodworking 1 and 2.

**Prerequisites:** Woodworking I

**Designation:** College Prep

**Credits:** 0.5

## **Career Pathways**

**Description:** Students will explore career pathways through three approaches in this course. The first is identifying the strengths, values, and interests the student has. From there, students will learn about different career “clusters” that exist and chose an area that matches best with what they currently know about themselves. Through the vehicle of “Professional Learning Communities” and industry specific mentors, students will further explore careers and long-term skill sets needed to be successful. The last component is a passion project related to these identified skill areas and strengths that students will continue to adapt as a final project that brings them one step closer to understanding their potential career journey as well as developing “professional skills” necessary post-graduation to be successful in college and/or career.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0

## **Basics in Emergency Medicine**

**Description:** Students in this hands-on course will have the opportunity to complete several certifications relevant in fields where first aid and emergency safety protocols are necessary.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

**BUS 115—Introduction to Business**

**Description:** Focuses on the operation of the American Business System. Covers fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business and social responsibilities.

**Prerequisites:** NextGen ACCUPLACER score (Comp/Lit 095 or higher recommended)

**Designation:** Front Range Community College

**Credits:** 3.0

**BUS 216—Legal Environment of Business**

**Description:** Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

**Prerequisites:** NextGen ACCUPLACER score (Comp/Lit 095 or higher recommended)

**Designation:** Aims Community College

**Credits:** 3.0

**BUS 217—Business Communication**

**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.

**Prerequisites:** NextGen ACCUPLACER score (Comp/Lit 095 or higher recommended)

**Designation:** Aims Community College

**Credits:** 3.0

**MAR 216—Principles of Marketing**

**Description:** Presents the analysis of theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to business and the individual consumer.

**Prerequisites:** NextGen ACCUPLACER score (Comp/Lit 095 or higher recommended)

**Designation:** Front Range Community College

**Credits:** 3.0

# COMPUTER SCIENCE

## Computer Science Foundations

**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

**Credits:** 0.5

## A+ Certification

**Description:** TestOut PC Pro prepares students for the TestOut PC Pro and CompTIA A+ 220-1001 (Core 1) and 220-1002 (Core 2) certification exams. Students use multiple learning formats to learn how to install, manage, and secure computer hardware and master home and corporate OS environments.

**Prerequisites:** Computer Science Foundations (or equivalent) preferred

**Designation:** College Prep

**Credits:** 0.5

## Network+ Certification

**Description:** The TestOut Network Pro prepares students for the TestOut Network Pro certification exam and CompTIA's Network+ N10-007 certification exam. Students gain the knowledge and skills they need to install, configure, and maintain a network for a small business.

**Prerequisites:** PC Pro (A+ Certification) required

**Designation:** College Prep

**Credits:** 0.5

## Security+ Certification

**Description:** Security+ is a global certification that validates the baseline skills necessary to perform core security functions and pursue an IT security career. Security+ is the first security certification a candidate should earn. It establishes the core knowledge required of any cybersecurity role and provides a springboard to intermediate-level cybersecurity jobs. Security+ incorporates best practices in hands-on troubleshooting, ensuring candidates have practical security problem-solving skills required to:

Assess the security posture of an enterprise environment and recommend and implement appropriate security solutions

- Monitor and secure hybrid environments, including cloud, mobile, and IoT

- Operate with an awareness of applicable laws and policies, including principles of governance, risk, and compliance

- Identify, analyze, and respond to security events and incidents

**Prerequisites:** A+ Certification and Network+ required

**Designation:** Certification

**Credits:** 0.5

**CIS 118—Introduction to PC Applications**

**Description:** Introduces basic computer terminology, file management, and PC system components. Provides an overview of office application software including word processing, spreadsheets, databases, and presentation graphics. Includes the use of a web browser to access the Internet.

**Prerequisites:** MAT 090

**Designation:** Front Range Community College

**Credits:** 3.0

**CSC 160—Computer Science I (Java or C+)**

**Description:** Introduces students to the discipline of computer science and programming. Algorithm development, data representation, logical expressions, sub-programs and input/output operations using a high-level programming language are covered. Intensive lab work outside of class time is required.

**Prerequisites:** Computer Science Foundations preferred

**Designation:** Front Range Community College

**Credits:** 4.0

**CSC 161—Computer Science II (Java or C+)**

**Description:** Continues the structured algorithm development and problem-solving techniques begun in Computer Science I. Enables students to gain experience in the use of data structures and design of larger software projects. Requires intensive computer laboratory experience.

**Prerequisites:** CSC 160

**Designation:** Front Range Community College

**Credits:** 4.0

## VISUAL ART

### High School Art Foundations

**Description:** This course introduces the concepts and significance of visual arts, including media, processes, techniques, and terminology. Student will explore the content of the course through the creation of original art projects including drawing, ceramic hand building, and other art media.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### Textiles

**Description:** Students will gain a foundational understanding of sewing and textiles including a variety of basic skills and machine usage.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### ART 110—Art Appreciation

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

**Prerequisites:** COMP 090

**Designation:** Front Range Community College

**Credits:** 3.0

### ART 121—Drawing I

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

**Prerequisites:** COMP/LIT 060

**Designation:** Front Range Community College

**Credits:** 3.0

### ART 221—Drawing II

**Description:** Explores expressive drawing techniques with an emphasis on formal composition, color media and content or thematic development.

**Prerequisites:** ART 121

**Designation:** Front Range Community College

**Credits:** 3.0

### ART 131—Visual Concepts- 2-D Design

**Description:** Examines the basic elements of design, visual perception, and artistic form and composition as they relate to two-dimensional media.

**Prerequisites:** COMP/LIT 060

**Designation:** Front Range Community College

**Credits:** 3.0

### ART 132—Visual Concepts- 3-D Design

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

**Prerequisites:** COMP/LIT 060

**Designation:** Front Range Community College

**Credits:** 3.0

### **ART 161—Ceramics**

**Description:** Introduces traditional and contemporary ceramic forms and processes including hand building and throwing on the potter's wheel.

**Prerequisites:** COMP/LIT 060

**Designation:** Front Range Community College

**Credits:** 3.0

### **ART 261—Ceramics II**

**Description:** A continuation of ART 161, this course emphasizes skill, technique and form.

**Prerequisites:** ART 161

**Designation:** Front Range Community College

**Credits:** 3.0

### **ART 262—Ceramics III**

**Description:** Encourages students to develop an individual style of wheel thrown and hand built ceramic forms with continuing involvement in surface treatment.

**Prerequisites:** ART 261

**Designation:** Front Range Community College

**Credits:** 3.0

### **Introduction to Film**

**Description:** This course is an exploration of film. The curriculum will focus on seeing and understanding film as an art and a reflection of our lives. This class is designed to assist students in analysis, writing, comprehension, and communication skills. Students will be asked to interpret, analyze, and explain various films. They will view films and discuss their thoughts with the class both verbally and through writing. They will also learn to understand film through writing. Students will learn how to write short films and the narrative structure/language of film. Students will focus on themselves as individuals and the world we live in through film analysis and screenwriting.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### **Foundations of Design, Multimedia Arts, and Digital Communications**

**Description:** Student are introduced to the variety of programs and occupations in the arts, audio/video technology, and communications systems. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### **MGD 111- Adobe Photoshop I**

**Description:** Concentrates on the high-end capabilities of a raster photo-editing software as an illustration, design and photo-retouching tool. Students explore a wide range of selection and manipulation techniques that can be applied to photos, graphics and videos.

**Prerequisites:** Foundations of Design, Multimedia, and Digital Communications preferred  
(basic keyboarding and computer knowledge required)

**Designation:** Front Range Community College

**Credits:** 3.0

### **MGD 112—Adobe Illustrator**

**Description:** Concentrates on the high-end capabilities of Adobe Illustrator as an illustration, design and vector drawing tool. Students learn how to use the tools to create digital artwork that can be used in web design, print media, and digital screen design. Course competencies and outline follow those set by the Adobe certified Associate exam in Visual Communication using Adobe Illustrator.

**Prerequisites:** Foundations of Design, Multimedia, and Digital Communications preferred (basic keyboarding and computer knowledge required)

**Designation:** Front Range Community College

**Credits:** 3.0

### **MGD 114— Adobe InDesign**

**Description:** Introduces students to InDesign, a page layout program that integrates seamlessly with other Adobe design programs. InDesign delivers creative freedom and productivity to Desktop Publishing. Class discussions and independent projects supplement hands-on classroom work.

**Prerequisites:** Foundations of Design, Multimedia, and Digital Communications preferred (basic keyboarding and computer knowledge required)

**Designation:** Front Range Community College

**Credits:** 3.0

### **Yearbook**

**Description:** Our yearbook will be the product of the students who create it. The students will research yearbooks and develop a plan for the design, theme, layout, cover, copy, captions, etc. Based on their plan, the students will set goals in advance of deadlines. Throughout the semester, students will work hard to meet these goals and submit required materials by all deadlines set by the printer. Group and individual projects will help students hone their skills, resulting in a better final product. Students will have the opportunity to create a multimedia project of their choosing to demonstrate the skills they've learned over the semester.

**Prerequisites:** COMP 090 (Recommended)

**Designation:** College Prep

**Credits:** 0.5



## PERFORMING ARTS

### Beginning Guitar

**Description:** This course is designed for students who are brand new at playing the guitar. Students will learn chords, individual note reading (tab), scales, and strumming/rhythm. Students are responsible for practicing outside of class time. No concerts are given.

*Students will need to provide their own acoustic guitar, tuner and capo. Be sure to bring your guitar on the first day of class! Class size limited to 8 students.*

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.25

### Int/Adv Guitar

**Description:** This is a continuation of Guitar 1. Students will learn chords, tab, scales, strumming, along with alternate tuning, picking, and chord structure/set up for song writing. Prerequisite: students must have taken Guitar 1 or know basic first position chords on the guitar (A, E, G, C, D em, am). Practice outside of class time is a must. No concerts are given. *Students will need to provide their own acoustic guitar, tuner, and capo. Bring your guitar on the first day of class! Class size limited to 8 students.*

**Prerequisites:** Beginning Guitar

**Designation:** College Prep

**Credits:** 0.25

### Choir (Beginning/Intermediate/Advanced)

**Description:** Choir is a performance-based singing class that develops sight-reading, pitch memory, basic music notation, proper tone quality, breath management and group performance techniques. Any student can join choir. You do not have to have prior experience. Participation in four concerts plus other special programs is required. This course may be repeated for additional credits. Students can choose to be in both choirs and receive credit for each.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5

### MUS 100—Music Theory

**Description:** Introduces the basics of music theory. Course designed to help the beginning music student, or those students with limited background in music theory, study the basic elements of music. Topics include notation, rhythm, scales, key signatures, intervals, chords, beginning level melodic and rhythm dictation, ear-training and sight singing skills.

**Prerequisites:** COMP/LIT 090

**Designation:** Front Range Community College

**Credits:** 3.0

### MUS 120—Music Appreciation

**Description:** Covers the basic materials of music, musical forms, media, genres and musical periods. Emphasizes the development of tools for intelligent listening and appreciation.

**Prerequisites:** COMP/LIT 090

**Designation:** Front Range Community College

**Credits:** 3.0

### MUS 122—Music History Romantic-Present

**Description:** Studies the various periods of music history with regard to the composers, aesthetics, forms, and genres of each period. Considers music from the Middle Ages through the Classical period. This course is one of the Statewide Guaranteed Transfer courses.

**Prerequisites:** COMP/LIT 090

**Designation:** Front Range Community College

**Credits:** 3.0

### **MUS 126—History of Rock and Pop**

**Description:** Provides a survey of basic materials of music, musical forms, media, genres, and musical periods of Rock and Pop music. It emphasizes the development of tools for intelligent listening and appreciation.

**Prerequisites:** None

**Designation:** Front Range Community College

**Credits:** 3.0

### **MUS 131—Music Class I (piano)**

**Description:** Applies the fundamentals of music to the voice or specific musical instruments. This course also introduces basic techniques, repertoire, and sight-reading.

**Prerequisites:** None

**Designation:** Front Range Community College

**Credits:** 2.0

### **MUS 132—Music Class II (piano)**

**Description:** Applies the fundamentals of music to the voice or specific musical instruments. The course also introduces basic techniques, repertoire, and sight-reading.

**Prerequisites:** MUS 131

**Designation:** Front Range Community College

**Credits:** 2.0

### **College Prep—Music Ensemble I/II (Band)**

**Description:** Students in this class will cultivate and refine music ensemble performance skills, learn to read and interpret assigned musical parts, improve primary instrumental musical performance, collaborate with peers in a larger group, and learn a variety of musical performance techniques.

**Prerequisites:** One year of prior band experience or one year private lessons on your instrument.

**Designation:** College Prep

**Credits:** 0.5

### **MUS 151/152/251/252- Music Ensemble I/II (Band)**

**Description:** Students in this class will cultivate and refine music ensemble performance skills, learn to read and interpret assigned musical parts, improve primary instrumental musical performance, collaborate with peers in a larger group, and learn a variety of musical performance techniques.

**Prerequisites:** Must audition for college level per FRCC curriculum

**Designation:** Front Range Community College

**Credits:** 1.0

### **College Prep -Jazz Band**

**Description:** Jazz Band exposes the student to various types of jazz literature in order to obtain an appreciation of the area of musical performance. Jazz Band is open to students who play the following instruments: woodwind, brass, percussion, guitar, electric bass, and piano.

**Prerequisites:** Students must also be enrolled in a music ensemble class.

**Designation:** College Prep

**Credits:** 0.5

### **College Prep—Music Ensemble I/II (Orchestra)**

**Description:** Students in this class will cultivate and refine music ensemble performance skills, learn to read and interpret assigned musical parts, improve primary instrumental musical performance, collaborate with peers in a larger group, and learn a variety of musical performance techniques.

**Prerequisites:** One year of prior orchestra experience or one year private lessons on your instrument.

**Designation:** College Prep

**Credits:** 0.5

## PHYSICAL EDUCATION

### Functional Fitness

**Description:** This course is designed to teach fundamentals of a variety of fitness activities. The goal of functional fitness is to prepare our bodies and minds for life activities through training. Students will learn techniques to improve muscular endurance, speed/agility, core strength, flexibility, and balance.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.25

### Introduction to Team Sports

**Description:** This course is designed to teach fundamentals of a variety of team sports. We will work on specific aspects of each game, such as passing, shooting, dribbling, and moving to open space. We will learn rules and strategies for each sport. Sports may include and are not limited to: Basketball, Volleyball, Floor Hockey, Soccer, Flag Football, Kickball, and Handball.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.25

### Introduction to Weightlifting/Introduction to Weightlifting LTD

**Description:** This course is designed to teach fundamental skills in weightlifting. Students will be taught techniques to improve strength, flexibility, and muscular endurance. Students will be taught proper form and etiquette to set them up for success in other/future weight training environments. We will learn to use a variety of methods such as free weights, cable resistance, body weight exercises, resistance bands, and medicine balls.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.25

### Health and Fitness

**Description:** This course is designed to encourage and provide exercise opportunities for students in a variety of ways. Depending on their schedules, students will have flexibility in the exercise courses they choose to participate in while in the building. These courses include but are not limited to: weightlifting, yoga, and athletic boot camp.

**Prerequisites:** Any prior Physical Education class at CECFC and schedule flexibility for workouts

**Designation:** College Prep

**Credits:** 0.25

### Basic Yoga

**Description:** Offers a guided instruction in yoga. Students practice yoga according to their individual fitness levels and abilities. Encourages growth in strength, flexibility, and balance.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.25

### PED 143—Yoga I

**Description:** Offers a guided instruction in yoga. Students practice yoga according to their individual fitness levels and abilities. Introduces history and philosophy of yoga. Emphasizes enhancing general health and well-being through the performance of yoga strength, flexibility, balance, and relaxation techniques and exercises.

**Prerequisites:** None

**Designation:** Aims Community College

**Credits:** 1.0