$$
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# Introduction to the Cherokee Trail Course Catalog 

WELCOME to Cherokee Trail High School! The Cherokee Trail High School Course Catalog contains important information about the courses to be offered during the upcoming school year. This information will be helpful as you select courses. Careful planning is essential for a successful and rewarding experience at Cherokee Trail High School. Parents, teachers, counselors, and administrators should all be involved in assisting you to develop a comprehensive plan allowing for variety, specific interests, and special preparation for the future. It is important to emphasize that your counselor is available to assist you in your course selections, but the final responsibility for course selections rests with the student and the parents. We urge you to play an active role in this important task. We are here to help you.

Each year, Cherokee Trail High School creates a new master schedule based on data derived from the student course request process. These course requests represent decisions made collaboratively with the student, the teachers, the counselor, and parents. Based on these requests, courses are scheduled, faculty members are employed, textbooks are purchased, and classrooms are allocated. Due to this, only schedule errors, not schedule changes, will be considered. See the Schedule Change Policy page for more details.

For the most up-to-date Course Catalog, please go to our website at:
https://www.cherrycreekschools.org/cherokeetrail

> Notification of Nondiscrimination: Cherry Creek School District No. 5 ("District") does not discriminate on the basis of race, color, national origin, sex, age, sexual orientation, or disability in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of their operations. Cherokee Trail High School does not discriminate in enrollment or access to any of its available programs. The lack of English language skills shall not be a barrier to admission or participation in District activities and programs. The district also does not discriminate in its hiring or employment practices.

> This notice is provided as required by Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990. Questions, complaints, or requests for additional information regarding these laws may be forwarded to the designated compliance coordinator, Ms. Stephanie Davies, District Compliance Officer, Educational Services Center, 4700 S. Yosemite St., Greenwood Village, CO 80111, telephone (720)554-4471, or directly to the U.S. Department of Education, Office for Civil Rights, Region VII.

Cherokee Trail High School
25901 East Arapahoe Road
Aurora, CO 80016
720.886.1900

Updated: 01-09-2024

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# CHEROKEE TRAIL HIGH SCHOOL 

## 25901 East Arapahoe Road, Aurora, CO 80016 <br> Post-Grad Center: 720-886-1981 CEEB Code: 060-086

Principal: Jean Griego-Incitti Cherokee Trail Administration Cherokee Trail Website


CounselingTeam

Counseling Coordinator: Lindsay Gillespie
Post-Grad Coordinator: Brooke Gabrielli
Post-Grad Specialist: Sara Winke

Sasha Bowden Shondra Carpenter Sarah Crook Sameen DeBard Brooke Gabrielli Lindsay Gillespie Nick Jasurda Nicole Longdon Jesse Martinez Kelsey Riley Kedar Witte

## SCHOOL DATA \& OVERVIEW

2022-2023 School Year Data
90\% of IB students earned the IB Diploma 176 students took 466 IB exams 67\% of students scored a $3+$ on AP exams 1,049 students took 1,750 AP exams 801 students took at least one concurrent enrollment course


2023-2024 Demographics
Central/Native American: ~1\%
Asian: 9\%
Black/African American: 9\% Latino/a: 18\% White: 54\%
Hawaiian/Pacific Islander: $\sim 1 \%$ Multiple Races: 7\%

## CLASS OF 2023 POST-GRADUATE DATA



4-Year College/University: 71.2\%

2-Year/Community College: 12.6\%

Career \& Technical Education: 2.5\%

Military (Enlistment): 2.2\%

Workforce: 4\%

Gap Year: 7.7\%

## CLASS OF 2024 ACADEMIC DATA

## 6 Semesters

Highest Weighted: 4.73
Weighted Median Range: 3.47
Mean Weighted: 3.27
Highest Unweighted: 4.0
Unweighted Median Range: 3.26
Mean Unweighted: 3.03

## SAT

## Cherokee Trail <br> Mean ERW: 546

Mean Math: 532
Mean Comp: 1078
Cherry Creek School District
Mean ERW: 537
Mean Math: 522
Mean Comp: 1059

Grading Scale: $A=90-100 \% B=80-89 \% ~ C=70-79 \% ~ D=60-69 \% ~ F=59 \%$
Marking System:
Unweighted GPA: $\mathrm{A}=4.0 \mathrm{~B}=3.0 \mathrm{C}=2.0 \mathrm{D}=1.0 \mathrm{~F}=0.0$
Weighted GPA: A=5.0 B=4.0 C=3.0 D=1.0 F=0.0
$A P$, Pre-AP, Honors, IB, and Pre-IB classes receive the same weighted grades.
Graduation Requirements:
Minimum 22 Credits Required: 1 credit=1 year
English: 4 credits, Math: 3 credits, Science: 3 credits, Social Studies: 3 credits,
Practical/Fine Arts/CTE: 1.5 credit, Health \& Wellness: 2.0 credits, Elective: 5.5 credits
Graduation Competencies: All students must demonstrate competency in Reading/Writing/Communication and Mathematics

## Advanced Placement

26 AP Classes Offered
Students are not limited in classes
AP classes available to grades 9-12
International Baccalaureate

## 28 IB Classes Offered

Application required for program
Pre-IB (9 \& 10); IB (11 \& 12)
Non-IB may take electives
Concurrent Enrollment
19 CE/DE Classes Offered
Students must qualify for credit
CE classes available to grades 9-12
Honors/Pre-AP/Pre-IB
17 Classes Offered
Students are not limited in classes
Honors (9-12); Pre-AP \& Pre-IB (9-10)
College Preparatory
Standard level, unweighted classes

## Course Catalog Terminology

AP (ADVANCED PLACEMENT PROGRAM): The Advanced Placement program is a national academic program sponsored by the College Board. Students are required to take the national exam if they wish to have the Advanced Placement designation on their transcript and be considered for Advanced Placement credit at the college level. All AP courses have weighted grades (see definition below).

ALTERNATING BLOCK SCHEDULE: Approximately 93minute classes meet on alternating days for the entire year. Each day is designated as "A" or " $B$ ", and each day has periods 1-4.

BACCALAUREATE: In the European sense, a "baccalaureate" is a diploma supporting the transition from school to university by means of examinations and/or evidence of successful performance. At Cherokee Trail High School, there are distinct baccalaureate programs (academic pathways) offered that prepare students for college, university, and career opportunities. Junior and senior students are expected to participate in one of the three programs.

COREQUITSE: A corequisite is a course students must be concurrently enrolled in to qualify for a specific course.

CREDIT (HIGH SCHOOL UNIT OF CREDIT): One unit of credit equals two completed semesters of high school work. One semester of completed high school work earns 0.5 credits. All students must earn a minimum of 22 credits (per Board policy) to participate in graduation and receive their diplomas.

CUMULATIVE GPA: A student's earned Grade Point Average for the total time they are in high school, concluding at the eighth semester or end of their senior year.

GPA: The student's earned Grade Point Average for one semester or one year.

GRADES -UNWEIGHTED: Courses award the student 4 points for an A, 3 points for a B, 2 points for a C, 1 point for a D , and 0 points for an F . GPA range is 4.0-0.

GRADES -WEIGHTED: Some courses award 5 points for an $A, 4$ points for a $B, 3$ points for a $C, 1$ point for a $D$ and 0 points for an $F$. For this year, the following courses have weighted grades: all AP, Honors, IB classes (excluding World Language levels 1-3), Pre-AP, Pre-IB, World Languages levels 4 and 5 , and postsecondary courses which are either a continuation of a weighted high school course or a course which exceeds the high school weighted course. GPA range is 5.0-0.

## IB INTERNATIONAL BACCULARUTE PROGRAM

The International Baccalaureate (IB) Program is a comprehensive and rigorous two-year curriculum for junior and senior students, which leads to international exams in six subjects and the International Baccalaureate Diploma. The aim of the IB Program is to develop inquiring, knowledgeable, and caring young people who will help to create a better and more peaceful world through intercultural understanding and respect

NCAA APPROVED: All student-athletes considering playing at the collegiate level need to be aware of the NCAA rules governing approved courses.
PRE-IB/PIB (PRE-INTERNATIONAL BACCALAUREATE): Prep classes to prepare students accepted into the IB program for their junior and senior year coursework.

PREREQUISITE: A prerequisite is what must be completed before enrolling in a course. This may include a prior course, teacher approval, or placement test.

## SATISFACTORY/UNSATISFACTORY GRADING:

Students will receive a satisfactory or unsatisfactory grade based on the requirements of the course. Students will receive credit towards graduation, but the credit will not be calculated into the GPA.

## Graduation Requirements

In pursuit of its mission to ensure that all students reach their learning potential, the Board of Education recognizes that high school shall be generally considered a four-year course of study. Therefore, graduation requirements are based on units of credit earned in grades nine through twelve. A unit of credit is defined as the amount of credit given for the successful completion of a course that meets the required hours of instruction as defined in state law.

To prepare students for a successful postsecondary education and work experience, the Board of Education strongly encourages students to participate in a rigorous academic core curriculum consisting of four years of English, four years of Mathematics, four years of Science, and three years of Social Studies.

Beginning with the class of 2022, graduates of the Cherry Creek School District will be required to meet credit requirements in addition to competencies as outlined by Board of Education Policy IKF, Graduation Requirements. All graduates will be required to demonstrate college and career readiness in English and math via one of the approved methods as outlined in this policy.

## Minimum Units of Credit Needed to Graduate

A minimum of 22 units of credit shall be necessary for high school graduation. In addition to the 16.5 required units, all other credits shall be considered as electives and may be selected from the entire curricular offering.

| Subject | Required Credits | Important Notes |
| :---: | :---: | :---: |
| English | 4.0 |  |
| Mathematics | 3.0 |  |
| Science | 3.0 |  |
| Social Studies | 3.0 | Including: 1 credit in U.S. History and 0.5 credit in Civics/Government. |
| Wellness/Fitness | 2.0 | Including: 0.5 credit in Health. |
| Fine Arts/Practical Arts/CTE | 1.5 | Business, Career and Technical Education, Communications, Performing Arts, Visual Arts. |
| Minimum Total Required Credits | 16.5 |  |
| Minimum Total of Elective Credits | 5.5 |  |
| Minimum Total Credits | 22.0 |  |

## Academic Waivers

- 4 Core Waiver: Academic core subjects include English, Math, Science, Social Studies, and World Languages. All students will be expected to enroll in a minimum of four academic core units per semester. Seniors are expected to enroll in four core units or a minimum of three AP/IB/CE/CTE courses. Any consideration of a waiver of this expectation will be approved on an individual basis by the principal or administration designee. Academic Waiver Requests must be submitted on form IKF1E.
- Athletic Waiver: Student athletes who have completed a season of athletics may be granted a one-time waiver of 0.5 of the required 1.5 units of physical education. This waiver does not reduce the total number of units required for graduation. Academic/physical education waiver requests must be submitted on form IKF2E.
- Fine Arts/Practical Arts Waiver: Seniors who have completed three years of AVID OR three years of Student Leadership, AND are currently enrolled in AVID or Student Leadership, may be granted a one-time waiver of 0.5 of the required 1.5 units of Practical/Fine Arts. This waiver does not reduce the total number of units required for graduation.


## Graduation Requirements

## Cherry Creek School District Course Requirements for Graduation

Board Policy IKF
A minimum of 22 units of credit shall be
necessary for high school graduduation.

| English | 4.0 units |
| :--- | :--- |
| Mathematics | 3.0 units |
| Science | 3.0 units |
| Social Studies | 3.0 units |
| PE | 1.5 units |
| Health | 0.5 units |
| Fine Art/CTE | 1.5 units |
| Electives | 5.5 units |

## Essential Skills Critical for Success in College and Career

- Innovation / Creativity
- Critical Thinking
- Real-World Experience
- Problem Solving
- Curiosity / Inquiry
- Relevancy
- Working in Teams
- Communication Skills
- Project-Based Learning
- Flexibility / Adaptability

Competency Menu of Options (Regulation IKT-E)
In addition to required coursework, all students must demonstrate career or college readiness in Reading/Writing/Communicating and Mathematics through at least one option below:

| Basis | Reading/Writing/Communicating | Mathematics |
| :---: | :---: | :---: |
| Next Generation Accuplacer | 241 Reading or 236 Writing | 255 Arithmetic (AR) or 230 Quantitative Reasoning, Algebra and Statistics (QAS) |
| Classic Accuplacer | 62 Reading Comprehension or 70 Sentence Skills | 61 Elementary Algebra |
| ACT | 18 | 19 |
| ACT Work Keys | Bronze or higher | Bronze or higher |
| Advanced Placement (AP) | 2 | 2 |
| ASVAB (AFGT score) | 31st percentile | 31st percentile |
| Concurrent Enrollment | Passing Grade | Passing Grade |
| International Baccalaureate (IB) | 4 | 4 |
| SAT | 470 | 500 |
| District Capstone | Secondary Literacy Assessment | Portfolio of Skills Exam |
| Industry Certificate | District Determined | District Determined |
| Performance-based Learning (PBA) | State Determined | State Determined |

Graduation requirements were modified in 2016 across the State of Colorado, in every school district, including the Cherry Creek School District. CCSD, under the direction of Colorado Department of Education and the CCSD Board of Education, requires full implementation of the Graduation Requirements Competency Menu of Options (above). This implementation includes 5th, 6th, and 7th year seniors from anticipated GY 2021 and all students with an anticipataed graduation year of 2022 and beyond, including 3-year graduates (early graduation candidates).

## Schedule Correction Policy

Students are expected to make their course selections during the registration window in the spring semester of each school year. These course selections represent decisions that are made collaboratively with the student, teachers, the student's counselor, and the student's parents. Based upon these requests, faculty members are employed, sections are created, textbooks are purchased, and rooms are allocated. The schedules students receive in August reflect these requests and are set for the entire school year.

Schedule Correction Deadlines

| Schedule repairs | First 2 days of the semester |
| :--- | :--- |
| WP/WF window | Beginning of week 2 of the new semester - End of week 4 |
| Drop F window | Beginning of week 5 |
| Level change to a higher-level course | Beginning of semester - First 9 weeks |
| Level change to a lower-level course | Weeks 5-9 |

## Attendance and ALL schedule corrections

Students are responsible for attendance and grades in the originally scheduled class until the change is confirmed in PowerSchool. It is the student's responsibility to confirm any schedule changes with their counselor before attending the new class.

## Schedule Repairs

Students may meet with their counselor to address the following schedule error corrections:

- Student does not have the prerequisite to take a scheduled class
- Student has already passed the class and it is not a repeatable class
- Level changes (requires a fully completed Level Change Form. See below for procedure)
- Error in the schedule (Missing a core class or short the required number of classes for grade level)
- Additional classes to meet college requirements/graduation requirements.

Requests that will NOT be considered:

- Elective changes
- Teacher changes
- Periods off/lunch preferences
- Changes to accommodate parent/student work schedules


## ** ALL SCHEDULE ERRORS MUST BE ADDRESSED IN PERSON BY THE STUDENT DURING THE FIRST TWO DAYS OF SCHOOL. EMAIL REQUESTS WILL NOT BE CONSIDERED. ** <br> $2^{\text {nd }}$ Semester Schedule Repairs

- Must meet the criteria above.
- Scheduling errors can be addressed in person by the student during the first two days of the semester following the scheduling policy outlined above.


## Course Withdraw Pass and Withdraw Fail

If there is a need to drop a class during the first four weeks of the semester, a WP/WF form will be required.

- When a student, despite his/her own significant efforts, is unable to continue satisfactorily in a class, the student's teacher may initiate a WP/WF request on the student's behalf. The process is completed upon final approval of the Department Coordinator, student's parent, and counselor.
- A grade of WP/WF will be entered on the student's transcript as an indication of work attempted.
- WP/WF will not be calculated into the student's cumulative grade point average.
- If the drop makes the student short the required number of courses, the student will not be allowed to drop the class.


## Drop F

After the fourth week of the semester, a student requesting to drop a class will receive an $F$ on their transcript.

- The student must obtain a Drop with an F form from their teacher.
- A permanent grade of F will be recorded on the transcript and negatively impacts the student's GPA.
- If the drop makes the student short the required number of courses, the student will not be allowed to drop the class.
- Drop with an F form must be approved by the department coordinator and must also be signed by the student's teacher, parent, and counselor.


## Level changes

A level change is appropriate only if it is determined that the student is either above or below the current class's academic level. The decision to change levels is made by the teacher, parent, and the student. As students were allowed to select their core classes in the spring, any student who wishes to level change down must remain in the class for four weeks before a level change will be considered; additionally, the student must take the first unit test. Students who wish to level change up may initiate the level change process immediately.
If a level change is appropriate, the procedure below should be followed:

- The student must first discuss the level change with their teacher. If the teacher agrees with the change, they will send the student to the department coordinator.
- If the department coordinator also agrees with the level change, they will provide the student access to the electronic Level Change Form.
- Once the form is submitted, the parent must email the department coordinator affirming their approval of the change.
- Before the level change process may begin, the student must have completed all homework, assignments, and tests to the best of his/her ability and must have sought assistance from the teacher.
- Level changes may be made up through the end of the first 9 weeks of the semester.
- The letter grade at the time of the level change accompanies the student to the new class.
- Level changes are only for core classes (i.e., chemistry honors to chemistry)

CTHS Career Pathway Plans of Study


## 9th Grade

English 9 (Pre-AP, Pre-IB)
World Geography (Pre-AP, AP)
Algebra 1 or higher
Biology (H)
World Language

## 10th Grade

English 10 (Pre-AP, Pre-IB)
Government/Economics (AP)
Geometry or higher
Chemistry (H, AP)
World Language

## 11th Grade

English 11 (AP, IB, H)
US HIstory (AP, IB, CE)
Algebra 2 or higher (AP, IB, CE)
Physics (AP, IB)
World Language

## 12th Grade

English 12 (AP, IB, CE)
Senior Social Studies (AP, IB)
College Algebra or higher (AP, IB, CE)
Senior Science (AP, IB, CE)

IB = International Baccalaureate | AP = Advanced Placement | CE = Concurrent Enrollment | H = Honors

## CTHS Beyond the Trail (BTT)

## Individual Career and Academic Plan (ICAP)

ICAP is a multi-year process that intentionally guides students in academic, career, and postsecondary exploration. Through our BTT ICAP

BTT 201: Career Pathway Discovery

1. Students complete personality and skills research using a Myers-Briggsbased survey in Naviance.
2. Students connect personality traits to a list of matching career choices.
3. Using the list of matching career choices, student make connections to post-graduate options.

## BTT 202: Planning for Final Two Years of High School

1. Students review graduation requirements and benchmarks.
2. Students review post-secondary options and CTHS Plans of Study.
3. Students conference with their counselor regarding course registration for the next school year.
lessons, students will develop the awareness, knowledge, attitudes, and skills to create their own meaningful and powerful Pathways of Purpose to be career and college ready.

## eir



BTT 101: Introduction to CT \& Resources
Students learn what resources are available to them at CT.

BTT 102: Academic Study Methods \&

## Resources

1. Students learn about different methods for studying.
2. Students identify their individual preferences for studying.
3. Students access resources to prepare for finals.

BTT 103: Academics and Course Planning

1. Students learn about CT graduation requirements.
2. Students learn about different Post-Secondary pathways and indicate which one they are considering.
3. Students learn to calculate their GPA.
4. Students conference with their counselor regarding course registration for the next school year.

## BTT 401: Implementing the ICAP

1. Students complete a survey indicating their post-secondary plans, and then attend a lesson by counselors specific to their plan.
2. Using Naviance, students finalize a list of possible colleges and/or programs that best fit selected career interests.
3. Students meet with their counselor in a senior conference to review post-secondary plan and begin implementation.
4. Students graduate with a completed Individual Career and Academic Plan (ICAP).


Students continue on to 4-year college/university, 2-year community college, military, Career and
Technical Education program, gap year, or straight to work.

## College Admission

The Colorado Commission of Higher Education (CCHE) has developed the Higher Education Admission Requirements (HEAR). To be considered for admission to any four-year public institution in Colorado, students must demonstrate successful completion of the following coursework:

| English | 4 Credits |
| :--- | :--- |
| Math (Algebra 1 level and higher) | 4 Credits |
| Natural Sciences (2 credits must be lab-based) | 3 Credits |
| Social Sciences (at least 1 credit of U.S. or World History) | 3 Credits |
| Foreign Language (must be the same language) | 1 Credit |
| Academic Electives (see note below) | 2 Credits |

NOTE 1: An academic credit, often referred to as a Carnegie credit, is equivalent to one full year of credit in a specific subject.

NOTE 2: For examples of acceptable HEAR courses, academic electives, and answers to frequently asked questions, go to https://highered.colorado.gov. Hover over "Students" and click on "Preparing for College" and then "Admissions Eligibility."

It is important to note that admission officers at these institutions will give preference to students who have demonstrated competence in a rigorous course of study over students who attain a good grade point average by taking fewer demanding courses.
*Please be aware that these requirements differ slightly from Cherry Creek School District graduation requirements.

## Factors Influencing College Admissions

According to the 2023 "State of College Admission Report," the following factors, in order of importance, were:

1. High school grades in college prep courses
2. Total high school grades (all courses)
3. Strength of high school curriculum
4. Positive character attributes
5. Essay or writing sample
6. Student's interest in attending
7. Counselor recommendation
8. Teacher recommendation
9. Extracurricular activities
10. High school class rank
11. Admission test scores (ACT, SAT)
12. Portfolio
13. Interview
14. Work
15. State graduation exam scores
16. Subject test scores (AP, IB)

## Colleges Strongly Recommend the Following

## Academics:

- Choose a rigorous course load. Seek out challenging courses. Colleges would rather see a lower grade in a more challenging course than the "easy A." Remember the best scenario is good grades in challenging classes.
- Make sure your courses are appropriate and in a logical progression. Use your Individual Career and Academic Plan (ICAP) to ensure you are on the right track.
- Enroll in at least 4 core classes (English, Social Studies, Math, Science, World Language) each semester.
- Get to know your counselor and teachers. These are the people who will be writing your recommendations.
- Keep your best work. Colleges may offer you a chance to submit supplementary material that demonstrates your achievements.
- Establish good study habits. Grades in the academic core areas (English, Math, Science, Social Studies, and World Languages) are the best predictors of success in college.
- Read! Studies have shown that one of the best preparations for college admission tests (SAT/ACT) is to read regularly.


## Extracurricular:

- Find activities, both in and out of school, that you enjoy and that provide an outlet for your non-academic side.
- Go for quality rather than quantity. Colleges admire students who put significant effort into one or two activities rather than students who put little time into many activities.


## Sample College Admissions

Admission criteria to colleges and universities vary. On a continuum of expectations and requirements, the following examples provide general indicators.

## Most Selective Colleges/Universities

Examples: Harvard University, Stanford University, Duke University, Vanderbilt University, Colorado School of Mines Minimum of 18 core units: English 4, Math 4, Social Studies 3-4, Science 3-4, World Language 3-4, 4+ Advanced Placement Courses or IB Courses
Grades and test scores: GPA 4.0+, SAT 1300+, 32+

## Selective Colleges/Universities

Examples: University of Denver, University of Colorado at Boulder, Brigham Young University, Baylor University, University of Nebraska, Creighton University
Minimum of 16 core units: English 4, Math 3-4, Social Studies 3, Science 2-3, World Language 2-3, Advanced Placement Courses or IB Courses Highly Recommended
Grades and test scores: GPA 3.5+, SAT 1100+, ACT 23+

## Competitive I Colleges

Examples: Colorado State University, University of Colorado at Denver, Arizona State University, University of Wyoming, Regis University
Minimum of 15+ core units: English 4, Math 3-4, Social Studies 3, Science 2-3, World Language 2-3, Advanced Placement or IB Courses Recommended
Grades and test scores: GPA 3.3+, SAT 1100+, ACT 23+

## Competitive II Colleges

Example: University of Northern Colorado, Colorado Mesa University, Metropolitan State University Denver, Fort Lewis College, Adams State University, Western Colorado University
Minimum of 14 core units: English 4, Math 3-4, Social Studies 3, Science 2-3, World Language 2
Grades and test scores: GPA 3.0+, SAT 1100+, ACT 20+
${ }^{* *}$ The ACT and SAT college entrance exams have optional ${ }_{1}$ yriting components. Please check with individual institutions.

# ONE OPPORTUNITY. LIMITLESS POSSIBILITIES. 

If you want to play sports at an NCAA Division I or II school, start by registering for a Certification Account with the NCAA Eligibility Center at eligibilitycenter.org. If you want to play Division III sports or you aren't sure where you want to compete, start by creating a Profile Page at eligibilitycenter.org.

## ACADEMIC REQUIREMENTS

To play sports at a Division I or II school, you must graduate from high school, complete 16 NCAA-approved core courses, earn a minimum GPA and earn an ACT or SAT score that matches your core-course GPA.

## CORE COURSES

Only courses that appear on your high school's list of NCAA core courses will count toward the 16 core-course requirement; visit eligibilitycenter.org/courselist for a full list of your high school's approved core courses. Complete 16 core courses in the following areas:

## DIVISION I

Complete 10 NCAA core courses, including seven in English, math or natura/physical science, before your seventh semester.


## GRADE-POINT AVERAGE

The NCAA Eligibility Center calculates your grade-point average based only on the grades you earn in NCAA-approved core courses.

- DI requires a minimum 2.3 GPA.
- DII requires a minimum 2.2 GPA.


## SLIDING SCALE

Divisions I and II use sliding scales to match test scores and GPAs to determine eligibility. The sliding scale balances your test score with your GPA. If you have a low test score, you need a higher GPA to be eligible. Find more information about test scores at ncaa.org/test-scores.


## HIGH SCHOOL TIMELINE



GRADE


- Start planning now! Take the right courses and earn the best grades possible.
- Find your high school's list of NCAA-approved core courses at eligibilitycenter.org/courselist.
- Sign up for a free Profile Page at eligibilitycenter.org for information on NCAA requirements.

- If you fall behind academically, ask your counselor for help finding approved courses you can take.
- Register for a Profile Page or Certification Account with the NCAA Eligibility Center at eligibilitycenter.org.
- Monitor your Eligibility Center account for next steps.
- At the end of the year, ask your counselor at each high school or program you attended to upload your official transcript to your NCAA Eligibility Center account.

- Check with your counselor to make sure you are on track to complete the required number of NCAA-approved courses and graduate on time with your class.
- Take the ACT or SAT and submit your scores to the NCAA Eligibility Center using code 9999.
- Ensure your sports participation information is correct in your Eligibility Center account.
- At the end of the year, ask your counselor at each high school or program you attended to upload your official transcript to your NCAA Eligibility Center account.

How to plan your high school courses to meet the 16 core-course requirement:



- Complete your final NCAAapproved core courses as you prepare for graduation.
- Take the ACT or SAT again, if necessary, and submit your scores to the NCAA Eligibility Center using code 9999.
- Request your final amateurism certification beginning April 1 (fall enrollees) or Oct. 1 (winter/spring enrollees) in your NCAA Eligibility Center account at eligibilitycenter.org
- After you graduate, ask your counselor to upload your final official transcript with proof of graduation to your NCAA Eligibility Center account.
- Reminder: Only students on an NCAA Division I or II school's institutional request list will receive a certification.


For more information: ncaa.org/playcollegesports | eligibilitycenter.org
Search Frequently Asked Questions: ncaa.org/studentfaq
Follow us: ©NCAAEC
(0) ©playcollegesports
$f$
@ncaaec

## Advanced Placement (AP) Courses

## Advantages of taking AP Classes

- AP courses and exams begin the journey through college-level academic challenges.
- Collegiate institutions recognize applicants with AP experience are better prepared for the demands of college.
- Tuition savings are realized for students whose AP assessment performance awards them college credit. More than 1,400 collegiate institutions award a full year's credit (sophomore standing) to students presenting satisfactory grades on a specific number of AP exams.
- AP students are eligible for honors and other special programs in college.
- Research supports that high school students enrolled in AP courses have greater success in their first year of college.


## AP Courses offered at CT

- English - AP Language, AP LIterature
- Math - AP Calculus AB, AP Calculus BC, AP Statistics
- Science - AP Biology, AP Chemistry, AP Environmental Science, AP Physics 1, AP Physics 2
- Social Studies - AP Government, AP Human Geography, AP US History, AP Macroeconomics, AP Psychology, AP Research, AP Seminar, AP World History
- Electives - AP 2D Art \& Design, AP 3D Art \& Design, AP Computer Science Principles, AP Computer Science, AP Drawing, AP Music Theory, AP Spanish Language

AP
CollegeBoard
Advanced Placement Program

## AP Considerations

All CTHS students are encouraged to take at least one AP-level course

- AP course grades are weighted, however, students may earn lower grades due to the intense study and homework loads
- AP students should expect a minimum of one and a half hours of homework each night per AP class.
- Before committing to multiple AP courses, students should consider the following:
- Increased amount of homework
- Increased rigor of coursework
- Time management skills required to balance multiple high-level courses
- Extracurricular activities could impair the ability to fulfill course requirements
- CTHS students enrolled in AP classes are expected to sit for May exams.
AP exams cost approximately $\$ 100$ per exam, due in October. Needsbased financial aid is available. Many AP courses require summer work. See the teacher or school website for specifics


## AP Capstone Program

The College Board's AP Capstone is an innovative and engaging college-level program that complements and enhances discipline-specific AP courses. It's built on two courses offered at Cherokee Trail - AP Seminar and AP Research - that immerse students in the practice of critical skills needed to distinguish themselves in college and in life. AP Capstone encourages a passion for learning, transforming students into curious, collaborative, and independent critical thinkers with skills that are valued and sought after by colleges and universities. practice of critical skills needed to distinguish them-

Students who earn scores of 3 or higher in AP Seminar and AP Research, and on four additional AP Exams of their choosing, will receive the AP Capstone Diploma issued by The College Board. This signifies their outstanding academic achievement and attainment of college-level academic research skills. Students who earn scores of 3 or higher in both AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and AP Research Certificate issued by The College Board. These stipulations are directed by The College Board.

## Advancement Via Individual Determination (AVID) Program

## The AVID Classroom

The Advancement via Individual Determination Program (AVID) is designed to push students to a higher rigor at an appropriate pace, while providing in-class support through an AVID class. It is directed towards college bound students who would thrive by building strong relationships with their teachers and peers, while also adding successful college skills to their toolbox.

The AVID class supports students through a variety of strategies. In the class, students work on skills such as time-management, Cornell notetaking, test-taking strategies, critical reading, research, collaboration, communication, inquiry, and organization. Teachers stress the importance of "writing as a tool for learning" and help support students through daily tutorial sessions led by trained tutors. The goal of the AVID tutorial session is to help students with the process of learning through inquiry and collaboration, rather than simply giving students the answers to their questions.

The foundation of the AVID program is to prepare and motivate students for college. Students have the opportunity to practice "mock" SAT and ACT exams so that they are fully prepared on test day. CT also offers an SAT prep course, and experts within the building work directly with AVID students to help prepare them for
those exams. AVID classes also participate in motivational activities, including college and career research, community service-learning experiences, college-fairs, leadership conferences, and college field trips.

## AVID and Elective Classes

AVID is a structured support program, not a separate curriculum. AVID students are open to a variety of electives based on their interests and current state requirements.

## AVID and Advanced Courses

AVID students are expected to increase their rigor of classes each year. One-on-one conferences with the student's AVID teacher and the AVID counselor will help determine when students are ready to increase their rigor. Advanced courses offered at CT include Advanced Placement (AP), Honors, International Baccalaureate (IB), and Concurrent Enrollment (CE). AVID students are expected to complete a minimum of one AP/IB or CE class while in high school. AP courses are offered in grades 9-12.

## AVID Awards and Scholarships

Students who are involved in AVID are eligible to receive a series of additional awards and scholarships specifically designed for AVID students. Listed below are a few of these awards.

- AVID with Distinction: A graduation cord of distinction is granted to AVID students who complete 20+ hours of community service, maintain a 3.0 GPA or better, complete $3+$ years of AVID, and are enrolled in the second semester of senior year, are a model AVID student, are accepted to a 4 -year college or university, and complete a minimum of one AP/IB or Concurrent Enrollment class and sit for a standardized test.
- CCSD AVID Scholarship: Students who complete 3 years of AVID in CCSD are eligible to receive money from the CCSD AVID Scholarship Fund.
- Cherokee Trail AVID Scholarship: Students who complete 3 years of AVID in CCSD, including secondsemester senior year, are eligible to receive money from the Cherokee Trail AVID Scholarship Fund.
- The Dell Scholars Program is offered to those high school students participating in an approved AVID program. The funding for each Dell Scholar is \$20,000.
- Scholarship Application Assistance: The senior teacher and counselor work together to find other scholarships specifically for each student and assist students in their college applications.

If you have any further questions regarding the CTHS AVID program and course offerings, please contact Laura Francoeur, at Ifrancoeur@cherrycreekschools.org or 720-886-2064.

## CHEROKEE TRAIL HICH SCHOOL CTE PATHWAYS 2024-2025

In addition to courses offered at the home high school, students may also apply to take courses at the Cherry Creek Innovation Campus (CCIC). Some CCIC Pathways are an extension to CTE Pathways already offered at the home high school. Students can enroll in CCIC Pathways beginning in their 10th grade year. Courses listed with a CE (Concurrent Enrollment) or DE (Dual Enrollment) provide students an opportunity to earn college credit. Industry certifications are also available in numerous pathways. CCIC courses are listed below in alphabetical order, with the recommended entry-level course listed first. See CCIC Course Guide for more information.

## BUSINESS ADMINISTRATION

- Accounting II: Principles of Accounting
- CE Accounting I: Fundamentals of Accounting
- CE Introduction to PC Applications
- Entrepreneurship
- IB Business Management SL
- IB Business Management HL
- Introduction to Business
- Legal Environment of Business
- Marketing I: Principles of Marketing
- Marketing II: Social Media and Advertising
- Marketing Cooperative
- Personal Finance
- Sports and Entertainment Marketing


## CRIMINAL JUSTICE

- CE Criminal Justice and Law I


## DESIGN \& MULTIMEDIA ARTS

- AP 2D Art and Design
- AP 2D Art and Design - Graphic Design
- Digital Art I
- Digital Art II
- Graphic Design I
- Graphic Design II


## DIGITAL MEDIA \& COMMUNICATIONS

- AP 2D Art and Design
- AP 2D Art and Design - Photography
- Digital Media Studies
- Journalism
- Video Production I
- Yearbook


## ENGINEERING, TECHNOLOGY \& ARCHITECTURE

- AP Computer Science Principles
- AP Computer Science A
- Architectural Design
- Computer Aided Design
- Computer Programming I
- Computer Programming II
- Engineering Design
- Engineering Technology I
- Engineering Technology II
- Engineering Technology Cooperative
- IB Design Technology SL
- IB Design Technology HL
- Manufacturing Production Design
- Medical \& Sustainable Technology
- Robotics \& Automated Systems
- Senior Design Capstone: Semester or Year
- STEM projects


## HEALTH SCIENCE

- CE Introduction to Health Care
- CE Comprehensive Medical Terminology
- Sports Medicine
- Sports Medicine Internship


## CTE DISTRICT-WIDE COURSES

These courses are available to all CCSD students, and take place at various locations. For more information, see the CTE website.

- All courses offered at the Cherry Creek Innovation Campus (see reverse side for courses offered at CCIC)
- Cosmetology/Esthetics (CE)
- Future Educator


## WORK-BASED LEARNING OPPORTUNITIES

Cherry Creek School District offers three (3) ways to experience real-world, hands-on learning in each pathway including:

- Learning About Work: provides exposure to different career clusters and pathways including career counseling, industry speakers and project-based learning.
- Learning Through Work: opportunities to interact with professionals from industry and community including internships and industry- sponsored projects.
- Learning At Work: pathway-specific training that occurs at a work site and prepares students for employment in the industry including apprenticeships.

For more information about CTE Pathways, Work-based Learning, Industry Certifications, or Concurrent Enrollment, visit: www.cherrycreekschools.org/cte.

CHERRY CREEK
InNOVATION GAMPUS

## CHERRY CREEK INNOVATION GAMPUS CTE PATHWAYS 2024-2025

In addition to courses offered at the home high school, students may also apply to take courses at the Cherry Creek Innovation Campus (CCIC). Some CCIC Pathways are an extension to CTE Pathways already offered at the home high school. Students can enroll in CCIC Pathways beginning in their 10th grade year. Courses listed with a CE (Concurrent Enrollment) or DE (Dual Enrollment) provide students an opportunity to earn college credit. Industry certifications are also available in numerous pathways. CCIC courses are listed below in alphabetical order, with the recommended entry-level course listed first. See CCIC Course Guide for more information.

## ADVANGED MANUFACTURING

- CNC Machining I (CE) *Recommended Entry-Level
- CNC Machining II (CE) (DE)
- Manufacturing Fundamentals I (CE)
- Manufacturing Fundamentals II (CE)
- Work-based Learning: Internships \& Apprenticeships


## BUSINESS SERVICES

- Project Management for Entrepreneurs I (CE) *Recommended Entry-Level
- Project Management for Entrepreneurs II (CE)
- Project Management for Entrepreneurs III (CE)
- CTE Capstone: Business (CE)
- Work-based Learning: Internships \& Apprenticeships


## HEALTH SCIENCE

- Introduction to Health Care (CE) *Recommended Entry-Level
- Behavioral Health Technician (CE)
- Certified Nurse Assistant
- Introduction to Occupational/Physical Therapy (CE)
- Pharmacy Technician
- Work-based Learning: Internships \& Apprenticeships


## HOSPITALITY \& TOURISM

- ProStart I (DE) *Recommended Entry-Level
- Hospitality Youth Apprenticeship (CE)
- Resort and Event Management (DE)
- ProStart II (DE)
- ProStart Youth Apprenticeship
- Work-based Learning: Internships \& Apprenticeships


## INFRASTRUGTURE ENGINEERING

- Construction I *Recommended Entry-Level
- Construction II
- Work-based Learning: Internships \& Apprenticeships


## IT: NETWORKING \& SECURITY

- Computer Programming I *Recommended Entry-Level
- CTE Capstone: IT
- Cybersecurity I: Computer Systems
- Cybersecurity II: Networks \& Security
- Cybersecurity III: Ethical Hacking
- Data Science I: Foundations
- Data Science II: Machine Learning
- Data Structures and Algorithms
- Virtual Reality I: Foundations of Unity
- Virtual Reality II: Building VR Experiences with Unity
- Work-based Learning: Internships \& Apprenticeships


## PRODUCT DESIGN

- Product Design I (DE) *Recommended Entry-Level
- Advanced Robotics and Automated Systems
- CTE Capstone: STEAM
- Product Design II (DE)
- Product Design III
- Work-based Learning: Internships \& Apprenticeships


## TRANSPORTATION - AUTOMOTIVE SERVICE

- Automotive Technology I* (CE) *Recommended Entry-Level
- Automotive Technology II (CE)
- Automotive Technology III (CE)
- Work-based Learning: Internships \& Apprenticeships


## TRANSPORTATION: AVIATION FLIGHT

- Private Pilot Ground School (DE) *Required Entry-Level
- Drone Pilot (DE)
- Work-based Learning: Internships \& Apprenticeships


## TRANSPORTATION - AVIATION MECHANICS

- General Aircraft Maintenance I *Recommended Entry-Level
- Airframe I
- Airframe II
- Airframe III
- Airframe IV
- General Aircraft Maintenance II
- Work-based Learning: Internships \& Apprenticeships


## Provides high school seniors experiences to gain exposure to career fields.

- Rising seniors
- Paid and unpaid opportunities
- Usually a semester but can be longer
- 100 hours at internship site, plus seminar coursework
- Complete weekly summaries, time logs and final project
- Receive 1 credit plus a letter grade
- Must provide own transportation to and from internship


## Internships Aligned with CTE Pathways

2

- Students must have successfully completed minimum of 1 semester (. 5 credit) in a CTE program aligned with internship they are pursuing (Can be currently enrolled also)
- Employers are looking for students who have demonstrated skills related to their opportunity

Internships and Apprenticeship Job Board (Jan 2024)

- Rising seniors apply to opportunities posted on the job board
- Opportunities will be accessible by CTE Pathways and prior/current coursework
- Student must complete an application and a resume
- Internships are Summer, Fall and Spring (Summer internships: Student must pay for summer school)
- Once offered an internship, then student is enrolled in the CCSD Coursework



## Concurrent \& Dual Enrollment

C HERRY CREEK<br>SCHOOLDISTRICT



Successfully complete college classes at your high school and earn high school credit \& college credit at the same time!

## SAVE ON COLLEGE TUITION

Concurrent Enrollment Classes $=$ FREE*
Compare to tuition costs at local universities/ colleges:
15 hours \$6812 @ CU Boulder
\$6889 @ CSU
\$6174 @ Metro State
\$5985 @ Mesa University
$\$ 4203$ @ Community College of Aurora
\$4203 @ Arapahoe Community College

## EARN COLLEGE CREDIT

- Accumulate college credits while in high school
- Credits may transfer to most colleges/universities
- Many are guaranteed transfer credits to public, in-state schools. Also transfer as credits out of state (check with the college.)
*Concurrent Enrollment courses are offered through Colorado Community College System: ACC, CCA, RRCC, CCD and PCC

A WIDE VARIETY OF CLASSES
Core academics, electives, Career \& Technical Education classes
Listed in your school's course guide and website

TAUGHT AT YOUR CCSD HIGH SCHOOL
Taught by accredicted CCSD teachers at CCSD high schools. Classes are in conjuction with local community colleges.

## LEARN MORE

Talk to your counselor to find out if you qualify and how to sign up

www.cherrycreekschools.org/Page/14839


## WHAT IS ASCENT?

Accelerating Students through Concurrent Enrollment (ASCENT) is a fifth-year high school program that allows students to take concurrent enrollment courses at college/university the year after 12th grade. It is a free program paid for by the State of Colorado and Cherry Creek School District. ASCENT provides a unique opportunity for students to earn a postsecondary credential, helping students develop the knowledge, skills, and abilities necessary to be postsecondary and workforce ready.

## ASCENT QUALIFICATIONS: A student is eligible if the student:



Has completed, or is on schedule to complete at least 9 credit hours (semester hours or equivalent) of transcripted, credit-bearing, collegelevel postsecondary coursework* prior to completing their 12th grade year. Developmental education college courses do not qualify as part of the 9 required credits.


Is college ready, and not in need of developmental coursework in accordance with the pathway in which they enroll.

Has not been designated an ASCENT program participant in any prior year (a student can only participate in ASCENT for 1 academic year).

Applies to and is accepted into a postsecondary degree program at a qualified Colorado institution of higher education.
> *Does not include International Baccalaureate (IB), College Level Education Program (CLEP), prior learning, or experiential courses, unless these exams/experiences have been converted to transcripted credits on a college transcript. The home high school counselor will help students with credits that need to be transcribed.

## HOW DOES IT WORK?

Students accepted into ASCENT will have tuition, fees and books paid for Fall 2024 and Spring 2025 at a Colorado post-secondary school approved by CCSD.

Current schools include Metro State University/Denver, Community College of Aurora, Community College of Denver, Arapahoe Community College, Red Rocks Community College as well as Emily Griffith and Pickens Technical Colleges.

A student accepted remains in the CCSD system as a senior for one additional academic year following 12th grade. They will then enroll in a postsecondary degree program. ASCENT credits and grades will be added to the high school transcript and the college transcript.

Students will receive their high school diploma after completion of the ASCENT year with the graduation date of May 2025 AND they can walk in graduation with the class of 2024.

## CHERRY CREEK'S OWN



## Let us pay for the first 2 years of your teaching degree

## WHAT IS THE TREP PROGRAM?

The Teacher Recruitment Education and Preparation (TREP) program exists to create opportunities for qualified students, in an educator career pathway, to enroll in postsecondary courses for up to two years after the 12th grade year. Students might be interested in teaching, counseling, special education or other education related fields.

Students accepted into the TREP program will have tuition, fees and books paid for Fall 2024, Spring 2025, Fall 2025, and Spring 2026 at participating community colleges/universities as identified by CCSD for courses in the educator career pathway. Students take all of their coursework at the college.

Students accepted into the TREP program remain a CCSD student, as a senior, for two additional academic years. Students will receive their high school diploma upon completion of the TREP program with the graduation date of 2026. They can graduate "socially" (walk in graduation ceremony with their original graduating class) in 2024. The State of Colorado caps the number of TREP students each year; those decisions are made in April or May each year.

Part time (3-11 credit hours) and full time (12-16 credit hour) options are available.

## A STUDENT IS ELIGIBLE FOR TREP IF THE STUDENT:

Has taken one applicable concurrent enrollment course during senior year and earned college credit. Plans to pursue postsecondary studies in the field of education. (See QR code below for a list of courses.)

Is college ready, and not in need of developmental education coursework in accordance with the education career pathway in which they enroll.

Completes an Individual Career and Academic Plan (ICAP) prior to declaring intent to participate in TREP.
Applies to, and is accepted into, a postsecondary program to continue on an approved educator pathway at a Colorado institution of higher education approved by CCSD. (Metro, ACC, CCA, CCD, RRCC)

Is entering the TREP program in the year immediately following the student's 4th year of high school.

Upon entry to the TREP program, has not been designated a TREP program participant in any prior year (can only participate in TREP for 2 academic years).

Is in good academic standing (minimum Grade Point Average of 2.0 in postsecondary coursework) and remains enrolled in an applicable educator pathway in order to participate in year 2 of the TREP program.

www.cherrycreekschools.org/Page/14839


Updated 11/20/2023


## CCSD Work-Based Learning

## How does it work?

Internships and Apprenticeships provide students 1.0 Elective/Practical Fine Arts credits per semester to experience work-based learning during the school day. Students must apply for opportunities in the spring and be selected by a company to be placed in a CCSD Internship or Apprenticeship.

## CTE Internships

Internships are for exploration. If you are interested in an industry, this is a great way to shadow and experience a career in real life. Internships are a short-term commitment that can help you decide if a path after high school is really for YOU.

- Juniors that have completed at least 1 related CTE course can apply

- Can be paid or unpaid
- Short-term commitment (about 100 hours at the internship site)
- Get real-world exposure to an industry
- Shadowing industry professionals
- Internship would begin the summer before senior year or during 1 semester of senior year


## Apprenticeships

Apprenticeships are for students who are currently committed to a specific career path. This is an opportunity to gain relevant experience and grow in your field while still in high school. This is a real, long-term, job commitment. Get ahead of your peers by starting work early.

- Must be 16 by the start of upcoming summer to apply
- Always a paid employee of company fulfilling a real job position
- Long-term commitment (between 2-to3 years)
- Always begin working in high school and stay with company 1-to-2 years after graduation
- Mentorship from industry professionals
- Begin in entry-level position and gain skills necessary to advance in career
- Company will support obtainment of certifications and/or some relevant college credit
- Some apprenticeships begin summer before junior year, some begin summer before senior year

Internship and Apprenticeship opportunities vary each year (just like a real-life job board). Industries each year will be related to CTE Pathways.

## How to apply:

Internship and Apprenticeship opportunities will be released in the spring of each school year. Check back to the CTE Work-Based Learning page in spring for more information.

$\frac{3}{\frac{3}{2}}$ Concurrent Enroliment (CE) Courses

## Concurrent Enrollment

Cherokee Trail High School works with Community College of Aurora (CCA) to concurrently offer college and high school credit to qualifying candidates across many disciplines. To qualify for these opportunities, a student must first complete prerequisites which may include course completion of a qualifying score on Accuplacer, ACT, or SAT. college credit is subject
to course and teacher approval and completion of all required registration steps within the designated semester deadline. Courses are subject to cancellation for Concurrent Enrollment college credit due to unforeseen circumstances. Prerequisites for courses may change at any time.

## Concurrent Enrollment Facts

- Students will also receive high school graduation credit for their CE course.
- Students must be enrolled in this class for the entire semester or year and finish with a grade of C or higher to earn college credit.
- Students are required to complete all necessary steps to qualify for Community College of Aurora credit. These steps include:

1. Application to Community College of Aurora (online)
2. Registration for College Opportunity Fund (COF); credit earned will be deducted from
the COF lifetime account (145.0 credit hours).
3. Satisfy prerequisites, qualifying test scores, or complete program self-assessment for placement
4. Complete online Course Agreement form for EACH course prior to established deadlines

- The college credit will be awarded through Community College of Aurora.
- Students should check with their transferring institution regarding transferability of the course.
- Students may enroll in courses without earning college credit.

| High School Course | Term | CCA Course - Qualifying Scores ACT, SAT, Next Gen Accuplacer | Credit Hours |
| :--- | :--- | :--- | :---: |
| CE Calculus | Yearlong | MAT 2410 - ACTM 25 or SATM 600 | 5.0 |
| CE College Algebra with Algebra Lab | Yearlong | MAT 0030/1340 | 5.0 |
| CE College Algebra | Fall | MAT 1340 | 4.0 |
| CE College Trigonometry | Fall or Spring | MAT 1420 | 3.0 |
| CE Comprehensive Medical Terminology | Fall or Spring | HPR 1040 - No qualifying scores required | 3.0 |
| CE Criminal Justice and Law I | Yearlong | CRJ 1010/1045 - ACTE 18 or SATV 470 or WR 246 | 6.0 |
| CE English Composition I | Yearlong | ENG 1021 | 3.0 |
| CE English Composition I | Fall | ENG 1021 | 3.0 |
| CE English Composition II | Fall | ENG 1022, 3 on AP Lang Exam | 3.0 |
| CE Intro to Health Care | Fall or Spring | HPR 1001/1004 - No qualifying scores required | 4.0 |
| CE Intro to Literature I | Spring | LIT 1015 | 3.0 |
| CE Introduction to PC Applications | Spring | CIS 1018 18 or SATV 470 or WR 236* | 3.0 |
| CE Intro to Statistics w/Quantitative Lab | Spring | MAT0020/1260 - ACTM 17 or SATM 200 or AAF 200 | 4.0 |
| CE US History to Reconstruction | Fall | HIS 1210 18 or SATV 470 or WR 236* | 3.0 |
| CE US History Since Civil War | Spring | HIS 1220 18 or SATV 470 or WR 236* | 3.0 |
| CE Phys Geo: Clim \& Eco w/Lab | Yearlong | GEO 1012 - ACTE 18 or SATV 470 or WR 246 | 4.0 |

Courses with * will accept exam score of 3+ in any AP English or AP Social Studies course to qualify.

## Dual Enrollment (DE) Courses

## Dual Enrollment

Cherokee Trail High School works with Metropolitan State University of Denver for Dual Enrollment (DE) to concurrently offer college and high school credit to qualifying candidates in the engineering and technology discipline. To qualify for these opportunities, a student must first complete prerequisites which may include course completion of a qualifying score on Accuplacer, ACT, or SAT.

Dual Enrollment college credit is subject to course and teacher approval and completion of all required registration steps within the designated deadline. Courses are subject to cancellation for Dual Enrollment college credit due to unforeseen circumstances. Prerequisites for courses may change at any time.


## Dual Enrollment Facts

- Students will also receive high school graduation credit for their DE course.
- Students must be enrolled in this class for the entire year and finish with a grade of $C$ or higher to earn college credit.
- Students can opt to sign up for Dual Enrollment and the process for enrolling will be shared with the class and supported through the teacher.
- Students will be charged $\$ 150$ for the optional Dual Enrollment piece.
- The college credit will be awarded through Metropolitan State University of Denver.
- Students should check with their transferring institution regarding the transferability of the course(s) outside of MSU Denver.
- Students may enroll in courses without earning college credit.

| High School Course | Term | MSU Course - Qualifying Scores <br> /Prerequisites | Credit Hours |
| :--- | :--- | :--- | :---: |
| Computer Aided Design | Yearlong | None | 3.0 |
| Engineering Design | Yearlong | Passed Computer Aided Design | 3.0 |
| Manufacturing | Yearlong | Passed Engineering Technology 1 <br> or Computer Aided Design | 3.0 |

## International Baccalaureate Diploma Program

## What is IB?

The International Baccalaureate (IB) Program is a comprehensive and rigorous two-year curriculum for junior and senior students, which leads to international exams in six subjects and the International Baccalaureate Diploma. The aim of the IB Program is to develop inquiring, knowledgeable, and caring young people who will help to create a better and more peaceful world through intercultural understanding and respect. The student who satisfies the demands

## IB Course of Study: 17th and 12th Grades

- Language A: English, Language \& Literature. Includes selections from literary and non-literary texts.
- Language B (learned language): French or Spanish
- Individuals and Societies: History of the Americas
- Experimental Sciences: Biology, Physics, or Sports Exercise Health Science
- Mathematics: Mathematical Analysis, Mathematical Applications
- Electives: Business and Management, Design Technology, Film, Psychology, Sports Exercise Health Science, Visual Arts, or a second subject from one other IB subject area.


## Additional Requirements

- Extended Essay - no more than 4,000 words that provides the experience of independent research.
- Theory of Knowledge (TOK) - explores the relationships among various disciplines.
- CAS experiences (Creativity, Activity, Service) during both junior and senior years of high school.
of the IB curriculum demonstrates a strong commitment to lifelong learning, both in terms of the mastery of subject content, and the development of the skills and discipline necessary for success at the university level and in the competitive world.

IB at CT
Cherokee Trail allows for students to apply for an IB pathway that can begin in 9th grade; however, students currently in 9th and 10th grades can apply to begin the following school year. Students interested in applying for IB should be committed to their academic learning in all core subjects and in either French or Spanish. An appreciation for global perspectives and learning beyond the school is also essential.

## Advantages of the IB Diploma

- The IB Diploma is a symbol of academic integrity and intellectual promise that colleges and universities around the world recognize.
- Colleges and universities recognize that IB Diploma recipients are better prepared for demands of college and offer special scholarships, waive certain courses, and in some cases waive out-of-state tuition to Diploma holders.
- Students awarded the IB Diploma in Colorado receive at least 24 credits at state schools according to Colorado legislation passed in 2003 and upheld in 2023.
- Students develop themselves beyond the academic expectations set within school.


## Liberal Arts Baccalaureate

## Communication/Performing/Visual Arts Distinction

This Liberal Arts Baccalaureate recognizes students who demonstrate excellence in upper level communication, visual and/or performing arts while demonstrating a dedication to overall academic success.

To receive the Liberal Arts Baccalaureate, students must complete the following:

- Two full credits in communication arts, visual arts, and/or performing arts with a B or higher in all courses applied toward this requirement.
- Of these, at least 1.5 credits must be taken during junior and/or senior year.
- At least 1.0 credit must be an eligible upper-level course. Courses that fulfill this requirement are indicated by "LB" in the course description portion of this guide. Students must be in the second year of the communication arts capstone course in order to count towards the LB requirement.
- Students must maintain an overall cumulative GPA of 2.5 or higher.
- Students must submit the cord application with a copy of their transcript to the Activities Office by the deadline (usually mid-April).


## Business Distinction

This Liberal Arts Baccalaureate recognizes students who are proficient in business and marketing concepts and skills, which contributes to their future success in their chosen careers.

To receive the Liberal Arts Baccalaureate, students must complete the following:

- Students must earn a total of 4 points by taking Business and Marketing courses and earning a B or better.
- A minimum of 3 points must be earned during the student's junior and/or senior year.
- Student must maintain an overall cumulative GPA of 2.5 or higher
- Students must submit the cord application with a copy of their transcript to the Activities Office by the deadline (usually mid-April of their senior year).


## ELIGIBLE BUSINESS/MARKETING COURSES

. 5 POINTS PER SEMESTER
Accounting 1 Fundamentals of Accounting
CE Introduction to PC Applications
Entrepreneurship
Introduction to Business
Legal Environment of Business
Personal Finance
Marketing 1 Principles of Marketing
Marketing Co-op

1 POINT PER SEMESTER
Accounting 2 Principles of Accounting
IB Business Management HL 1
IB Business Management HL 2
IB Business Management SL
Marketing 2: Social Media and Advertising
Sports and Entertainment Marketing

## Science, Technology, Engineering, and Mathematics (STEM) Baccalaureate

The world needs highly educated individuals in the areas of science, technology, engineering, and math. With this as our goal, Cherokee Trail High School offers a Science, Technology, Engineering, and Math (STEM) Baccalaureate. This baccalaureate is designed to prepare students for postsecondary coursework in these challenging fields. A student who participates in the STEM Baccalaureate Program will complete coursework in upper-level math and science courses as well as specialize in one of two areas of technology: engineering technology or computer programming.

The STEM Baccalaureate is open to all students including those in the International Baccalaureate Program. To receive the STEM Baccalaureate, students must earn a weighted B or higher in all STEM courses applied to the baccalaureate. Students will be honored at graduation with a green and silver cord.

Students must complete requirements in science, mathematics, and ALL requirements from one of the three areas of specialization with a weighted $B$ or higher to qualify for the STEM Baccalaureate cord. In addition, students must maintain an overall cumulative GPA of 2.5 or higher and apply with a copy of their transcript to the Activities Office by the deadline (usually mid-April of their senior year).

Four years of science AND four years of math are required for all STEM baccalaureate options

Four years of science, including at least one of the following:

AP Biology, AP Chemistry, AP Environmental Science, AP Physics 1, AP Physics 2, AP Physics C, IB Biology, IB Chemistry, IB Physics, IB Sports Exercise

Four years of math, including at least one of the following:

AP Calculus AB, AP Calculus BC, Calculus, IB Math, Trigonometry/Pre-Calculus Honors, AP Statistics

| COMPLETE THE ENTIRE COLUMN FOR ONE OF THE OPTIONS |  |
| :---: | :---: |
| ENGINEERING TECH OPTION | PROGRAMMING OPTION |
| Computer Aided Design |  |
| SELECT ONE OR TwO TO TOTAL 1.0 CREDITS: <br> Engineering Tech I, Engineering Tech II, Robotics and <br> Automated Systems, Manufacturing Production and <br> Design, Engineering Design, Architectural Design, IB <br> Design Tech HL 1 or STEM Projects | 2.0 CREDITS FROM THE FOLLOWING: <br> Computer Programming I <br> Computer Programming II <br> Robotics and Automated Systems <br> AP Computer Science A |
| AP Computer Science Principles |  |

# Seal of Biliteracy for High School Diplomas 

Minimum Requirements

Colorado Senate Bill 17-123 authorizes the Local Educational Agency (LEA) to grant a Seal of Biliteracy for high school diplomas for graduating high school students who attain proficiency or higher in one or more world languages in addition to attaining proficiency or higher in English. To meet Colorado Seal of Biliteracy for High School Diplomas minimum requirements, a graduating student must:

*If World Language AP test is not available: Achieving a passing score on a CDE identified summative test in WL that is comparable in rigor to the AP test can be accepted. If CDE identified test is not available: LEA-created test or body of evidence that demonstrates knowledge of the WL can be accepted.

The Seal of Biliteracy is an award issued by a state department of education or local school district to recognize a graduating student who has attained proficiency in English Language Arts and one or more World Languages. The recognition of attaining biliteracy becomes part of the high school permanent record via their transcripts. The seal certifies attainment of biliteracy for students and is a statement of accomplishment that further supports a student's preparedness for college/career and for engagement as a global citizen. Visit the Seal of Biliteracy

Requirements on the Cherokee Trail High School website for more information.


# Additional Distinctions and Pathway Legend 

\(\left.$$
\begin{array}{ll}\text { AP } & \text { Advanced Placement (AP) level courses } \\
\text { IB/PIB } & \begin{array}{l}\text { International Baccalaureate (IB) program } \\
\text { courses are indicated in the course title. } \\
\text { IB prep courses are listed as PIB }\end{array} \\
& \begin{array}{l}\text { Course is eligible for concurrent credit } \\
\text { through either Community College of } \\
\text { Aurora or Arapahoe Community College } \\
\text { as delineated within the course } \\
\text { description. }\end{array} \\
& \begin{array}{l}\text { Career and Technical Education. } \\
\text { CTE }\end{array} \\
& \begin{array}{l}\text { Course is eligible for dual enrollment } \\
\text { credit through Metro State University. }\end{array}
$$ <br>

Fees are required to receive credit.\end{array}\right\}\)| Course fulfills requirements for Liberal |
| :--- |
| Arts Baccalaureate distinction. |
| LB |

Community College of Aurora (CCA)

Arapahoe Community College (ACC)

National Aeronautics and Space Administration (NASA) Design and Prototype Program

Autodesk Certified User Revit Industry Certification Available

SolidWorks Industry Certification Available


## Business Department Course Descriptions

The purpose of the Business Department at Cherokee Trail High School is to provide students with meaningful instruction for and about business, computer technology, marketing, and technology systems. A broad, comprehensive curriculum imparts the skills necessary to succeed in an increasingly complex information-based society. The ability to process and manipulate data has become the most important determiner of economic success, on both the individual and business level. Successfully analyzing and communicating information to others has always been a vital skill in the business world. In this new electronic age, these skills are now intertwined with technology. Cherokee Trail High School's vision is to graduate students who are knowledgeable in many areas of business and marketing, poised and professional, comfortable, and proficient in using technology in all its forms, and possess the essential skills needed for life-long learning.

## ACCOUNTING 1: FUNDAMENTALS OF ACCOUNTING CTE LB

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits

Introduces accounting fundamentals with an emphasis on the procedures and practices used in business organizations. Major topics include the accounting cycle for service and merchandising companies including end-of-period reporting. Students are encouraged to join Future Business Leaders of America (FBLA) as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service, social and competitive events.

## ACCOUNTING 2: PRINCIPLES OF ACCOUNTING CTE LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Accounting 1
Co-requisite: FBLA Membership

This course introduces accounting principles for understanding the theory and logic that underlie procedures and practices for business organizations. Major topics include the accounting cycle for service and merchandising companies, internal control principles and practices, notes and interest, inventory systems and costing, and plant and intangible asset accounting. Students are required to join Future Business Leaders of America (FBLA) as leadership activities provide opportunities to make connections between the school, community and the business world. Emphasis is placed on service to others, social and competitive events.

## ENTREPRENEURSHIP CTE LB

Grades: 11, 12
Year: 0.5 Fine Arts/Practical Arts credits

Through hands-on learning students, will master the skills and knowledge necessary to start and operate their own business. During the course, students will work with working entrepreneurs to learn about the various aspect of starting and growing a business, including branding, marketing, financing, human resources, bookkeeping, among others. By the end of this course, students will develop a business plan that they can use to start up their business.

IB Business and Management courses prepare students to take the International Baccalaureate Business Management exam at either the Standard or Higher Level. In keeping with Individual and Society courses, IB Business and Management promotes problem-solving by identifying the problem, selecting, and interpreting data, applying appropriate analytical tools, and recommending solutions by evaluating their quantitative and qualitative implications. These courses also equip students with knowledge and understanding of business terminology, concepts, and principles. IB Business Management HL1 is the first year of a two-year course and can be used as the $6^{\text {th }}$ subject for IB Diploma candidates. The IB exam is at the end of the second year. Membership in DECA (An Association of Marketing Students) is strongly encouraged.

## IB BUSINESS MANAGEMENT HL 2 CTE LB W

Grade: 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: IB Business Management HL1 or SL
IB Business and Management courses prepare students to take the International Baccalaureate Business Management exam at either the Standard or Higher Level. In keeping with Individual and Society courses, IB Business and Management promotes problem-solving by identifying the problem, selecting, and interpreting data, applying appropriate analytical tools, and recommending solutions by evaluating their quantitative and qualitative implications. These courses also equip students with knowledge and understanding of business terminology, concepts, and principles. This is the second year of this two-year course and can be used as the $6^{\text {th }}$ subject for IB Diploma candidates. One of the major objectives of IB BM HL2 is to prepare IB seniors for the HL exam in May. Senior IB students who choose to test HL will also be required to complete an Internal Assessment research project. Membership in DECA (An Association of Marketing Students) is strongly encouraged.

## IB BUSINESS MANAGEMENT SL CTE LB W

Grades: 11,12
Year: 1.0 Fine Arts/Practical Arts credits
IB Business and Management courses prepare students to take the International Baccalaureate Business Management exam at either the Standard or Higher Level. In keeping with Individual and Society courses, IB Business and Management promotes problem-solving by identifying the problem, selecting, and interpreting data, applying appropriate analytical tools, and recommending solutions by evaluating their quantitative and qualitative implications. These courses also equip students with knowledge and understanding of business terminology, concepts, and principles. This is a one-year course that can be used as the $6^{\text {th }}$ subject for IB Diploma candidates or as the capstone course in the business pathway for non-IB students. One of the major objectives of IB BM SL is to prepare students for the SL exam in May. Students who test SL will also be required to complete an Internal Assessment research project. Membership in DECA (An Association of Marketing Students) is strongly encouraged.

## INTRODUCTION TO BUSINESS CTE LB

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits

If you ever want to own a business, work for a business, or buy from a business, this course is for you. Explore the concepts of entrepreneurship and business management by gaining skills and knowledge that lead to success in developing and managing domestic and global business opportunities. This course introduces the application of fundamental business principles to local, national, and international forums. This course examines the relationships among economic systems, governance, regulations, and law upon business operations. It surveys the concepts of career development, business ownership, finance and accounting, economics, marketing, management, operations, human resources, regulations, and business ethics. Students are encouraged to join Future Business Leaders of America (FBLA) as leadership activities provide opportunities to make connections among school, community, and the business world. Emphasis is placed on service, social and competitive events.

## CE INTRODUCTION TO PC APPLICATIONS CTE LB

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
*To receive CE credit, student must have grade waiver or qualifying score

Gain an industry certificate in Microsoft Suite through this course! Create value in the workplace by having a certification and skill set in Microsoft Word, PowerPoint, Excel, and Access. This course 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. This course includes the use of web browsers to access the Internet. This course aligns with the Colorado Community College course. Students will have the opportunity to earn high school credit while, at the same time, enroll in and earn community college credits with the opportunity to transfer credit to an institution of higher education. If the student is interested in earning community college credit, an additional free application is required. More information can be found at
www.cherrycreekschools.org/cte on the Concurrent Enrollment tab. Students are encouraged to join Future Business Leaders of America (FBLA) as leadership activities provide opportunities to make connections among school, community and the business world. Emphasis is placed on service, social and competitive events.

## LEGAL ENVIRONMENT OF BUSINESS CTE LB

Grades: 9, 10, 11,12
Semester: 0.5 Fine Arts/Practical Arts credits

Legal Environment of Business emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is given to economic regulation, social regulation, labor-management issues, environmental issues, and contract fundamentals. This course analyzes the role of law in social, political, and economic change in business environments. Students are encouraged to join Future Business Leaders of America (FBLA) as leadership activities provide opportunities to make connections among school, community, and the business world. Emphasis is placed on service, social and competitive events.

## MARKETING 1: PRINCIPLES OF MARKETING CTE LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Co-requisite: DECA membership
This course will build skills in sales, marketing, communications, and professionalism. Some units of study are advertising, promotion, marketing, display, selling, merchandising, marketing math, and job-seeking skills. This course presents the analysis of theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to businesses and the individual consumer.

MARKETING 2: SOCIAL MEDIA AND ADVERTISING CTE LB
Grades: 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Marketing 1 or teacher recommendation
Co-requisite: DECA membership

This course teaches students how to use social media as a business strategy and covers how to match that strategy with the goals of the business. This course addresses current trends, ethics, regulations, legal challenges, strategy, content development, and change management. This course helps students develop a better understanding of how marketing with social media is similar to and different from traditional marketing and how to best use online methods to further business goals. Advertising examines the principles and practices of advertising and its relationship to business to promote a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout, and ethical considerations.

## MARKETING CO-OP CTE LB

Grades: 11, 12
Semester: 1.0 Fine Arts /Practical Arts credits/ 125 hours
Prerequisite: Marketing 1
Co-requisite: DECA membership

Marketing CO-OP is a work-based learning (WBL) course that includes a continuum of activities that occur in the workplace, providing the learner with hands-on, real-world experience. The course further develops marketing content knowledge and skill development with simultaneous work experience. Students must complete an initial employer agreement and a reflection of the WBL experience. Students who work a minimum of 125 hours in one semester will earn 1.0 credit.

## PERSONAL FINANCE LB

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits

The course is intended to establish successful financial life skills. Students will learn how to budget funds, work through the car buying processes, and learn how to invest in the stock market. According to Forbes, students who take a personal finance course have on average higher credit scores and a greater chance of establishing a reliable emergency fund. This course 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. Students are encouraged to join Future Business Leaders of America (FBLA) as leadership activities provide opportunities to make connections among school, community, and the business world. Emphasis is placed on service, social, and competitive events.

## SPORTS \& ENTERTAINMENT MARKETING CTE LB

Grades: 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Marketing 1
Co-requisite: DECA membership

With Sports and Entertainment Marketing students will explore the management principles practiced by successful businesses in the sports and entertainment fields. Topics covered will include sports \& entertainment management, college \& amateur sports, professional sports, product management, human resources, legal and ethical issues, managing change, customer relations, and much more. This class will define the importance and role of marketing, media, and public relations in the event planning industry. Students will also identify marketing and communication tools such as social media, promotional events, and networking. Further, students will design a marketing plan that includes target market research, communication tools, objectives, strategies, and implementation.

Communication Arts Pathways

Students are encouraged to take two (2) Introductory courses before joining a year-long class/co-curricular program.
Courses in the Communication Arts Pathways can be used to meet the Practical Arts credit requirement for graduation

Intro Courses
Advanced Courses


## Communication Arts <br> Courses Descriptions

In a project-based learning environment, the communications student will discover and enhance their ability to communicate with others in a variety of ways. By cultivating an understanding of the transactional nature of the communication process, students will discover the significance and benefits of effective communication. In a global environment that is continually flooded with changes in communication and its technology, the communications curriculum seeks to engage students in becoming proficient in all aspects of the field, including the spoken word, the written word, and the use of visual images.

## AP 2D DESIGN CTE LB W

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Yearbook
Fee: $\$ 60$

This course is for students who have expressed an interest in completing the AP 2-D Design Portfolio in Photography. Emphasis will be placed on the completion of a volume of student-directed pieces within a sustained investigation. Effective visual communication skills and written skills will be emphasized. There is an expectation that a student will work outside of class time, if needed, to complete the volume of work necessary for the AP 2-D Portfolio. Students will be expected to participate in the portfolio submission in April.

## AP 2D ART \& DESIGN PHOTOGRAPHY CTE LB W

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Yearbook
Fee: $\$ 60$

This course is for students who have expressed an interest in completing the AP 2-D Design Portfolio in Photography. Emphasis will be placed on the completion of a volume of student-directed pieces within a sustained investigation. Effective visual communication skills and written skills will be emphasized. There is an expectation that a student will work outside of class time, if needed, to complete the volume of work necessary for the AP 2-D Portfolio. Students will be expected to participate in the portfolio submission in April.

## COMPETITIVE DEBATE LB

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Beginning Debate
Fee: $\$ 150 /$ year
This course may be repeated for credit.
By selecting this course, you are indicating a desire to join the CT Speech and Debate team. This elective course focuses on research-intensive, formalized debate. This course is co-curricular, and students are required to participate in speech and debate competitions which are held on selected weekdays and Saturdays. The course will prepare students to successfully compete in individual or partner debates. Considerable class time will be used to organize, research, outline, present, and critique debates. Students will review debate theory and apply this theory as they prepare polish and rehearse for competition. Students will gain membership in the National Speech and Debate Association through their participation at required competitions.

## COMPETITIVE SPEECH LB

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Fee: \$150/year
This course may be repeated for credit.

By selecting this course, you are indicating a desire to join the CT Speech and Debate team. Speech/Debate is competitive speaking, acting, and debate. This elective course focuses on the first two of those three categories of competitive events. The course is co-curricular, and students are required to participate in speech and debate competitions on selected weekdays and Saturdays. Areas of intensive study include Original Oratory, Informative Speaking, Extemporaneous Speaking, and Interpretation of Literature. Specific event descriptions can be found at https://www.speechanddebate.org/competition-events/. Students will gain membership in the National Speech and Debate Association through their participation at required competitions.

## DIGITAL MEDIA CTE LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Journalism, Video Production 1, Photography, Graphic Design 1, Digital Art 1, Public Speaking
Fee: \$30/year
This course may be repeated for credit.

As they plan and produce the school news media (CT-TV and CTHSToday.org), students will study journalistic-style storytelling and the basic requirements of investigative reporting. In addition, students will examine the production of all digital media platforms, the history of journalism, and journalistic ethics. Students will be responsible for every aspect of creating a news media platform: reporting, news and editorial writing, interviewing, editing, photography and videography, layout and design, filming, lighting, editing, post-production techniques, advertising design, advertising sales, and positive public relations. Students enrolled in this class will develop mastery in the Adobe Creative Suites, specifically Adobe Premiere, Adobe Photoshop and Adobe After Effects. Students should plan to work periodically after school, evenings, and/or weekends.

## JOURNALISM CTE

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Fee: \$15

This course is designed to introduce students to the process and structure of a publication class. Students will learn the ins and outs of digital photography, digital page layout using Adobe InDesign, and interviewing, copywriting, and copyediting skills. Part of the semester-long course will include an in-depth study of scholastic press law and analysis of the professional media's coverage of current events. As part of this course, students may contribute to one of CT Journalism's student publications: CT-TV, cthstoday.org, and/or The Legend in a limited capacity.

## PUBLIC SPEAKING

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits

Public Speaking is highly recommended for all students. The aim of the course is to develop students' poise, selfconfidence, and speaking habits. Students learn the characteristics and elements of great speeches, how to craft and write them, practice, and deliver them. Rhetorical strategies and appeals are emphasized. Exercises in breathing and movement as well as improvisation are used to strengthen delivery. Throughout the course, students prepare and present both formal and informal speeches on a variety of topics.

## VIDEO PRODUCTION 1 CTE

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Fee: \$15

Video Production is a course that explores the fascinating world of digital video and television production. Students work in collaborative teams to produce video projects using small cameras while learning the basics of studio and field production, lighting, and sound. Special emphasis is placed on creativity and the writing process. Part of the semesterlong course will include an in-depth study of scholastic press law and an analysis of the professional media's coverage of current events. As part of this course, students may contribute to one of CT Journalism's student publications: CT-TV, cthstoday.org, and/or The Legend in a limited capacity.

## YEARBOOK CTE LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Journalism, Video Production 1, Photography, Graphic Design 1, Digital Art 1, Public Speaking Fee: \$30
This course may be repeated for credit.

Students will plan and produce the CTHS yearbook, The Legend. Students will be responsible for every aspect of yearbook production including the following: taking photographs and writing captions, planning, and designing layouts, researching, writing copy and headlines, editing, promoting, and distributing the book, and selling advertisements. Meeting deadlines to create the yearbook will often require time not only during class, but also after school, evenings, and/ or on weekends. Students enrolled in this class will develop mastery in the Adobe Creative Suites, specifically Adobe Photoshop and Adobe In-Design. This course may be repeated for credit.

## Engineering Technologies and Computer Science Pathways



# Engineering Technologies and Computer Science Department Course Descriptions 

These courses offer students a variety of experiences that will help them choose and prepare for $21^{\text {st }}$-century technology careers. Students who take these classes gain skills in innovation and design that are critical for careers such as Engineering, Programming, Architecture, Robotics, and Alternative Energy, as well as high-tech careers that have not yet been invented. Classroom instruction connects to the REAL world of work and future career opportunities.

Upper-level Engineering courses require a co-requisite of TSA membership and yearly $\$ 30$ dues.

AP COMPUTER SCIENCE A CTE STEM W<br>Grades: 10, 11, 12<br>Year: 1.0 Fine Arts/Practical Arts credits<br>Prerequisite: Computer Programming 1 or AP Computer Science Principles

AP Computer Science A is an introductory, college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections among the school, community, and the business world. Emphasis is placed on service, social, and competitive events.

## AP COMPUTER SCIENCE PRINCIPLES CTE STEM W

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
AP Computer Science Principles is an introductory college-level computing course. Students cultivate their understanding of computer science through working with data, collaborating to solve problems, and developing computer programs as they explore concepts like creativity, abstraction, data and information, algorithms, programming, the internet, and the global impact of computing. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections among the school, community, and the business world. Emphasis is placed on service, social and competitive events.

## ARCHITECTURAL DESIGN CTE STEM

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Fee: $\$ 25$
This course is designed for advanced drafters to develop skills in the field of architectural engineering. This class will offer students experience in the development and design of structures using architectural design software. Students will develop drafting skills by reading architectural blueprints and generating floor plans for real-world applications. This course is designed to allow students to use their knowledge of CAD to create a set of house plans that meet city code requirements. Students will use CAD software and draw a floor plan, plot plan, electrical plan, foundation plan, and elevation for their house as well as construct a model frame house. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections among the school, community, and the business world. Emphasis is placed on service, social, and competitive events. Students enrolled in this class will have the opportunity to obtain an Autodesk Certified User Revit industry certification.

## COMPUTER AIDED DESIGN CTE DE STEM

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Dual Enrollment Fees (Optional): \$150

Computer Aided Design is an entry-level design class developed to teach students how to use various drawing instruments to read and create technical drawings and 3D parts. This course is designed for students interested in exploring careers related to engineering, product design, and drafting. Student projects will demonstrate skills and software valued in related industries. The course will culminate with students taking the Certified SolidWorks Associate exam, an industry-level certification exam used to demonstrate a student's level of expertise using SolidWorks which focuses on basic computer-aided drafting skills using the SolidWorks software. Students enrolled in this class will have the opportunity to obtain multiple SOLIDWORKS industry certifications. Students in this class can earn 3.0 hours of Dual Enrolment through Metropolitan State University. This class aligns with IND 1450 - Technical Drawing and CAD.

## COMPUTER PROGRAMMING I CTE STEM

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits

This course is intended to teach students the basics of computer programming. The course places emphasis on practicing standard programming techniques and learning the logic tools and methods typically used by programmers to create simple computer applications. Upon completion of this course, proficient students will be able to solve problems by planning multi step procedures; writing, analyzing, reviewing, and revising programs, converting detailed information from workflow charts and diagrams into coded instructions in a computer language; and will be able to troubleshoot/debug programs and software applications to correct malfunctions and ensure their proper execution. This course is also a part of the school's E-Sports program. Students will have a chance to explore the growth and impact of E-Sports on our community and society. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## COMPUTER PROGRAMMING II CTE STEM

Grades 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Prerequisite: Computer Programming 1
Co-requisite: TSA Membership

Programming 2 combines problem-solving techniques with computer game design and implementation to introduce the student to basic gaming concepts. Students will design, implement, and test computer games using software that allows for basic game creation through a wide variety of game creation tools. Students will explore concepts of game design in the context of computer programming. Students will design various games and be given a chance to design in 2D and 3D environments through the Unity game engine. VR game design is also introduced. Upon completion of this course, proficient students will demonstrate an understanding of object-oriented programming language using highlevel languages such as FOCUS, Python, or SAS. Technology Student Association resources and events are integrated in this upper-level class. Students are required to join the TSA as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## ENGINEERING DESIGN CTE DE STEM

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Computer Aided Design
Co-requisite: TSA Membership
Fee: \$25
Dual Enrollment Fees (Optional): \$150

Engineering Design is the second in a series of classes offered in mechanical design/engineering. This course allows students to further their skills in design and problem solving. The emphasis of Engineering Design will be on applying and utilizing the design process to develop products, systems, or processes. Students will be responsible for researching, designing, and constructing a prototype using both CADD and/or fabrication. Students are required to join the TSA as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events. Students enrolled in this class will have the opportunity to obtain multiple SOLIDWORKS industry certifications. Students in this class can earn 3.0 hours of Dual Enrolment through Metropolitan State University. This class aligns with Engineering Design-IND 3660 Computer Aided Modeling. Please note there is a $\$ 150$ fee if students choose to apply for the optional Dual Enrolment credit.

## ENGINEERING TECHNOLOGY I CTE STEM

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Fee: \$25

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 will be 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. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## ENGINEERING TECHNOLOGY II CTE STEM

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Prerequisite: Engineering Technology 1
Co-requisite: TSA Membership
Fee: \$25

The course covers essential knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students can describe various engineering disciplines, as well as admissions requirements for postsecondary engineering and engineering technology programs in Colorado. Students will participate in various engineering design challenges, including large-scale catapults, designing their own drones to fly through a course and designing their own scale RC car to race in the parking lot. Technology Student Association resources and events are integrated in this upper-level class. Students are required to join the TSA as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## ENGINEERING TECHNOLOGY COOP CTE

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Manufacturing Production Design or IB Design Technologies and teacher recommendation
Co-requisite: TSA Membership
This course can be repeated for credit.

Students will have the opportunity to work in the Engineering Technologies Fab Lab to produce items for the Student Enterprise. Students will learn the business side of a custom product shop. Skills taught will include order processing, supply chain management, fabrication, and fulfillment. In addition, students will gain experience in customer service, quality assurance and human relations skills. Students build on prior knowledge and skills in the program of study to further develop and apply employability and technical skills that prepare them for success in future career and postsecondary education. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## IB DESIGN TECHNOLOGY HL I CTE STEM W

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Acceptance to the IB Diploma Program
Fee: \$30

Diploma Program design technology is based on a model of learning that incorporates knowledge, skills, and design principles in problem-solving contexts, while at the same time maximizing the use of local and readily available resources. It assumes no previous experience in either technology or design. The intent is not solely the acquisition of knowledge about design and technology, which may change or become outdated, but it is about learning how to adapt to new experiences and to approach problems with the appropriate skills and the relevant techniques to identify the important elements and, crucially, to develop the optimum solutions. The design cycle is at the core of the course, and it is expected that students will use this process in practical investigative work as well as in theory. Each element in the design cycle represents an aspect of design technology, which, when viewed together, constitutes a holistic approach. Any given element is therefore only to be seen in the context of the whole process. To design with technology is to use human ingenuity in selected activities to meet needs and find solutions. This can be achieved through existing or new technologies. Design consists of gathering information about the problem or opportunity, processing that information, and planning for intervention either by modifying what is already there or by introducing something new. The designer is interested not just in the material environment but also in the social, technological, economic, environmental, political, legislative, and ethical considerations that affect peoples' priorities. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## IB DESIGN TECHNOLOGY HL II CTE STEM W

Grade: 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: IB Design Technology HL 1
Fee: \$30

IB design technology HL II is a continuation of skill and knowledge learned through IB Design Technology HL I. Students will continue to design by gathering information about the problem or opportunity, processing that information, and planning for intervention either by modifying what is already there or by introducing something new. The designer is interested not just in the material environment but also in the social, technological, economic, environmental, political, legislative, and ethical considerations that affect peoples' priorities. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## MANUFACTURING PRODUCTION DESIGN CTE STEM

Grades: 10, 11, 12
Semester: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Engineering Technology 1 or Computer Aided Design
Co-requisite: TSA Membership
Fee: \$25
This course may be repeated for credit.

Students will become proficient in using tools such as 3D printers, laser engravers, CNC mills, CNC routers and select power tools to make products. Students will be designing and crafting various personal projects utilizing the capabilities of the Fabrication Lab. There will also be a focus on tool and workplace safety. Students are introduced to knowledge and skills used in the proper application of principles of manufacturing. The study of manufacturing technology allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities. Students will gain an understanding of what employers require to gain and maintain employment in manufacturing careers. Technology Student Association resources and events are integrated in this upper-level class. Students are required to join the TSA as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events

## MEDICAL \& SUSTAINABLE TECHNOLOGY CTE

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Fee: \$25

Students will explore careers and systems of medical and sustainable technologies. This class will be a mix of theoretical and hands-on learning. Topics may include healthcare diagnostic/treatment equipment, bioplastics, biofuel, alternative food production, waste management, and prosthetics. Students are encouraged to join the Technology Student Association (TSA) as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## ROBOTICS \& AUTOMATED SYSTEMS CTE STEM

Grades: 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Prerequisite: Engineering Technology 1 or Computer Programming 1
Co-requisite: TSA Membership

This is an introductory course in robotics and automation technologies. Topics include building, programming, troubleshooting and maintenance of robotic systems. This class incorporates a survey of automation topics including history, computer and hardwired controls, sensors, motors, and actuators. This course goes through understanding the engineering design process and creating robots. The class uses the newest VEX Robotics to create designs to solve problems. Problems include but are not limited to automation races, soccer, tug-o-war, obstacle courses, and others. Students will work through a series of simulations and experience challenges based on state and nationally recognized competitions. 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 understand 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. Technology Student Association resources and events are integrated into this upper-level class. Students are required to join the TSA as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, social and competitive events.

## SENIOR DESIGN CAPSTONE: (SEMESTER AND YEARLONG)CTE STEM

Grades: 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Yearlong: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Teacher approval
Co-requisite: TSA Membership
Fee: $\$ 30$

In Senior Design Capstone, students will pick one or more independent projects to do over the course of the semester. Students are required to document all work through social media or an engineering notebook, publicly promote the project at an approved school event, and make formal presentations/videos. Time management and independent learning are skills required in this course. This course allows for advanced work in any Drafting and Design Program of Study. This advanced work can be individualized to the specific program of study to allow for specialized study by the student. It may include project-based learning or preparation for the end-of-program industry certification. Specific content and course design will be determined by the instructor in collaboration with the individual student. Technology Student Association resources and events are integrated into this upper-level class. Students are required to join the TSA as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others, and social and competitive events.

## STEM PROJECTS CTE STEM

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credits
Prerequisite: Engineering Technology 1 or Computer Aided Design or Medical \& Sustainable Technology Co-requisite: TSA Membership
Fee: \$25
This course can be repeated for credit.
In STEM projects, students participate in group projects that combine aspects of Science, Technology, Engineering, and Math. Students will choose an area of concentration from a list of performance-based projects that involve state and national competitions/challenges. Examples include advanced Technology Student Association events, NASA HUNCH design challenges (https://www.nasahunch.com), and more. Students will develop skills in model/prototype fabrication, problem-solving, project management, and presenting. Students will be required to attend the appropriate events outside of school, based on their area of concentration. Students will be able to participate in cross-curricular projects between the Science, Technology, Engineering, and Math departments at Cherokee Trail. This course allows for advanced work in the Engineering \& Design Program of Study. This advanced work can be individualized to the specific program of study to allow for specialized study by the student. It may include project-based learning or preparation for the end-of-program industry certification. Specific content and course design will be determined by the instructor in collaboration with the individual student. Technology Student Association resources and events are integrated into this upper-level class. Students are required to join the TSA as leadership activities provide opportunities to make connections between the school, community, and the business world. Emphasis is placed on service to others and social and competitive events.

## UNIFIED ENGINEERING TECHNOLOGIES

Grades: 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credits
Prerequisite: Instructor approval
This course can be repeated for credit.

Unified Engineering Technologies is a class specifically designed for students who benefit from a modified curriculum, with an emphasis on those with special needs. There will be an emphasis on relevant life skills and the ability to properly use a variety of tools. The opportunity for a limited number of student peer partners is available. Peer partners do not need a background in engineering/technology to take this class. Peer partners will receive Engineering Technologies elective credit with enrollment in this class. This course can be repeated for credit

## English Language Arts Pathways



# English Language Arts Department Course Descriptions 

The English language arts are central to all learning. Through integrated reading, writing, and speaking instruction, students actively construct meaning. As they study literature, both modern and from long ago, written by people from many racial, ethnic, and cultural groups, students grow in their understanding of their own world and the worlds of others. The study of the writing process focuses on content, organization, fluency, word choice, and conventions, so that students may find their own voices.

## AMERICAN LITERATURE NCAA

Grade: 11
Year: 1.0 English credit
Prerequisite: English 10
This is a survey course in American Literature. Students will study non-fiction along with drama, short stories, poetry, and novels. By reading a broad variety of American authors, students will gain an increased understanding and appreciation of the American experience. The writing in the course is structured to develop skills for college and includes most of the expository types - narration, description, definition, classification, cause-effect, and argumentation. Vocabulary study and mechanics and usage work are included as well.

## AMERICAN LIT HONORS NCAA W

Grade: 11
Year: 1.0 English credit
Prerequisite: English 10
This is an English course designed to prepare students for college-level work in their senior year. In addition to studying a variety of genres and authors, students will begin to develop rhetorical analysis skills through their reading and writing. This class is designed for students with a strong work ethic who wish to pursue more rigorous coursework. The writing in the course is structured to develop skills for college and success on timed writing exercises and includes a focus on most of the expository forms. Vocabulary study and mechanics and usage work are included as well. Grades are weighted.

## AP ENGLISH LANGUAGE AND COMPOSITION NCAA W

Grades: 11, 12
Year: 1.0 English credit
Prerequisite: Pre-AP English 10, Pre-IB English 10, or American Lit Honors

The course is designed for academically motivated students who read and write well above grade level. The course is fundamentally a first-year college composition class. Students will study examples of various kinds of writing: biographies, essays, fiction, and poetry. The writing is analytical and expository, with practice in writing time-limited compositions in class. Students will prepare for the Advanced Placement English Language and Composition exam at the end of the year. Grades are weighted. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply.

## AP ENGLISH LITERATURE AND

COMPOSITION NCAA W
Grade: 12
Year: 1.0 English credit
Prerequisite: American Literature Honors or AP English Language and Composition

This course is designed for accelerated students who wish to prepare for the AP Literature and Composition exam. Students will examine selected works ranging from classics to contemporary works. Students will analyze a work's structure, style, and themes as well as such smaller-scale elements as the use of imagery, symbolism, and tone. Students will strengthen their ability to write literary analysis, reflective essays, and timed compositions. Grades are weighted. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply.

## CE ENGLISH COMPOSITION I NCAA

Grade: 12
Semester: 0.5 English credit
Prerequisite: $11^{\text {th }}$ Grade English

* To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)

This course aligns with the Community College of Aurora course. Eligible students who earn a C or better in the class will receive 3 community college credits. These are guaranteed transfer credits to public colleges and universities in Colorado. This concurrent enrollment-credit course emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative, and persuasive/argumentative writing. Students taking semester long CE English Composition I MUST enroll in CE Intro to Literature 115 second semester.

## CE ENGLISH COMPOSITION I NCAA

Grade: 12
Year: 1.0 English credit
Prerequisite: $11^{\text {th }}$ Grade English

* To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)

This course aligns with the Community College of Aurora. Eligible students who earn a C or better in the class will receive 3 community college credits. These are guaranteed transfer credits to public colleges and universities in Colorado. his concurrent enrollment-credit course emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative, and persuasive/argumentative writing.

## CE ENGLISH COMPOSITION II NCAA

Grade: 12
Semester: 0.5 English credit
Prerequisite: 3 or higher on AP Lang Exam or CE English Composition I at another school

* To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)

This course aligns with the Community College of Aurora. Eligible students who earn a C or better in the class will receive 3 community college credits. These are guaranteed transfer credits to public colleges and universities in Colorado. This course expands and refines the objectives of CE English Composition I. This course emphasizes critical and logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and/or persuasive papers that incorporate research. Students taking semester long CE English Composition II MUST enroll in CE Intro to Literature I.

## CE INTRO TO LITERATURE I NCAA

Grade: 12
Semester: 0.5 English credit
Prerequisite: Junior-level English, English Composition 121, or English Composition122.

* To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)

This course aligns with the Community College of Aurora. Students who earn a C or better in the class will receive 3 community college credits. These are guarantee transfer credits to public colleges and universities in Colorado. This concurrent-enrollment credit course introduces students to the fiction, poetry, and drama read at the college-level. The course emphasizes active and responsive reading, literary analysis and critique, and analytical writing.

## CP ENGLISH 12 NCAA

Grade: 12
Year: 1.0 English credit
Prerequisite: Junior-level English

The purpose of the course is to ensure that students meet the college readiness standards as defined by CCSD and CDE graduation requirements in writing and reading. Students enrolled in this class will research, organize, develop, and express their ideas in essays typical of those required in college classes. As part of their development of reading strategies, students will read a variety of fiction and non-fiction pieces. Student choice will be a driving force behind the texts used in this class. Students will also complete portions of the college application process, such as writing their entrance essays, during the fall semester of the course.

## ENGLISH 9 NCAA

Grade: 9
Year: 1.0 English credit

This course includes reading, oral communication, composition, and study skills. The four major genres - short story, novel, poetry, and drama - are taught with attention to understanding main idea, supporting details, author's purpose, and literary techniques. The composition program includes narrative and expository writing, reinforces usage and grammar skills, and introduces the student to literary analysis. Study skills are reviewed throughout the course and include note taking, text annotation, and media skills. To complement the 9th grade year in social studies, the focus is on World Literature - myths, legends, and modern works.

## ENGLISH 10 NCAA

Grade: 10
Year: 1.0 English credit

This course reinforces reading, oral communication, composition, vocabulary, grammar and usage, and research skills. Both fiction and nonfiction are taught within the context of themes. In keeping with the social studies and science department curricula, one focus is to help students understand how science, technology, and economic activity have developed, changed, and affected societies. Students will study persuasion and argumentation through the writing of a 5-7-page research paper.

Prerequisite: Acceptance to the IB Diploma Program
This is the first level of a two-year, in-depth study of both literary and non-literary texts designed to prepare IB candidates for the English A: Language and Literature HL assessments required of the International Baccalaureate program. Students analyze texts for their literary and linguistic excellence, social significance, and personal meaning. Students prepare and present both written and oral commentaries and analyses. They complete the Individual Oral and keep a Learning Portfolio that will later guide the writing of the Higher-Level Essay.

## IB ENGLISH HL 2 NCAA W

Grade: 12
Year: 1.0 English credit
Prerequisite: IB English HL 1
This is the second level of a two-year, in-depth study of both literary and non-literary texts designed to prepare IB candidates for the English A: Language and Literature HL assessments required of the International Baccalaureate program. Students analyze texts for their literary and linguistic excellence, social significance, and personal meaning. They complete and refine the Higher-Level Essay and prepare for IB exams, which are completed in May. Students who read a minimum of two years above grade level and possess strong writing skills will continue to develop the skills necessary for success in AP courses by studying a variety of fiction and nonfiction. In addition to literary analysis, students will study types of expository writing: cause-effect, comparison-contrast, definition, argumentation, etc. A research paper is required. Vocabulary and usage study will continue. The goal is to prepare students for AP work during junior/senior years. Grades are weighted.

## PRE-AP ENGLISH 9 NCAA W

Grade: 9
Year: 1.0 English credit
Prerequisite: Teacher recommendation

Ninth grade students, who read a minimum of two years above grade level, have demonstrated a strong writing ability, and possess a willingness to engage in challenging work, will study World Literature. The focus is similar to English 9, with more rigorous reading and deeper literary analysis. A structured vocabulary program is taught, along with grammar and usage skills. The goal is to prepare students for AP work during junior/senior years. Grades are weighted.

## PRE-AP ENGLISH 10 NCAA W

Grade: 10
Year: 1.0 English credit
Prerequisite: English 9
Students who read a minimum of two years above grade level and possess strong writing skills will continue to develop the skills necessary for success in AP courses by studying a variety of fiction and nonfiction. In addition to literary analysis, students will study types of expository writing: cause-effect, comparison-contrast, definition, argumentation, etc. A research paper is required. Vocabulary and usage study will continue. The goal is to prepare students for AP work during junior/senior years. Grades are weighted.
Students who read a minimum of two years above grade level and possess strong writing skills will continue to develop the skills necessary for success in IB courses by studying a variety of fiction and nonfiction. In addition to literary analysis, students will study types of expository writing: cause-effect, comparison-contrast, definition, argumentation, etc. A research paper is required. Vocabulary and usage study will continue. The goal is to prepare students for IB work during junior/senior years. Grades are weighted.

Ninth grade students, who read a minimum of two years above grade level, have demonstrated a strong writing ability, and possess a willingness to engage in challenging work, will study World Literature. The focus is similar to that of English 9, with more rigorous reading and deeper literary analysis. A structured vocabulary program is taught, along with grammar and usage skills. The goal is to prepare students for IB work during junior/senior years. Grades are weighted.

## PRE-IB ENGLISH 10 NCAA W

Grade: 10
Year: 1.0 English credit
Prerequisite: Acceptance to the IB Diploma Program

Students who read a minimum of two years above grade level and possess strong writing skills will continue to develop the skills necessary for success in IB courses by studying a variety of fiction and nonfiction. In addition to literary analysis, students will study types of expository writing: cause-effect, comparison-contrast, definition, argumentation, etc. A research paper is required. Vocabulary and usage study will continue. The goal is to prepare students for IB work during junior/senior years. Grades are weighted.

## English Support Courses

Students who need additional support in English will be enrolled in a support course in addition to the grade level English course.
**Students will earn general elective credit for all English support courses. English support courses do not count towards English graduation credit

## NEWCOMER ENGLISH LANGUAGE SUPPORT

Grades: 9, 10, 11, 12
Year: 1.0 general elective credit
Prerequisite: ELA teacher approval
*This course will count toward general elective graduation credit.

This course is intended only for students who's native or first language is not English. The curriculum includes reading skills, vocabulary development, literature, composition, and the development of academic language. Class size and organization permit a highly individualized program. This course runs based on enrollment need. This course will not count as a core year for NCAA clearinghouse.

## READING LAB 1

Grade: 9
Semester: 0.5 general elective credit
Prerequisite: Assessment data
Co-requisite: Grade level English
*This course will count toward general elective graduation credit.

The goal of Reading Lab 1 is to develop the skills of its students so that they can become proficient readers, to approach all texts with confidence, and to find texts that the students enjoy reading. As part of their study, students will learn reading strategies such as questioning the text, making connections, inferencing, and chunking. Students taking this class will also enjoy the benefits of small class sizes.

## READING LAB 2

Grade: 10, 11
Semester: 0.5 general elective credit
Prerequisite: Assessment data
Co-requisite: Grade level English
*This course will count toward general elective graduation credit.

The goal of Reading Lab 2 is to continue the work that students began in Reading Lab 1. The course continues to develop the skills of its students so that they can become proficient readers, to approach all texts with confidence, and to find texts that the students enjoy reading. As part of their study, students will learn reading strategies such as questioning the text, making connections, inferencing, and chunking. Students taking this class will also enjoy the benefits of small class sizes.

## WRITING LAB 1

Grade: 9
Semester: 0.5 general elective credit
Prerequisite: Assessment data
Co-requisite: Grade level English
*This course will count toward general elective graduation credit.

This class is designed to improve the writing skills of its students and ultimately create students who think positively about themselves as writers. As part of their study, students will receive specific instruction on mechanics, usage, and grammar. Students will also practice all steps of the writing process in the context of a writing workshop. Students taking this class will also enjoy the benefits of small class sizes.

## WRITING LAB 2

Grade: 10
Semester: 0.5 general elective credit
Prerequisite: Assessment data
Co-requisite: Grade level English
*This course will count toward general elective graduation credit.

In Writing Lab 2, students will continue to grow as writers by continuing the work they began in Writing Lab 1. Students will work to improve their writing skills and their impression of themselves as writers. As part of their study, students will receive specific instruction on mechanics, usage, and grammar. Students will practice all steps of the writing process in the context of a writing workshop. Students taking this class will also enjoy the benefits of small class size.

## Health Science Pathways

This Pathway is suggested for any student who is considering the medical field beyond high school.

The Health Science Pathway crosses multiple subjects and disciplines relative to the human body and health science. We strongly encourage students to enroll in many of the following courses to prepare for a Health Science career.


## Health Science Pathways and Courses

The Health Science pathway is suggested for any students who are looking to go into the medical field beyond high school. This pathway explores many different occupations in the medical field, while giving students job ready skills, an opportunity to talk with current medical professionals and a great foundation of knowledge for any medial career. The Health Science pathway crosses over multiple subjects and disciplines all relating to the human body and health science. We strongly encourage students to enroll in a variety of courses to prepare them for a Health Science Career.

## CE COMPREHENSIVE MEDICAL TERMINOLOGY CTE

Grades: 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit

This course introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots, and suffixes. This includes terms related to major body systems, oncology, psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. The class structure provides accepted pronunciation of terms and relative use in the healthcare setting. Students will also learn professional skills such as resume and cover letter writing along with interview skills. This course aligns with the Colorado Community College course Introduction to Medical Terminology (HPR 1040). Students will have the opportunity to earn high school credit while at the same time enroll in and earn community college credits with the opportunity to transfer credit to an institution of higher education. If the student is interested in earning community college credit, an additional free application is required. More information can be found at www.cherrycreekschools.org/cte on the Concurrent Enrollment tab.

## CE INTRO TO HEALTH CARE CTE

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit

This class introduces health science with an overview of the 5 pathways that make up the health science clusters. The course addresses the foundations of standards including health maintenance, employability skills, teamwork, health care systems, communication, and legal issues in health care. This course aligns with the Colorado Community College course (HPR 1001). Students will have the opportunity to earn high school credit while at the same time enroll in and earn community college credits with the opportunity to transfer credit to an institution of higher education. If the student is interested in earning community college credit, an additional free application is required. More information can be found at www.cherrycreekschools.org/cte on the Concurrent Enrollment tab.

## SPORTS MEDICINE CTE

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Fee: \$15

This course provides students with a general overview of the field of sports medicine. It includes students with information about careers; scope of practice; legal and ethical responsibilities; injury prevention, treatment, and management; anatomy and physiology; nutrition; basic taping and wrapping techniques and administrative functions. The course includes preparation for the American Red Cross Certification in Responding to Emergencies certification. Contact hours outside of the classroom shadowing/assisting a sports medicine professional are required as determined by the instructor.

## SPORTS MEDICINE INTERNSHIP

Grades: 11, 12
Semester: 1.0 general elective credit/125 hours
Prerequisite: Sports Medicine, application
Grading System: S/US

Sports Medicine Internship offers the field and clinical experience to apply the related sports medicine knowledge, skills, and abilities. This is a semester course in which students will receive credit for working alongside the CTHS Athletic Training Staff, at after-school sporting events. The student and Athletic Trainer will work together and create a schedule for when and what events the student will work.

## Math Pathways



## Mathematics Department Course Descriptions

The Mathematics Department recognizes the diverse interests of the student population. In this regard we have organized a multi-path program that may be tailored to meet individual needs. The student's counselor and mathematics teacher will assist the student in designing a mathematics curriculum within or across the paths. All students must complete 3 credits of mathematics to meet graduation requirements. The paths are:<br>College Prep<br>Calculus HS Condensed<br>Calculus MS Condensed<br>Multi-Variable Calculus

## ALGEBRA 1 NCAA

Grade: 9
Year: 1.0 Math credit

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The content of Algebra 1 deepens and extends students' understanding of linear and exponential relationships by contrasting them with each other and identifying and exploring their underlying mathematical structures. Students explore many examples of functions, including sequences, and analyze them graphically, numerically, symbolically, and verbally, making connections between them and identifying the strengths and weakness of these forms. Extending the statistics studied in Grade 8, students apply linear models to data that exhibit a linear trend, and mathematically analyze how well the model fits the data. Additionally, students engage in methods for analyzing, solving, and applying quadratic functions and become familiar with the usefulness of multiple forms of quadratic functions. The Mathematical Practice Standards are applied to the content of this course, allowing students to experience Algebra 1 as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Summer work for this course can be found on the school website.

ALGEBRA 2 NCAA<br>Grades: 10, 11<br>Year: 1.0 Math credit<br>Prerequisite: Geometry<br>Required: Graphing Calculator

Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial and radical functions. Students work closely with the expressions that define the functions and continue to expand their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Functions are studied in relation to one another by analysis of multiple representations of functions with unrestricted domains, as well as those with restricted domains. Additionally, students extend their understanding of the trigonometric ratios and circles from geometry and use the coordinate plane to model periodic phenomena with trigonometry.

Students further develop their statistical knowledge by studying the collection, analysis, and interpretation of data and the connections to probability. The Mathematical Practice Standards are applied to the content of this course, allowing students to experience Algebra 2 as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

## ALGEBRA 2/PRE-CALCULUS HONORS NCAA W

Grades: 9, 10, 11
Year: 1.0 Math credit
Prerequisite: Geometry/Pre-Calculus Honors or teacher recommendation
Required: Graphing Calculator

For students interested in studying Advanced Placement Calculus in high school and/or STEM-related careers postgraduation, condensed courses are offered so that students do not need to take two math classes in one year. In this more rigorous and fast-paced course, students will study all the content of the Algebra 2 course as outlined above. Additionally, the Pre-Calculus topics that connect mathematically to the concepts of the Algebra 2 course will be included. These topics include but are not limited to parametric equations, a deeper study of rational and logarithmic functions, trigonometric functions \& identities, and limits. The Mathematical Practice Standards will again be an integral part of the course, supporting students in having conceptual understanding, procedural skill and fluency, and an ability to fully apply their understanding of mathematics.

## AP CALCULUS AB NCAA STEM W

Grades: 11, 12
Year: 1.0 Math credit
Prerequisite: College Algebra and College Trigonometry, Trig/Pre-Calculus Honors, or Algebra 2/Precalculus Honors Required: Summer coursework

This course emphasizes a multi-representational approach to calculus, with results and problems being expressed graphically, numerically, analytically, and verbally. Topics include graphs and limits, differentiation, applications of differentiation, integration, and applications of integration. The pace and rigor of instruction will be geared toward preparing students for the AP exam, which they are expected to take in the Spring. Students should expect 1.5 hours of homework per class session and/or teacher led outside-of-class AP study sessions. Summer work for this course can be found on the school website.

## AP CALCULUS BC NCAA STEM W

Grades: 11, 12
Year: 1.0 Math credit
Prerequisite: Algebra 2/Pre-Calculus Honors, Trig/Pre-Calc Honors, and teacher recommendation

This is the more rigorous of the two AP calculus courses we offer. Students will learn both the theoretical foundations and proper techniques of both differential and integral calculus and apply them extensively in problem-solving contexts. The pace and rigor of instruction will be geared toward preparing students for the AP exam, which they are expected to take in the Spring. Students should expect 1.5 hours of homework per class session and/or teacher led outside-of-class AP study sessions. Summer work for this course can be found on the school website.

Required: Graphing Calculator
The AP Precalculus course is designed for students to have a capstone experience of their learning through Algebra, Geometry and Algebra 2, while also focusing on preparing them for future courses, specifically $A P$ Calculus $A B / B C$. This course applies real-world modeling situations and develops a deeper conceptual understanding of polynomial, rational, exponential, logarithmic, trigonometric, and polar functions. This includes compositions, inverses and transformations using graphical, numerical, verbal, and analytical representations. Research shows that deepening student understanding of functions and their graphs and understanding the relationships between these two best supports the student in preparing for calculus. Units of study also include limits, vectors, and matrices. Before taking this course, students should be proficient in solving equations of all types using a variety of techniques.

## STATISTICS NCAA STEM W

Grades: 11, 12
Year: 1.0 Math credit
Prerequisite: Algebra 2
This is an advanced course in statistics. Topics include exploratory analysis of data, planning a study and collection of data, and producing statistical models using probability distributions and statistical inference. The pace and rigor of instruction will be geared toward preparing students for the AP exam, which they are expected to take in the Spring. Exam fees apply. Students should expect 1.5 hours of homework per class session and/or teacher led outside-of-class AP study sessions.

## CE CALCULUS I NCAA STEM

Grade: 12
Year: 1.0 Math credit
Prerequisite: CE College Algebra and CE College Trigonometry
*To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)
Graphing Calculator: Required
This course aligns with Colorado Community College. Students who earn a C or better in the class will receive 5 community college credits. These are guaranteed transfer credits to public colleges and universities in Colorado. This course introduces single variable calculus and analytic geometry. It includes limits, continuity, derivatives, and applications of derivatives as well as indefinite and definite integrals and some applications.

## CE COLLEGE ALGEBRA NCAA

Grades: 11, 12
Semester: 0.5 Math credit
Prerequisite: Algebra 2
*To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)
Graphing Calculator: Required
This course aligns with the Colorado Community College course. Students who earn a C or better in the class will receive 4 community college credits. These are guaranteed transfer credits to public colleges and universities in Colorado. This course will cover advanced math topics necessary for college success in math or non-math related majors. Topics studied include graphs and applications of linear, quadratic, polynomial, and exponential functions; conic sections; probability and statistics; and elementary trigonometry. Topics such as graphing of conic sections, introductions to sequences and series, permutations and combinations, the binomial theorem, and theory of equations will be included.

## CE COLLEGE ALGEBRA W/ ALGEBRA LAB NCAA

Grades: 12
Year: 1.0 Math credit
Prerequisite: Algebra 2
*To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)
Graphing Calculator: Required

This course aligns with the Colorado Community College course. Students who earn a C or better in the class will receive 4 community college credits. These are guaranteed transfer credits to public colleges and universities in Colorado. This course will cover advanced math topics necessary for college success in math or non-math related majors. Topics studied include graphs and applications of linear, quadratic, polynomial, and exponential functions; conic sections; probability and statistics; and elementary trigonometry. Topics such as graphing of conic sections, introductions to sequences and series, permutations and combinations, the binomial theorem, and theory of equations will be included.

## CE COLLEGE TRIGONOMETRY NCAA

Grades: 11, 12
Semester: 0.5 Math credit
Prerequisite: CE College Algebra
Must meet minimum scores on Accuplacer, ACT-M, or SAT-M
Graphing Calculator: Required

This course aligns with the Colorado Community College course. Students who earn a C or better in the class will receive 3 community college credits. These are guaranteed transfer credits to public colleges and universities in Colorado. This course includes trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence.

## CE INTRO TO STATISTICS W/ QUANTITATIVE

LAB NCAA
Grade: 12
Semester: 0.5 Math credit
Prerequisite: CE College Algebra
*To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)

This course aligns with the Colorado Community College course. Students who earn a C or better in this class will receive 3 Community College credits. These are guaranteed transfer credits to public colleges and universities in Colorado. This course explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference-estimation, hypothesis testing, comparisons of populations, correlation, and regression. Students will use statistical software and the World Wide Web to engage in an active, visual approach to the topics covered. Students will work with real world data on problems of a practical nature.

GEOMETRY NCAA
Grade: 9, 10
Year: 1.0 Math credit
Prerequisite: Algebra 1

The high school Geometry course formalizes and extends students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relations, moving toward formal mathematical arguments. In this course, rigid and non-rigid transformations (including translations, reflections, rotations, and dilations) are the frame through which students build and prove the concepts of congruence and similarity. Students apply similar reasoning to geometric constructions. Previous experiences with proportional reasoning and the Pythagorean Theorem lead students to understand the trigonometry of right triangles to find unknown measures in general triangles. The geometry of two-and-three-dimensional figures is the focus, including work and analysis in the coordinate plane. The Mathematical Practice Standards are applied to the content of this course, allowing students to experience Geometry as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Summer work for this course can be found on the school website.

## GEOMETRY/PRECALCULUS HONORS NCAA W

Grades: 9, 10
Year: 1.0 Math credit
Prerequisite: Algebra 1
Graphing Calculator: Required

For students interested in studying Advanced Placement Calculus in high school and/or STEM-related careers postgraduation, condensed courses are offered so that students do not need to take two math classes in one year. In this more rigorous and fast-paced course, students will study all the content of the geometry course as outlined above. Additionally, the Pre-Calculus topics that connect mathematically to the concepts of the geometry course will be included. These topics include but are not limited to vectors, trigonometry, parametric equations and graphs, and polar equations and graphs. The Mathematical Practice Standards will again be an integral part of the course, supporting students in having conceptual understanding, procedural skill and fluency, and an ability to fully apply their understanding of mathematics. Summer work for this course can be found on the school website.

## INTERMEDIATE COLLEGE ALGEBRA * NCAA

Grades: 11, 12
Year: 1.0 Math credit
Prerequisite: Algebra 2
Required: Graphing Calculator

This course is a further exploration of the algebra of the real number system with extension into complex numbers. It will emphasize problem-solving with further study of equations, slopes, inequalities, systems of equations, polynomials, quadratic equations, rational expressions, rational exponents, radical expressions, graphing, and applications. The course is designed to prepare students to successfully take a college algebra course either at the high school level (as concurrent enrollment with CCA) or at the college they choose to attend. *This class will not count as an additional core year for NCAA Clearinghouse if the student has completed Algebra 2.

## IB MATH SL 1 APPLICATIONS NCAA W

Grade: 10, 11
Year: 1.0 Math credit
Prerequisite: Acceptance to IB program
Graphing Calculator: Required

This course is designed for students who enjoy describing the real world and solving practical problems using mathematics; those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics. This course is part of a 2 -year curriculum that prepares students to take the IB Mathematics Applications Standard level test in the Spring of the $2^{\text {nd }}$ year.

## IB MATH SL 2 APPLICATIONS NCAA W

Grades: 11, 12
Year: 1.0 Math credit
Prerequisite: IB Math SL 1 Applications
Graphing Calculator: Required

This course is designed for students who enjoy describing the real world and solving practical problems using mathematics; those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics. Students enrolled in this course take the IB Mathematics Applications Standard level test in the Spring.

## IB MATH SL 1 ANALYSIS NCAA W

Grades: 10, 11
Year: 1.0 Math credit
Prerequisite: Acceptance to the IB program
Graphing Calculator: Required

This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem solving and exploring real and abstract applications, with and without technology. This course is part of a 2-year curriculum that prepares students to take the IB Mathematics Analysis Standard level test in the Spring of the $2^{\text {nd }}$ year.

## IB MATH SL 2 ANALYSIS NCAA W

Grades: 11, 12
Year: 1.0 Math credit
Prerequisite: IB Math SL 1 Analysis
Graphing Calculator: Required

This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem-solving, and exploring real and abstract applications, with and without technology. Students enrolled in this course take the IB Mathematics Analysis Standard level test.

## IB MATH HL 1 ANALYSIS NCAA W

Grade: 11
Year: 1.0 Math credit
Prerequisite: Acceptance to the IB program
Graphing Calculator: Required

This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem-solving, and exploring real and abstract applications, with and without technology. This course coincides with AP Calculus BC and is part of a 2-year curriculum that prepares students to take the IB Mathematics Analysis Higher level test in the Spring of the 2 nd year.

## IB MATH HL 2 ANALYSIS NCAA W

Grade: 12
Year: 1.0 Math credit
Prerequisite: IB Math HL 1 Analysis or AP Calculus BC
Graphing Calculator: Required

This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem-solving, and exploring real and abstract applications, with and without technology. Students enrolled in this course take IB Mathematics Analysis Higher level test in the Spring.

## Pre IB Algebra 1 NCAA W

Grade: 9
Year: 1.0 Math credit
Prerequisite: Acceptance to the IB Diploma Program

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The content of Algebra 1 deepens and extends students' understanding of linear and exponential relationships by contrasting them with each other and identifying and exploring their underlying mathematical structures. Students explore many examples of functions, including sequences, and analyze them graphically, numerically, symbolically, and verbally, making connections between them and identifying the strengths and weaknesses of these forms. Extending the statistics studied in Grade 8, students apply linear models to data that exhibit a linear trend, and mathematically analyze how well the model fits the data. Additionally, students engage in methods for analyzing, solving, and applying quadratic functions and become familiar with the usefulness of multiple forms of quadratic functions. The Mathematical Practice Standards are applied to the content of this course, allowing students to experience Algebra 1 as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Summer work for this course can be found on the school website.

## PRE-IB ALGEBRA 2 NCAA W

Grade: 10
Year: 1.0 Math credit
Prerequisite: Acceptance to the IB program
Graphing Calculator: Required

This course is designed for students who are planning on continuing through the International Baccalaureate program during their $11^{\text {th }}$ and $12^{\text {th }}$ grade years. This course focuses on graphical transformations, logarithms, rational and radical functions, and trigonometry. Students will experience pure mathematics as well as real-world applications using technology. This course will help guide their course selection for the following year when deciding between IB Math SL 1 Applications and IB Math SL 1 Analysis.

## Performing Arts Pathways



Dance Composition


Music (non-performing) Pathways


Unified Performing Arts

Exploration of Popular Music (semester)

## Performing Arts Department Course Descriptions

The Performing Arts Department includes vocal and instrumental music, theatre and technical theatre, and dance courses. Students in the Advanced Placement track, Liberal Arts Baccalaureate, or International Baccalaureate programs will find many elective courses in this department. Some courses can be repeated for credit.
**All Performing Arts courses count toward the Fine Arts/Practical Arts graduation credit.

## Dance Courses

DANCE 1
Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts or Wellness/Fitness credit
This beginning dance course is designed to expose students to dance as an opportunity for fitness development and as an art form. Students will learn the fundamentals of movement, dance technique, improvisation, anatomy, choreography, performance skills, and dance vocabulary. Hip-hop, jazz, modern, and ballet will be studied in this class. Dance 1 will help the dancer to develop strong collaboration and communication skills. Dance 1 students are required to perform in the Dance Showcase at the end of the semester.

## DANCE 2

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts or Wellness/Fitness credit
Prerequisite: Dance 1
Fee: $\$ 25 /$ semester
This course may be repeated for credit.
This beginning-intermediate level dance class will focus on technique development, enhancing performance skills, the application of anatomy and kinesiology to dance, choreography, and combinations. Hip-hop, jazz, ballet, and modern dance will be studied. A beginning approach to dance composition will be utilized to aid the student in creating studies and dances for evaluation. Dance 2 students are required to perform in the Dance Showcase at the end of the semester.

## DANCE 3

Grades: 10, 11, 12
Semester: 0.5 Fine Arts or Wellness/Fitness credit
Prerequisite: Audition
Fee: $\$ 25 /$ semester
This course may be repeated for credit.
This intermediate level dance class will focus on intermediate technical development, performance skills, choreography, and combinations. Ballet, jazz, contemporary/modern, and hip-hop dance will be studied. Students who desire to continue in the program will prepare for teacher recommendation to Dance Composition. Dance 3 students are required to perform in the Dance Showcase at the end of the semester.

## DANCE COMPOSITION LB

Grades: 10, 11, 12
Semester: 0.5 Fine Arts or Wellness/Fitness credit
Prerequisite: Audition
This course may be repeated for credit.
This is an intermediate-advanced dance course for the student displaying excellent dance technique, exceptional performance skills, and the desire to grow as a dancer. This course will allow the dancer to gain an understanding of choreography principles, dance production, and performance qualities. Jazz, ballet, hip hop, contemporary, and modern dance will be studied and performed. Students must audition and will be placed in the spring. Dance Composition students are required to perform in the Dance Showcase at the end of the semester.

## DANCE TECHNIQUE LB

Grades: 10, 11, 12
Semester: 0.5 Fine Arts or Wellness/Fitness credit
Prerequisite: Audition
This course may be repeated for credit.
Dance Technique is designed to improve the intermediate/advanced dancer's technical skills, abilities, and performance quality. The class will focus on strength, intermediate/advanced turn, jump, and leap skill combinations specific to dance team. Intermediate to advanced level dance training is required.

## Non-Performance Based Courses

AP MUSIC THEORY LB W
Grades: 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Music Theory
The AP Music Theory course focuses on concepts and skills emphasized within introductory college music theory courses, with the goal of helping students become sophisticated and thoughtful music listeners, performers, and composers. AP Music Theory students learn to recognize, understand, describe, and produce the basic elements and processes of performed and notated music. To become proficient with these skills, students will consistently practice applying course concepts through aural analysis, score analysis, sight-singing, dictation, and composition.

## EXPLORATION OF POPULAR MUSIC

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit

This course will explore 20th and 21st century American popular music. Students will discover why they enjoy their favorite songs, develop their analytical listening skills, and increase their knowledge around the elements of music. They will study history through the lens of music and engage with a wide variety of genres including hip hop, rock and roll, rhythm and blues, jazz, pop, and electronic music, among others.

## MUSIC PRODUCTION

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit
Fee: \$25

Music Production is a computer-based class in which each student will learn the art of audio recording and music technology and be prepared for a career in the music industry. Students will learn how to use loops, record the voice and a variety of instruments, how to make "beats" and sequence drums, how to use digital effects in the recording process, arranging and songwriting techniques, how to mix and master music tracks like a producer, and how to create musical sounds using synthesis. The focus will be on contemporary pop and electronic music, and students will learn how to use state-of-the-art software programs for music production.

## MUSIC PRODUCTION 2

Grades: 10, 11, 12
Semester: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Music Production
Fee: \$25
This course may be repeated for credit.

Music Production 2 is a computer-based class in which each student will learn advanced skills related to the art of audio recording and be prepared for a career in the music industry. Students will expand upon their knowledge of loops, recording techniques, synthesizing beats/drums, expanded audio effects, and creating music with advanced techniques. The course will also cover manipulating MIDI, exploring mixing and mastering, and live audio. Students will learn how to use a professional grade Digital Audio Workstation. A general knowledge of music theory, chords, and rhythms will help students succeed in this class.

## MUSIC THEORY

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit
Prerequisite: Prior music experience recommended

Introduction to Music Theory is a semester-long class designed to introduce basic music theory skills including intervals, chords, key signatures, scales, ear training, and terminology. This course is for students who are interested in taking AP Music Theory or wish to increase their music knowledge for success in performance-based classes

## UNIFIED PERFORMING ARTS

Grades: 9,10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit
Prerequisite: Teacher recommendation
This course may be repeated for credit
Performing Arts Exploration is specifically designed for students who benefit from a modified curriculum, with an emphasis on those with special needs. All students will be exposed to basic tenants of the performing arts including theatre, music, movement, and dance. The opportunity for a limited number of student assistants is available through teacher recommendation only. Student assistants will receive Performing Arts elective credit through enrollment in this class.

## Vocal and Instrumental Courses

## BELLA VOCE

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
Fee: \$40-\$115
This course may be repeated for credit.

This is an intermediate auditioned treble voice choir. This choir is for students who show high levels of musicianship, vocal ability, and personal responsibility. The emphasis of this course is to develop vocal and stylistic techniques, sight singing skills, and performance ability within various styles of music. Students will perform in required concerts throughout the year.

CHAMBER SINGERS LB
Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
Fee: \$40-\$115
This course may be repeated for credit.

This is the advanced treble choir. This course is designed to expand and refine all skills learned in Concert Choir and Con Brio. Students will develop more advanced ensemble techniques, appropriate vocal techniques, sight singing skills, and performance skills. Students will be exposed to a variety of musical styles. Students will perform in required concerts throughout the year and will have periodic rehearsals, field trips, and performances outside the school day.

## CHAMBER ORCHESTRA LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
Fee: School-owned instrument $\$ 72 /$ year or $\$ 8 /$ month
This course may be repeated for credit.

Chamber Orchestra is the advanced orchestra at CTHS. Open to sophomores, juniors, and seniors by audition only, this auditioned group will explore the music of some of the greatest composers. Instrumentation is limited throughout the ensemble. Extensive practice time is required for this course. Students will perform in required concerts throughout the year. Periodic rehearsals, field trips, and performances will be required outside the school day.

## CONCERT CHOIR

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
This course may be repeated for credit.

This is a non-auditioned treble choir for students without high school choral experience. The emphasis of this course is to offer the student an understanding of choral music and a chance to learn the fundamentals of choral literature, appropriate vocal technique, sight singing skills, and performance skills. Students will perform in required concerts throughout the year and may have periodic rehearsals, field trips, and performances outside the school day. Students need no prior experience in choir to enroll.

## CON BRIO LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
Fee: \$40-\$115
This course may be repeated for credit.

This is an intermediate mixed choir. This choir is for students who show high levels of musicianship, vocal ability, and personal responsibility. The emphasis of this course is to continue to develop advanced vocal techniques, sight singing skills, and performance skills. Students will be exposed to a variety of musical styles and will perform in required concerts throughout the year. Students will have periodic rehearsals, field trips, and performances outside the school day.

## CONCERT BAND

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Prior instrument experience
Fee: School-owned instrument $\$ 72 /$ year or $\$ 8 /$ month
This course may be repeated for credit.

All students with prior experience playing a wind or percussion instrument are encouraged to enroll in the Concert Band. A wide variety of band music will be explored while continuing to develop musicianship, technique, and theory. Instrumentation is limited within some sections. Students will perform in required concerts throughout the year. Periodic rehearsals, field trips, and performances will be required outside the school day.

## GUITAR

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit
This course may be repeated for credit.
This is a beginning level guitar class designed to explore technique, performance, and literature for guitar. Students will learn how to read music in several forms, play chords and melodies, understand the guitar's role in many music styles, and work on performing in a variety of settings. Students will need to provide their own instrument and purchase a method book.

## GUITAR 2

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit
Prerequisite: Guitar 1 or teacher approval
This course may be repeated for credit.

This is an intermediate-level guitar class for students with prior guitar experience and is designed to continue student's development in technique, performance, and literature for guitar. Students will engage in advanced techniques covering style, chords, melodies, improvisation, and performance in a variety of settings. Students will need to provide their own instrument and purchase a method book.

## JAZZ BAND 1

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Prior instrument experience
Fee: School-owned instrument $\$ 72 /$ year or $\$ 8 /$ month
This course may be repeated for credit.

Jazz Band 1 is the introductory level jazz band at Cherokee Trail. Students will be exposed to jazz music, history, and performance techniques with a heavy emphasis on improvisation and style. This course will prepare students for further study in Jazz Band 2. Students will perform in required concerts throughout the year. Periodic rehearsals, field trips, and performances will be required outside the school day.

## JAZZ BAND 2

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
Fee: School-owned instrument $\$ 72 /$ year or $\$ 8 /$ month
This course may be repeated for credit.

Jazz Band 2 is the intermediate-level Jazz Band at CTHS. Jazz style, improvisation, listening, and ensemble work will be covered in this course. Instrumentation is limited throughout the ensemble. Students will perform in required concerts throughout the year. Periodic rehearsals, field trips, and performances will be required outside the school day.

## JAZZ BAND 3 LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
Fee: School-owned instrument $\$ 72 /$ year or $\$ 8 /$ month
This course may be repeated for credit.

Jazz Band 3 is the upper-level Jazz Band at CTHS. Jazz style, improvisation, listening, and ensemble work will be covered in this course through the study of high-level literature. Instrumentation is limited throughout the ensemble. Students will perform in required concerts throughout the year. Periodic rehearsals, field trips, and performances will be required outside the school day.

## JAZZ CHOIR LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
This course may be repeated for credit.

This is a highly select mixed jazz choir. This varsity choir is for students who show high levels of musicianship, vocal ability, and personal responsibility. The emphasis of this course is to continue to develop advanced vocal techniques, sight singing skills, and performance ability within the jazz and pop styles. Students will perform in required concerts throughout the year. Students will have periodic rehearsals, field trips, and performances outside the school day.

Beginning Piano is for students with little or no keyboard experience. Using the electronic piano lab, this class introduces students to music notation, basic music theory, keyboard technique, and musical terminology through the study of basic keyboard literature.

## PIANO 2

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit
Prerequisite: Piano 1 or Teacher Approval
This course may be repeated for credit.

Piano 2 is an intermediate level piano class designed for students with prior piano experience. Using the electronic piano lab, this class explores advanced keyboard techniques, music notation, and terminology through the study of intermediate and advanced keyboard literature.

## STRINGS ORCHESTRA

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Prior instrument experience
Fee: School-owned instrument $\$ 72 /$ year or $\$ 8 /$ month
This course may be repeated for credit.

Students with experience playing violin, viola, cello, or bass are encouraged to enroll in this course. String Orchestra will introduce the students to a wide variety of orchestral and chamber music. Strong musicianship and proper technique will be emphasized. Students will perform in required concerts throughout the year. Periodic rehearsals, field trips, and performances will be required outside the school day. This course may be repeated for credit.

## SYMPHONIC ORCHESTRA

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
Fee: School-owned instrument $\$ 72 /$ year or $\$ 8 /$ month
This course may be repeated for credit.

Symphonic Orchestra is an intermediate performance group at CTHS. Open to sophomores, juniors, and seniors by audition only, this ensemble explores a wide variety of orchestral literature. Instrumentation is limited throughout the ensemble. Extensive practice time is required for this course. Students will perform in required concerts throughout the year. Periodic rehearsals, field trips, and performances will be required outside the school day.

## VOCALIS

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
This course may be repeated for credit.

This is a non-auditioned bass voice choir for students without prior high school choral experience. The emphasis of this course is to offer the student an understanding of choral music and to learn the fundamentals of choral literature, appropriate vocal technique, sight singing skills, and performance skills. Students will perform in required concerts throughout the year, and may have periodic rehearsals, field trips, and performances outside the school day. Students need no prior experience in choir to enroll.

## WIND ENSEMBLE LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Audition
Fee: School-owned instrument $\$ 72 /$ year or $\$ 8 /$ month
This course may be repeated for credit.
Open to sophomores, juniors, and seniors by audition only, this select group will explore some of the best concert band literature. Instrumentation is limited throughout the ensemble. Extensive practice time is required for this course. Students will perform in required concerts throughout the year. Periodic rehearsals, field trips, and performances will be required outside the school day.

## Theatre Courses

## ADVANCED ACTING LB

Grades: 11,12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Theatre 2
This course may be repeated for credit.
This course is designed to continue to develop the actor's instrument and the actor's technique through exploration and improvisation. It includes practical applications of the craft of acting in the classroom and showcases performances. Students will discover their individual techniques of acting and the process of creating characters within a monologue/scene/play.

## TECHNICAL THEATER 1

Grades: 9, 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Fee: \$25
This course may be repeated for credit.
This course offers students a hands-on opportunity to learn many aspects of stagecraft to produce plays and auditorium events. Students will learn safety, scenery construction, scenic painting, and stage lighting. In addition to classwork, students are required to view one live theatre production outside of the classroom.

## TECHNICAL THEATER 2 LB

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Technical Theater 1
Fee: $\$ 25$
This course may be repeated for credit.
Technical Theatre 2 offers a continuation of the basics of backstage work. Students will study costume design and construction, sound engineering, stage make-up/special effects, properties, and stage management. Students will expand upon previous knowledge of Technical Theatre 1 to master aspects of stagecraft to produce plays. This course focuses heavily on the design aspects of creating after-school theatrical productions through group collaboration. Students must attend at least two live theatre performances outside of class.

## THEATRE 1

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit
Fee: \$25

This course is designed to introduce the student to the craft of acting. The student will learn to approach, prepare, and perform a role through reading, class discussion, improvisational exercises, and performance. In addition, through preparation and improvisation, students will increase their ability to relax in front of an audience and perform with a greater sense of purpose and stage presence. Students are required to view one live theatre performance outside of class.

## THEATRE 2

Grades: 10, 11, 12
Year: 1.0 Fine Arts/Practical Arts credit
Prerequisite: Theatre 1
Fee: \$45
This course may be repeated for credit.

This is a year-long course for students who have taken Theatre 1 and are ready to fine-tune their acting skills. Students will better understand themselves as performers through scene and character analysis. Students will participate in daily acting practice, improvisation, and discussion. Performance projects include but are not limited to scene study, monologues, playmaking, improvisation, voice, movement, and auditioning. Students are required to view two live theatre performances outside of class.

## Science Pathways



## Science Department Course Descriptions

Science is the human quest for the 'probable truth' of how the universe works. The quest uses inquiry, reasoning, and the careful collection of empirical evidence to 'unweave the rainbow' of consistent patterns that is our natural world. The resulting evidence must be testable, falsifiable and have the power to predict outcomes. The evidence then builds into a scientific theory, the summit of scientific understanding of the underlying mechanisms of the natural world. Both a creative analytical process and a body of knowledge, science is an international evolutionary endeavor of bold promise and of responsibility in how it is used. The teaching and learning of science should honor these tenets.

## ANATOMY \& PHYSIOLOGY NCAA

Grade: 12
Year: 1.0 Science credit
Prerequisite: Biology, Chemistry

Anatomy and Physiology is designed for students with an interest in the human body and/or health sciences. This course starts with a basic overview of cells and their components, as well as a review of the chemistry necessary to properly understand how cells and parts of the human body function. Students will study the organ system in great depth, including structure, shape, function, and relationship to other systems. This course involves a mixture of lecture, lab work, and dissection. Students must be able to do dissections in this class.

## AP BIOLOGY NCAA STEM W

Grade: 12
Year: 1.0 Science credit
Prerequisite: Biology, Chemistry (or concurrent enrollment with a chemistry course)
AP Biology is designed to be the equivalent of an introductory college Biology course. The curriculum for this class is the College Board Advanced Placement Biology Curriculum. Units of study will include the chemistry of life, cells, cellular energetics, heredity, molecular genetics, evolutionary biology, and ecology. This course differs significantly from a high school course with respect to the laboratory work done and the time and effort of the student outside of class. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Students should expect 2 hours or more of homework per class session and teacher-led outside-of-class AP study sessions.

## AP CHEMISTRY NCAA STEM W

Grades: 10, 11, 12
Year: 1.0 Science credit
Prerequisite: Biology Honors, Algebra 2, Chemistry Honors
AP Chemistry is designed to be the equivalent of an introductory college Chemistry course. The curriculum for this class is the College Board Advanced Placement Chemistry Curriculum. Units of study will include the atomic theory and atomic structure, chemical bonding, nuclear chemistry, gases, liquids and solids, solutions, reaction types, stoichiometry, equilibrium, kinetics, thermodynamics, and descriptive chemistry. This course differs significantly from a high school course with respect to the laboratory work done and the time and effort of the student outside of class. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Students should expect a minimum of one hour of homework per class session and teacher-led outside-of-class AP study sessions.

## AP ENVIRONMENTAL SCIENCE NCAA STEM W

Grade: 12
Year: 1.0 Science credit
Prerequisite: Biology, Chemistry

AP Environmental Science is designed to be the equivalent of an introductory college Environmental Science course. The curriculum for this class is the College Board Advanced Placement Environmental Science Curriculum. Units of study will include Earth science concepts, the atmosphere, global water resources and use, soil and soil dynamics, ecosystem structure, energy flow, global water resources and use, soil and soil dynamics, ecosystem structure, energy flow, ecosystem diversity, natural ecosystem change, and natural biogeochemical cycles. This course differs significantly from a high school course with respect to the laboratory work done and the time and effort of the student outside of class. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Students should expect 1 hour of homework per class session and teacher led outside-of-class AP study sessions.

## AP PHYSICS 1 NCAA STEM W

Grades: 10, 11, 12
Year: 1.0 Science credit
Prerequisite: Biology Honors, Chemistry Honors

AP Physics 1: Algebra-Based is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum), work, energy, and power, and mechanical waves and sound. It will also introduce electric circuits. This course differs from a high school course with respect to the laboratory work done and the time and effort of the student outside of class. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Depending on score and college admission, students can receive up to 5 college credits for a successful score. Students should expect 1 hour of homework per class session and teacher led outside-of-class AP study sessions.

## AP PHYSICS 2 NCAA STEM W

Grades: 11, 12
Year: 1.0 Science credit
Prerequisite: Biology Honors, Chemistry Honors, AP Physics 1

AP Physics 2 is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. This course differs from a high school course with respect to the laboratory work done and the time and effort of the student outside of class. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Depending on score and college admission, students can receive up to 5 college credits for a successful score. Students should expect 1.5 hours of homework per class session and teacher led outside-of-class AP study sessions.

## AP PHYSICS C: MECHANICS NCAA STEM W

Grade: 12
Year: 1.0 Science credit
Prerequisite: AP Physics 1 and Calculus (or co-requisite of calculus)

AP Physics C is a Calculus-based, college-level physics course that serves as the foundation in physics for students majoring in science or engineering. Strong emphasis is placed on solving a variety of challenging problems, some of which require basic and intermediate calculus. The course will comprise a variety of topics in Newtonian mechanics, including kinematics, Newton's laws, momentum, energy, rotational motion, gravitation, and simple harmonic motion. The depth and pace of the subject matter require a background in both physics and calculus. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Students should expect 1.5 hours of homework per class session and teacher led outside-of-class AP study sessions.

## BIOLOGY NCAA

Grade: 9
Year: 1.0 Science credit

In this class, students will explore relationships between structure and function in organisms and the interaction of cells and organisms with each other and their environments. Units of study will include ecology, chemistry of life, cellular structure and function, genetics, evolution, classification, and human systems. Laboratory activities reinforce concepts and principles presented.

## BIOLOGY HONORS NCAA W

Grade: 9
Year: 1.0 Science credit

In this class, students will explore relationships between structure and function in organisms and the interaction of cells and organisms with each other and their environments. Units of study will include ecology, chemistry of life, cellular structure and function, genetics, evolution, classification, and human systems. Laboratory activities reinforce concepts and principles presented. This course covers the same topics as the regular biology program, but in a greater depth and at an accelerated rate. This course is designed to prepare students for AP, IB, CE, or selective university pathways.

## CE PHYS GEO: CLIM \& ECO W/LAB NCAA

Grade: 12
Year: 1.0 Science credit
*To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)

This course introduces the principles of meteorology, climatology, world vegetation patterns, and world regional climate classification. The course is conducted through an integrated process of lectures, discussions, and laboratory assignments. This course aligns with Colorado Community College. Students will have the opportunity to earn high school credit while, at the same time, enrolling in and earning community college credits with the opportunity to transfer credit to an institution of higher education. If the student is interested in earning community college credit, an additional application is required

## CHEMISTRY NCAA

Grade: 10, 11
Year: 1.0 Science credit
Prerequisite: Biology and Algebra 1
This course provides the opportunity to develop knowledge and understanding about the structure and properties of matter, the interaction between mass and energy, and how it relates to our planet. Units of study include matter and its changes, atomic structure, chemical composition, nomenclature, reactions, stoichiometry, gas laws, periodicity, bonding, molecular geometry, thermodynamics, and special topics in Earth Science. Laboratory activities reinforce concepts and principles presented in this course.

## CHEMISTRY HONORS NCAA W

Grade: 10
Year: 1.0 Science credit
Prerequisite: Biology Honors
This course provides the opportunity to develop knowledge and understanding about the structure and properties of matter, the interaction between mass and energy, and how it relates to our planet. Units of study include matter and its changes, atomic structure, chemical composition, nomenclature, reactions, stoichiometry, gas laws, periodicity, bonding, molecular geometry, thermodynamics, and special topics in Earth Science. Laboratory activities reinforce concepts and principles presented in this course. This course covers the same topics as the regular Chemistry program, but in a greater depth and at an accelerated rate.

## IB BIOLOGY HL 1 NCAA STEM W

Grade: 11
Year: 1.0 Science credit
Prerequisite: Acceptance to the IB Diploma Program
IB Biology is a fast-paced laboratory science course which emphasizes the unifying concepts of biology. The first year focuses on statistics, biochemistry, cells and cell processes, genetics, evolution, and classification. Scientific investigation and original lab work will also be emphasized. This university level course requires a heavy reading load and intensive study. Students are expected to take IB Bio HL 2 in 12th grade.

## IB BIOLOGY HL 2 NCAA STEM W

Grade: 12
Year: 1.0 Science credit
Prerequisite: IB Biology HL 1
Topics from the first year are expanded and the focus is on ecology and conservation, human health and physiology, and neurobiology and behavior. Scientific investigation and original lab work will also be emphasized. This university level course requires a heavy reading load and intensive study. Students will be prepared to take the Biology HL exam. Students interested in a medical career should consider concurrent registration in IB Chemistry or taking Chemistry Honors sometime during the 10-12th grade years.

This class is a lab-based survey investigation of the physical world from Newtonian mechanics through the beginnings of $20^{\text {th }}$-century understanding of the atom. A quarter of course time is devoted to practical work, where students gain direct experience with the ideas and processes of physics. This is a math-intensive course, not just for pre-engineering students, but for any IB student looking to do well in college. Students will be prepared for the IB Physics HL exams.

## IB PHYSICS HL 2 NCAA STEM W

Grade: 12
Year: 1.0 Science credit
Prerequisite: IB Physics HL 1

This is a continuation of IB Physics 1. Topics expand on earlier ones with the addition of two options. At least a quarter of course time is devoted to practical work, where students gain direct experience with the ideas and processes of physics. This is a math-intensive course, not just for pre-engineering students, but for any IB student looking to do well in college. Students will be prepared for the IB Physics HL exams.

## IB SPORTS, EXERCISE AND HEALTH SCIENCES NCAA STEM W

Grades: 11, 12
Year: 1.0 Science credit
Prerequisite: Biology Honors and Chemistry Honors

This course is open to non-IB seniors based on availability. This is a one-year standard-level chemistry course for IB students. The course involves the study of the science that underpins physical performance. The course incorporates the traditional areas of anatomy and physiology, biomechanics, psychology, and nutrition. Students cover a range of topics and carry out practical (experimental) investigations in both laboratory and field settings. This provides an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyze human performance in sports and exercise science. The course will also address international issues and ethics by considering sport, exercise, and health relative to the individual in a global context. At the end of the course, students will be prepared for the IB SL exams.

## PHYSICAL SCIENCE * NCAA

Grade: 10
Year: 1.0 Science credit
Prerequisite: coordinator approval

Physical Science is a full-year course designed to provide the student with a solid foundation in basic chemistry and physics. Students will study common forms, properties, and changes in both matter and energy, and will relate physics and chemistry concepts to the process of scientific investigation while reinforcing algebraic math skills used to solve science problems. * This class will not count as an additional core year for NCAA Clearinghouse if the student has successfully completed Chemistry or Physics.

## PHYSICS NCAA

Grade: 11, 12
Year: 1.0 Science credit
Prerequisite: Biology and Chemistry

This course uses mathematical applications and conceptual principles to help students understand the physical laws of our universe. Units of study include forces, motion, energy, light, waves, electricity, magnetism, and astronomy.
Laboratory work and the principles of algebra and trigonometry serve to promote understanding and illustrate the experimental and mathematical nature of physics.

## PLANETARY ASTRONOMY NCAA

Grade: 12
Semester: 0.5 Science credit
Prerequisite: Biology, Chemistry or Physics

Students will explore the properties and characteristics of the Earth, Moon, and Sun. We will discover how ancient astronomers studied our universe and mapped the sky. We will also study the planets and their recent discoveries. All levels of seniors are welcome to take this course.

## STELLAR ASTRONOMY NCAA

Grade: 12
Semester: 0.5 Science credit
Prerequisite: Biology, Chemistry or Physics

Students will explore how we use light and telescopes to study the stars, galaxies, and universe. We will go beyond our solar system to study topics such as the size of the universe, a star's life cycle, constellations, the origin of the universe, and more. All levels of seniors are welcome to take this course.

## Social Studies Pathways



## Social Studies Department Course Descriptions

Social studies pursue the questions of who we are, why we are the way we are, and how the world works. Embedded in the social sciences of history, geography, political science, and economics are lessons about human nature and the human condition, with sober reflection on the shortcomings and an appreciation of the noblest achievements. Social studies investigate what choices we have, as individuals, as a society, and as a world. In its essence, social studies are about life. Social studies will help young people develop the ability to make informed and reasonable decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world.

## AMERICAN ETHNIC STUDIES NCAA

Grade: 12
Semester: 0.5 Social Studies credit
This course is designed to teach United States history through the lens of power and oppression. The primary areas of focus are race, ethnicity, class, gender, and sexual orientation. The content in this class is meant to get students thinking critically about the myths and legends related to the history of the United States. The curriculum will be focused on primary sources allowing students to engage with stories of people whose voices have been historically silenced. In this class, students will be expected to think critically, engage in productive conversations, read, and analyze various texts, and create both expository and persuasive writing.

## AP HUMAN GEOGRAPHY NCAA W

Grade: 9
Year: 1.0 Social Studies credit
Recommended: Concurrent enrollment in Pre-AP English 9 or Pre-IB English 9
This class is a systematic study of patterns and processes that have shaped human understanding, use, and alteration of the earth's surface. Students study the nature and perspective of geography, population factors, cultural patterns and processes, the political organization of states, rural and agricultural land use, industrialization and economic development, and urbanization. They employ spatial concepts and landscape analysis to study human organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Students are expected to take the AP Geography examination in the spring. This course includes Holocaust and Genocide Studies (HB-1336).

## AP MACROECONOMICS NCAA W

## Grade: 12

Year: 1.0 Social Studies credit
AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system. The course places emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Students are expected to take the AP Macroeconomics examination in the spring. Exam fees apply.

## AP PSYCHOLOGY NCAA W

Grade: 12
Year: 1.0 Social Studies credit

This college-level course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology. They also learn about the methods psychologists use in their science and practice. The structure of the course is designed to prepare students for the Advanced Placement test in Psychology. Success on this test may entitle a student to college credit, advanced placement, or both. The course requires excellent reading and writing skills, well-developed organizational skills, as well as a high degree of self-motivation. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Students should expect 1.5 hours of homework per class session and teacher-led, outside-of-class AP study sessions.

## AP RESEARCH (AP Capstone Program Year 2) NCAA W

Grades: 11, 12
Year: 1.0 Social Studies credit
Prerequisite: AP Seminar and a passing score (3 or higher) on at least two AP exams
AP Research allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

## AP SEMINAR (AP Capstone Program Year 1) NCAA W

Grades: 10, 11
Year: 1.0 Social Studies credit
Prerequisite: Passing score (3 or higher) on at least one AP exam
AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision to craft and communicate evidence-based arguments.

## AP U.S. GOVERNMENT AND POLITICS NCAA W

Grade: 10
Year: 1.0 Social Studies credit
Recommended: Concurrent enrollment in Pre-AP English 10 or Pre-IB English 10
This interpretive college-level course requires excellent reading and writing skills, well-developed organizational skills, as well as a high degree of self-motivation. Students will receive a weighted grade for the AP course. AP Government gives students an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. The structure of the course is designed to prepare students for the Advanced Placement test in U.S. Government and Politics. Success on this test may entitle a student to college credit, advanced placement, or both. This course fulfills the graduation requirement of one semester of government as established by the State of Colorado. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Students should expect 1.5 hours of homework per class session and teacher-led, outside-of-class AP study sessions.

## AP U.S. HISTORY NCAA W

## Grade: 11

Year: 1.0 Social Studies credit
Recommended: Concurrent enrollment in CE English or AP English

This interpretive college-level course considers the American experience from colonial times to the present. The course requires excellent reading and writing skills, well-developed organizational skills, as well as a high degree of selfmotivation. Students will receive a weighted grade for the course. The structure of the course is designed to prepare students for the Advanced Placement test in US History. Success on this test may entitle a student to college credit, advanced placement, or both. This course fulfills the requirement of one year of U.S. History as established by the State of Colorado. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Students should expect 1.5 hours of homework per class session and teacher-led, outside-of-class AP study sessions.

## AP WORLD HISTORY NCAA W

Grade: 12
Year: 1.0 Social Studies credit
Recommended: Concurrent enrollment in CE English or AP English
This college level course is designed to allow students to explore societies of the past and present. The purposes of the AP World History course are to understand the evolution of global processes and contacts; to study the interactions of the many societies and cultures throughout the history of the world; to appreciate both the diversity and commonalities of humanity; to allow students to make comparisons among many different societies; as well as view the contributions made. The structure of the course is designed to prepare students for the Advanced Placement test in World History. Superior reading, writing, and organizational skills are recommended. Success on the AP test may entitle a student to college credit, advanced placement, or both. It is expected that all students enrolled in this class will sit for the May exam. Exam fees apply. Students should expect 1.5 hours of homework per class session and teacher-led, outside-of-class AP study sessions.

## CE US HISTORY TO RECONST NCAA

Grade: 11
Semester: 0.5 Social Studies credit
*To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)

This course aligns with the Colorado Community College course. These course surveys events, trends, people, groups, cultures, ideas, and institutions in North American 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. A principal focus of this course is on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the Statewide Guaranteed Transfer courses: GT-HI1. Students taking CE US History to Reconst must also enroll in CE US History since Civil War.

## US HISTORY SINCE CIVIL WAR CE NCAA

Grade: 11
Semester: 0.5 Social Studies credit
*To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)

This course aligns with the Colorado Community College course. This class explores events, trends, people, 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. It focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the Statewide Guaranteed Transfer courses: GT-HI1. Students are required by CCA to write a research paper worth $20 \%$ of their final grade for both CE courses. Resources and rigor are equivalent to a community college history survey course.

## COLORADO HISTORYNCAA

Grade: 12
Semester: 0.5 Social Studies credit

Colorado History is a comprehensive study of the state of Colorado. Topics covered will include geographic underpinnings, exploration and conquest, mountain men, settlement and pioneer life, native populations, mining, economic and political developments, urbanization, civil rights and social movements, exploitation and preservation of the environment, and recent trends of the $21^{\text {st }}$ century. This course is designed to fit the academic needs and backgrounds of students with a variety of learning styles. Resources such as primary source readings, fieldwork, GIS, and other technical data will be used. Students will gain insights into the diversity and continual development of Colorado, realizing their relation to Colorado's history.

## CONTEMPORARY ISSUES NCAA

Grade: 12
Semester: 0.5 Social Studies credit

Contemporary Issues will give students the opportunity to become aware of and then scrutinize current and unfolding developments in our world. Current news events will be woven into themes of politics, economics, sociology, foreign affairs, technology, and culture. There will be special attention paid to the skills of nonfiction reading, expository writing, speaking, and oral presentation.

## ECONOMICS NCAA

Grade: 10
Semester: 0.5 Social Studies credit

This course is an introductory-level survey class on economics covering three main units, in addition to a personal financial literacy unit, not typically part of traditional economics courses. The economics course will begin with the Basics of Economics, teaching students to acquire an economic way of thinking. The underlying concepts that reinforce that way of thinking include scarcity, choice, opportunity cost, marginalism, incentives, voluntary exchange, production, and its relation to wealth. The course then covers a unit on Microeconomics, focusing on the three foundational questions of what to produce, how to produce, and for whom to produce. This is followed by the concepts of supply and demand, price, and variables that cause changes in supply and demand, and how to illustrate these concepts on graphs. The unit on Macroeconomics covers concepts such as GDP, circular flow of economic activity, money, banking, the FED, fiscal and monetary policy, and international trade. In addition to the basic economic units, students will engage in the study of personal financial literacy, better preparing them for life as they get older and engage in the financial world. Topics to be covered include the concept of compound interest, different saving and investing options, the stock market, and various aspects of credit.

## GOVERNMENT NCAA

Grade: 10
Semester: 0.5 Social Studies credit

This course fulfills the requirement of one semester of government as established by the State of Colorado. This course is intended to provide lessons that make the learner familiar with the organizing concepts of American government while imparting the basics of how government works and why it works as it does. Important political functions that are undertaken by non-governmental actors will be identified, as well as the how-to to access and influence government at the national, state, and local levels. Practice with governmental processes and problem-solving mechanisms will be built in. This course should educate learners to appropriately monitor the system and provide guidelines for what to do when action is needed. This course will provide the background information necessary to create and recognize important questions regarding government and politics. It will help young citizens know how to think critically about these questions. Students will be provided with opportunities to apply political concepts and tools to current case studies, draw historical information for causational reasoning, and seek answers to contemporary issues. This course should provide the necessary tools to help students make informed choices.

## IB HISTORY OF THE AMERICAS NCAA W

Grade: 11
Year: 1.0 Social Studies credit
Prerequisite: Acceptance to the IB Diploma Program

The IB History of the Americas course is a comparative study of the Western Hemisphere with primary emphasis on the United States. Canadian and Latin American history will also be integrated throughout the course. The themes of geographic context, political evolution and foreign policies, economic progress and development, and social dimensions including civil rights will be emphasized. The aims of this course are: 1) to allow students to understand the parallel developments of political, social, and economic systems in each region as well as the cultures in which they are embedded; 2) to expose students to the theories, concepts, and arguments that have emerged from various political, socio-economic systems over time; 3) to enable students to use various source materials to analyze and interpret historical events from multiple perspectives; and 4) to inculcate in students an awareness of, and appreciation for, the diversity of human attitudes and opinions.

## IB HISTORY - THE 20th CENTURY NCAA W

## Grade: 12

Year: 1.0 Social Studies credit
Prerequisite: IB History of the Americas

The Twentieth Century is the second year of the two-year IB Higher Level (HL) History Program at CTHS. Complementing the History of the Americas in the junior year, this senior-level class will focus on the IB Prescribed Subject (3) of the Cold War. Within that context, two twentieth-century world topics will be the causes, practices, and effects of war (topic 1) and the rise and fall of single-party states (topic 3). Students will complete an internal assessment project during their first semester and prepare for the end-of-the-year IB external assessments.

## IB PSYCHOLOGY NCAA W

Grades: 11, 12
Year: 1.0 Social Studies credit
Prerequisite: Acceptance to the IB Diploma Program

IB Psychology is designed to fulfill the requirements for the Standard Level (SL)/Sixth Subject of the IB Program in Psychology. Students will complete the compulsory study of three psychological perspectives: biological, cognitive, and learning. In addition, students will study one of the following option areas: dysfunctional, social, or psychodynamic psychology. Subtopics include nervous system functions, sensation, and perception, learning and memory, language, stress, and intelligence. For their internal assessment, students will undertake a partial replication of and report on one simple experiment of their choice.

## PRE-AP WORLD HISTORY AND GEOGRAPHY NCAA W

Grade: 9
Year: 1.0 Social Studies credit
Recommended: Concurrent enrollment in Pre-AP English 9 or Pre-IB English 10

Pre-AP World History and Geography is designed to be a disciplinary apprenticeship in which students participate in the process of discovery. The course explores the invisible structures and forces that shape and reflect the regions, communities, governments, economies, and cultures of humanity. These big ideas help students develop an organized and meaningful understanding of time and space. Pre-AP World History and Geography will have seven units: four geography units during first semester and three world history units that cover historical eras (1750 to 2005 during second semester). This course includes Holocaust and Genocide Studies (HB-1336).

## PSYCHOLOGY NCAA

Grade: 12
Semester: 0.5 Social Studies credit

Psychology is the study of human behavior. In this semester course, students will learn about the basic principles of psychology including the following topics: history of psychology, biological bases of behavior, sensation, perception, consciousness, learning, memory, language and thought, intelligence, motivation, emotion, human development, personality, stress and coping, psychological disorders, and social behavior. In addition to being applicable in their everyday lives, Psychology will provide students with a foundation for further study in the field. Note: Sensitive subject matter will be covered in this class.

## STREET LAW NCAA

Grade: 12
Semester: 0.5 Social Studies credit

This is a practical law class that emphasizes the law and the legal system that will be of use to students in their everyday lives. Topics covered include constitutional law, criminal law and juvenile justice, torts, consumer and housing law, family law, and issues in the community such as hate speech, obscenity, search and seizure, and students' rights. The curriculum includes case studies, moot court, role plays, and scored discussions.

## U.S. HISTORY NCAA

## Grade: 11

Year: 1.0 Social Studies credit

This course fulfills the requirement of one year of U.S. History as established by the State of Colorado. Students can expect to read a high school U.S. History textbook (grade 11 reading level) and to hone their analytical writing skills. With an emphasis on the nineteenth and twentieth centuries, the overriding goal of this course is to help students understand how the current domestic and international status of the U.S. developed. It is designed to help students acquire a sense of chronology, to identify causes and effects, to recognize the events, individuals, and philosophies that helped shape our contemporary society, and to use historical inquiry to evaluate prominent episodes in U.S. history.

## WORLD GEOGRAPHY NCAA

Grade: 9
Year: 1.0 Social Studies credit

This class is a systematic study of patterns and processes that have shaped human understanding, use and alteration of the earth's surface. Students study the nature and perspective of geography, population factors, cultural patterns and processes, the political organization of states, rural and agricultural land use, industrialization and economic development and urbanization. They employ spatial concepts and landscape analysis to study human organization and its environmental consequences in the world. They also learn about the methods and tools geographers use in their science and practice. This course includes Holocaust and Genocide Studies (HB-1336).

## Student Achievement Services (Special Education) Pathways and Courses



Other Special Education Support Classes


Integrated Learning Communities (ILC) Courses


# Student Achievement Services (Special Education) Course Descriptions 

Cherokee Trail's Student Achievement Services (SAS) will provide services in the "least restrictive environment" for the individual student's needs. Each student's IEP (Individualized Education Plan) will be used to direct the placement and needed accommodations/modifications to support success.

Students will register for classes based on needs determined via the IEP. Eligibility for SAS is determined after researchbased interventions have been tried and the responses to those interventions evaluated. A team composed of parents, students and professionals from SAS and regular education make the determination of the handicapping condition, the needs, and suitable interventions. If a student has a current Individual Education Plan (IEP), he/she is automatically eligible for any of the following classes if the student's IEP specifies the need.

Several academic mainstream courses will be co-taught. Co-taught courses provide a Student Achievement Services instructor in the class to help accommodate or make necessary modifications for students with an IEP. It also will provide a smaller pupil-to-teacher ratio.

## ACADEMIC SUPPORT LAB

Grades: 9, 10, 11, 12
Year: 1.0 elective credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.
This course is for students who can be successful in academic coursework in mainstream classes. The Academic Support Lab offers academic coaching and tutoring on organization and self-determination, adult guidance, and academic structure in support of mainstream coursework. This course may be taken more than once for credit.

## AFFECTIVE ED

Grades: 9, 10, 11, 12
Year: 1.0 elective credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.
Affective Education is designed for students with affective needs. The course will offer opportunities for skill development in the areas of coping skills, anger management skills, intra, and interpersonal skills, communication skills, assertiveness training, stress management, and opportunities for academic support. The course also offers a small pupil-to-teacher ratio, utilizing a behavior management program to possibly include positive behavior support, point sheets, and/ or a level system. This course may be taken more than once for credit.

## ALGEBRA 1x1

Grade: 9
Year: 1.0 Math credit
Prerequisite: IEP and coordinator approval
This course will count as 0.5 core for the NCAA clearinghouse if the student has an active IEP.

This course is part of a 2-year sequence with Algebra 1x2, to cover the Algebra 1 standards at a slower pace. The course is designed for students who have typically struggled in mathematics and are in significant need of remediation. Students will explore functions, graphing, and writing equations of linear equations, sequences, and systems of equations, as well as a constant spiraling of Math 8 topics for students to grow in their fluency and fundamental algebra skills. These topics include integers, basic operations, statistics, and the cartesian coordinate system.

## ALBEBRA 1X2

Grade: 10
Year: 1.0 Math credit
Prerequisite: Algebra 1x1
This course will count as 0.5 core for the NCAA clearinghouse if the student has an active IEP.

This course is a part of a 2-year sequence with Algebra $1 \times 1$, to cover the Algebra 1 standards at a slower pace. The course is designed for students who have typically struggled in mathematics and are in significant need of remediation. The two main topics covered are quadratic and exponential functions, including graphing, writing equations, applications, and solving. Connections will continually be made about the similarities and differences between the three types of functions covered in the Algebra 1 standards: linear, quadratic, and exponential functions. Topics for Algebra $1 \times 1$ will continue to be spiraled and reviewed, including solving linear equations, systems of equations, and sequences.

## APPLIED MATHEMATICS

Grades: 12
Year: 1.0 Math credit
Prerequisite: IEP and coordinator approval
This course will not count as a core year for the NCAA clearinghouse.

Students will be focused on mathematical and graphing literacy and the application of Algebra and Geometry standards to the real world increasing mathematical fluency. Significant time will be spent on understanding the math being used in the real world through an analysis of mathematical representations used in websites, in the news, and in printed media. Students will learn how to analyze information and use their mathematical understanding to describe the information that is provided, and the validity of the data represented.

## FOUNDATIONS OF READING

Grades: 9, 10, 11, 12
Year: 1.0 elective credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

This course offers a strong emphasis on reading remediation including basic decoding skills, fluency, vocabulary, comprehension, and language usage. Students whose decoding skills are significantly below grade level should be considered for this class.

## ILC COMMUNITY

Grades: 9, 10, 11, 12
Year: 1.0 elective credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

This is a self-contained class taught by an ILC teacher. It is designed to teach job skills through direct practical vocational experiences. Students will be required to work at a job site either within or outside of the high school. Students will learn correct job duties and work habits while practicing skills specific to their job site. This course may be taken more than once for credit.

## ILC ENGLISH

Grades: 9, 10, 11, 12
Year: 1.0 English credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

This course is a self-contained class taught by an ILC teacher. Based on current IEP goals, teaching focus will be placed on functional skills such as reading for jobs or community survival. Other aspects of this class include reading and understanding classic literature, the writing process, and increasing grammar usage and skills. This course may be taken more than once for credit.

## ILC MATH

Grades: 9, 10, 11, 12
Year: 1.0 Math credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

This is a self-contained class taught by an ILC teacher. This course is designed to develop functional math skills. Major emphasis is placed on all functional skill areas, such as money/budgeting, time, measurement/cooking, and word problem-solving. Students will also develop basic math skills. The material taught is dependent on the student's math goals as written on their IEP.

## ILC SCIENCE

Grades: 9, 10, 11, 12
Year: 1.0 Science credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

This is a self-contained class taught by an ILC teacher. Science concepts to be covered will include Health, Life, Physical, and Earth Science. This class will include science labs to reinforce instruction. Materials are appropriate to the skill level of the students in class and based on individual goals identified in the IEP.

## ILC SOCIAL STUDIES

Grades: 9, 10, 11, 12
Year: 1.0 Social Studies credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

This is a self-contained class taught by an ILC teacher. It introduces and reviews functional community/social skills. Students will explore functional words/signs, geography, maps (including bus schedules and routes), laws, job skills, and different cultures.

## MATH LAB

Yea: 1.0 elective credit
Prerequisite: IEP and coordinator approval
Co-requisite: Algebra 1

The goal of Math Lab is to develop the Algebra skills of students who need more support. Aligned in tandem with their Algebra 1 class students will be able to work on skills needed to be successful in their Algebra 1 class, using different strategies and alternative perspectives. Algebra 1 teachers work closely with the Math Lab teachers to make meaningful and important connections to their work in Algebra 1. Math Lab is a support class and receives elective credits.

## PWR I - ACE SUCCESS FOUNDATIONS CTE

Grades: 11, 12
Year: 1.0 elective credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

This is a self-contained class taught by an ILC teacher. It is designed to help students acquire the skills necessary for a successful transition to postsecondary working life. Topics include critical thinking, academic knowledge, money management, and hands-on experiences.

## PWR II - ACE SUCCESS SYSTEMS CTE

Grade: 12
Year: 1.0 elective credit
Prerequisite: Successful completion of PWR I - ACE Success Foundations
This course may be repeated for credit.

This is a self-contained class taught by an ILC teacher. It is designed to help students understand the relationship of their individual talents, interests, and goals with others around them. Teachers will facilitate an understanding of personal learning styles and self-management. Topics include critical thinking, money management, collaboration, conflict resolution, personal responsibility, and hands-on experience.

## UNIFIED ENGINEERING TECHNOLOGIES

Grades: 9,10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

A Unified Engineering Tech class specifically designed for students who benefit from a modified curriculum, with an emphasis on those with special needs. The opportunity for a limited number of student peer partners is available. Peer partners do not need a background in engineering/technology to take this class. Peer partners will receive Engineering Technologies elective credit with enrollment in this class.

## UNIFIED PE

Grades: 9,10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

A Unified PE class specifically designed for students who benefit from a modified curriculum, with an emphasis on those with special needs. The opportunity for a limited number of student assistants is available through teacher recommendation only. Student assists will receive Wellness/Fitness credit with enrollment in this class.

## UNIFIED PERFORMING ARTS

Grades: 9,10, 11, 12
Semester: 0.5 Fine Arts credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.
A Unified Performing Arts class specifically designed for students who benefit from a modified curriculum, with an emphasis on those with special needs. The opportunity for a limited number of student assistants is available through teacher recommendation only. Student assistants will receive Fine Art elective credit with enrollment in this class. taken more than once

## UNIFIED VISUAL ARTS

Grades: 9,10, 11, 12
Semester: 0.5 Fine Arts credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.

A Unified Art class specifically designed for students who benefit from a modified curriculum, with an emphasis on those with special needs. The opportunity for a limited number of student assistants is available through teacher recommendation only. Student assistants will receive Visual Art elective credit with enrollment in this class.

## WE I- ACE IN-SCHOOL WORK-BASED LEARNING CTE

## Grades: 11, 12

Year: 1.0 elective credit
Prerequisite: IEP and coordinator approval
This course may be repeated for credit.
This is a self-contained class taught by an ILC teacher. It is designed to help students acquire the skills necessary for a successful transition to postsecondary working life. Topics include critical thinking, academic knowledge, money management, and hands-on experiences.

## WE II - ACE COMMUNITY WBL CTE

Grade: 12
Year: 1.0 elective credit
Prerequisite: WE I or PWR I
This course may be repeated for credit.

This is a self-contained class taught by an ILC teacher. As developmentally appropriate, students will develop basic employment skills by participating in an in-school work/school-based enterprise experience. A training plan and evaluation will be developed listing job-specific technical skills the student will learn during the experience. Hours worked will be documented. Students will demonstrate levels of self-awareness, career exploration, postsecondary option knowledge, and employability skills.

## Visual Arts Pathways


*There are no prequisites required for IB , but it is strongly recommended that students take at least 2 visual arts courses in preparation for IB Visual Art.

## Visual Arts Department Course Descriptions

The Visual Arts Department recognizes and nurtures the individual perspectives and natural abilities of students, whether they explore only one course or decide to make art a career. Courses are offered in two-dimensional and threedimensional media from beginning to advanced levels, culminating in Advanced Placement Studio Art Classes and International Baccalaureate Visual Arts classes.

We embrace the mission of the International Baccalaureate Organization, which is "to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect." Our classes encourage students to become "active, compassionate and lifelong learners who understand that other people, with their differences, can also be right."

All courses have a materials fee, which is listed. If the financial need exists, please contact the Visual Arts Department.

## AP 2D DESIGN CTE LB W

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Graphic Design 2
Fee: $\$ 60$
This course is designed for the HS student who wants to pursue the opportunity to develop their own personal exploration in Visual Arts. This course is designed to accommodate students who have expressed an interest in completing the AP 2-D Design Portfolio with an emphasis on graphic design. Units are presented in accordance with College Board Exam requirements. Emphasis will be placed on the completion of a volume of quality student-directed pieces. Students will be required to develop their own personal concentrations. Effective visual communication skills and written and oral analysis skills will be emphasized as well. Students enrolled in this class will be expected to participate in the portfolio submission in April. There is an expectation that a student will work outside of class time to assist in completing the volume of work necessary for the portfolio. The course fee exists to cover the cost of consumable materials. Some additional materials may have to be purchased.

## AP 2D ART \& DESIGN GRAPHIC DESIGN CTE LB W

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Graphic Design 2
Fee: $\$ 60$
This course is designed for the HS student who wants to pursue the opportunity to develop their own personal exploration in Visual Arts. This course is designed to accommodate students who have expressed an interest in completing the AP 2-D Design Portfolio with an emphasis on graphic design. Units are presented in accordance with College Board Exam requirements. Emphasis will be placed on the completion of a volume of quality student-directed pieces. Students will be required to develop their own personal concentrations. Effective visual communication skills and written and oral analysis skills will be emphasized as well. Students enrolled in this class will be expected to participate in the portfolio submission in April. There is an expectation that a student will work outside of class time to assist in completing the volume of work necessary for the portfolio. The course fee exists to cover the cost of consumable materials. Some additional materials may have to be purchased.

AP 3D ART \& DESIGN LB W
Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Ceramics 2 or Sculpture 2
Materials Fee: \$60

This course is for students who have expressed an interest in completing the AP 3-D Design Portfolio. Emphasis will be placed on the completion of a volume of student-directed pieces within a sustained investigation. Effective visual communication skills and written skills will be emphasized. There is an expectation that a student will work outside of class time, if needed, to complete the volume of work necessary for the AP 3-D portfolio. Students enrolled in this class will be expected to participate in the portfolio submission in April. The course fee exists to cover the cost of materials and equipment.

## AP DRAWING LB W

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Drawing/Painting 2
Fee: \$60

This course is for students who have expressed an interest in completing the AP Drawing Portfolio or the AP 2-D Design Portfolio. Units are presented in accordance with College Board Exam requirements. Emphasis will be placed on the completion of a volume of student-directed quality pieces. Students will be required to develop their own personal concentrations. Effective visual communication skills, written, and oral analysis skills will be emphasized as well. There is also an expectation that a student will work outside of class time to assist in completing the volume of work necessary for the portfolio. Students enrolled in this class will be expected to participate in the portfolio submission in April. The course fee exists to cover the cost of materials and equipment.

## CERAMICS 1

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts credit
Fee: \$25

This course is a hands-on studio class designed for those art students who like to create in clay. Students will create pieces using hand-building techniques such as pinch, slab, and coil. Students will learn to throw and trim ceramic pieces using the potter's wheel. They will be introduced to a variety of ceramic surface treatments including cone 6 reduction glazes, underglazes, and cold finishing techniques. The final for this course is a project designed to combine the conceptual process with the culmination of skills taught throughout the semester.

## CERAMICS 2

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Ceramics 1
Fee: \$50
This course may be repeated for credit.

This course is a continuation of Ceramics 1 with an emphasis on hand-building, wheel throwing, surface treatments, and the development of a digital portfolio. Using hand-building techniques, students will be introduced to mold making and coil building larger than 14 inches. Using the pottery wheel, students will learn to stack ceramic pieces, as well as throw lids for cylinders, and spouts for teapots. Students will engage in slip casting and burnout firing techniques, as well as self-directed ceramic pieces. Students will also continue to develop ceramic surfaces through experimentation with stain washes, saggar firing, decals, mixing their own cone 6 reduction glaze, and glaze testing. The course will focus on historical and contemporary ceramics as a means of cultural and artistic expression. The final will be the presentation and critique of the student's digital portfolio of 3-dimensional artwork.

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts credit
Materials Fee: \$25

A course for those who want to learn how to paint using the computer. Students will learn a variety of digital painting techniques. Tablets and Photoshop will be the primary means of painting. This course will focus on a foundation of drawing techniques, as well as color theory, identifying and replicating texture materials and drawing/painting a variety of subject matter. We will look at art that is found in CGI, video games, movies, animation and much more. For the beginner or the advanced artist, this course is for everyone.

## DIGITAL ART II CTE

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Fee: \$50
This course may be repeated for credit.
A course for students who wish to advance their skills in techniques of drawing, painting, and rendering using Digital media.

## DRAWING/PAINTING 1

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts credit
Fee: \$25

This course opens the possibilities of drawing and painting for students to work from observation and imagination. Media covered include, but are not limited to, pencil, colored pencil, pen and ink, acrylic paints, collage, and printmaking. Students are exposed to a variety of artwork, art styles, critical thinking skills, and techniques.

## DRAWING/PAINTING 2

Grades: 10, 11, 12
Year: 1.0 Find Arts credit
Prerequisite: Drawing and Painting 1
Fee: \$50
This course may be repeated for credit.

Students will be introduced to and focus on exploring many new mediums and techniques used in modern contemporary drawing, painting, and printmaking. Media covered include, but are not limited to, acrylic paints, watercolors, pastels, pen and ink, fabric painting, woodburning, and a variety of mixed media techniques. Historical and contemporary artist movements and theories are studied, and techniques are explored. This course develops critical thinking and sharpens visual observations in solving visual problems as well as developing advanced drawing and painting skills.

GRAPHIC DESIGN I CTE
Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts credit
Fee: $\$ 25$

This course is designed for students who are interested in learning and exploring design and print production. Students will learn and use Adobe Illustrator \& Photoshop to produce professional-quality graphics. Students will acquire an understanding of advertising, poster and T-shirt production, photo and text manipulation and digital drawing. Students will also learn the principles of design and how they apply to the art they create.

## GRAPHIC DESIGN II CTE

Grades: 10, 11, 12 S
Year: 1.0 Fine Arts credit
Prerequisite: Graphic Design 1
Fee: \$50
This course may be repeated for credit.

This course provides an extended study of graphic design principles and their application to more complex design problems. Students learn advanced techniques within the Adobe CC Design Suite to gain mastery in creating art with this digital tool. Students will build on prior knowledge of the Adobe programs within this course.

IB VISUAL ARTS HL 1 LB W
Grade: 11
Year: 1.0 Fine Arts credit
Prerequisite: Acceptance to the IB Diploma Program
Fee: $\$ 60$
This first year of a two-year course, which prepares students for the Higher-Level ( HL ) Visual Arts exam, is open to International Baccalaureate (IB) Diploma candidates as a sixth subject and highly motivated non-IB students who wish to pursue an IB Certificate in Visual Arts. Students study art history, art styles, and artwork from international and multi-cultural points of view. Students demonstrate creative thinking skills, explore techniques, and solve visual arts problems through the production of studio work and development of Investigation Workbooks, culminating in a personal art show and oral exam, in which all students are expected to participate, during the last quarter of their senior year. Contact the department coordinator for required summer assignments.

IB VISUAL ARTS HL 2 LB W
Grade: 12
Year: 1.0 Fine Arts credit
Prerequisite: IB Visual Arts HL 1
Fee: \$60
Required: Summer Work
This second year of a two-year course, which prepares students for the Higher-Level (HL) Visual Arts exam, is open to International Baccalaureate (IB) Diploma candidates as a sixth subject and highly motivated non-IB students who wish to pursue an IB Certificate in Visual Arts. Students study art history, art styles, and artwork from international and multi-cultural points of view. Students demonstrate creative thinking skills, explore techniques, and solve visual arts problems through the production of studio work and the development of Investigation Workbooks, culminating in a personal art show and oral exam, in which all students are expected to participate, during the last quarter of their senior year.

Grades: 11,12
Year: 1.0 Fine Arts credit
Prerequisite: Acceptance to the IB Diploma Program
Fee: \$60

This one-year course, which prepares students for the Standard-Level (SL) Visual Arts exam, is open to highly motivated International Baccalaureate (IB) Diploma candidates as a sixth subject and highly motivated non-IB students who wish to pursue an IB Certificate in Visual Arts. Students study art history, art styles, and artwork from international and multi-cultural points of view. Students demonstrate creative thinking skills, explore techniques, and solve visual arts problems through the production of studio work and development of Investigation Workbooks, culminating in a personal art show and oral exam, in which all students are expected to participate, during the last quarter of the year. Contact the department coordinator for required summer assignments.

## PHOTOGRAPHY 1

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts credit
Fee: \$25

This course will introduce the concepts, tools, and technology of digital imaging. Students will learn about digital photography equipment, software, storage devices, and printers to produce, capture, manipulate, correct, transmit, store and output images. Creative exploration will occur as students learn to apply and manipulate digital photography techniques, as well as explore a variety of visual art skills. Students will be expected to participate in critiques, analyses, and understanding of their own art as well as the art of others. Students are required to have a digital recording device (i.e., digital camera, phone with digital photo capabilities, etc.)

## PHOTOGRAPHY 2

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Photography 1
Fee: \$50
This course may be repeated for credit.

This course will advance the concepts of digital imaging taught in photo 1 with an increased emphasis on real-world applications of the skills taught. Students will begin to develop pieces in preparation for successful completion of AP Photography.

## SCULPTURE 1

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts credit
Recommended: Previous 3-D art experience
Materials Fee: \$25

This course explores the 3-dimensional design principles of sculpture and relief work. Students will learn additive and subtractive techniques. Students will build armatures and experience a variety of materials, such as air-dry clay, glass, papier mâché, plaster, metals, and wire. The final for this course is a project designed to combine the conceptual process with the culmination of skills taught throughout the semester.

## SCULPTURE 2

Grades: 10, 11, 12
Year: 1.0 Fine Arts credit
Prerequisite: Sculpture 1
Fee: \$50
This course may be repeated for credit.

This course builds upon the skills and techniques learned in Sculpture 1. In addition, students explore non-traditional materials and examine artwork from a historical and cultural perspective. The final for this course will be the presentation and critique of the student's digital portfolio of 3-dimensional artwork.

## UNIFIED VISUAL ARTS

Grades: 9 ,10, 11, 12
Semester: 0.5 credit
This course may be repeated for credit.

This class provides an opportunity to earn a visual arts credit while assisting CT students with severe disabilities. All students will learn about visual arts, inclusion, and valuing differences.

## Wellness/Fitness Pathways

| Health* <br> graduation requirement | Sth |
| :--- | :--- | :--- | :--- | :--- |
| Strongly |  |
| Recommended |  |

# Wellness and Fitness Department Course Descriptions 

The Wellness and Fitness Department at Cherokee Trail High School offers a health-related fitness program. Students will experience a variety of cardiovascular and fitness activities, as well as develop knowledge and skills through participation in individual sports. Students will also acquire practical experiences and knowledge related to establishing a healthy lifestyle, both as an adolescent and maturing adult. Cardiovascular fitness, agility, strength, flexibility, training, and nutrition.

## Department fee: Fitness courses require a one-time $\mathbf{\$ 1 0}$ purchase of a fitness shirt.

## ADVANCED WEIGHTS BASEBALL

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: $\$ 15 /$ semester
This course may be repeated for credit.
This course is designed for students who participate in the CT Baseball Program. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performance-based; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## ADVANCED WEIGHTS BASKETBALL

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: $\$ 15 /$ semester
This course may be repeated for credit.
This course is designed for students who participate in the CT Boys or Girls Basketball Programs. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performancebased; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## ADVANCED WEIGHTS CHEER

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: $\$ 15 /$ semester
This course may be repeated for credit.

This course is designed for students who participate in the CT Cheer Program. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performance-based; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## ADVANCED WEIGHTS CROSS COUNTRY

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: \$15/semester
This course may be repeated for credit.

This course is designed for students who participate in the CT Boys or Girls Cross Country Running Programs. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning for a distance runner. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performance-based; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## ADVANCED WEIGHTS FOOTBALL

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: $\$ 15 /$ semester
This course may be repeated for credit.

This course is designed for students who participate in the CT Football Program. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performance-based; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## ADVANCED WEIGHTS LACROSSE

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: $\$ 15 /$ semester
This course may be repeated for credit.

This course is designed for students who participate in the CT Boys or Girls Lacrosse Programs. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performancebased; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## ADVANCED WEIGHTS SOCCER

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: $\$ 15 /$ semester
This course may be repeated for credit.

This course is designed for students who participate in the CT Boys or Girls Soccer Programs. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performancebased; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## ADVANCED WEIGHTS VOLLEYBALL

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: $\$ 15 /$ semester
This course may be repeated for credit.

This course is designed for students who participate in the CT Volleyball Program. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performance-based; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## ADVANCED WEIGHTS WRESTLING

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Coach approval
Fee: \$15/semester
This course may be repeated for credit.

This course is designed for students who participate in the CT Wrestling Program. This course will include approximately 90 high-intensity minutes of advanced weight training and conditioning. The specific needs of athletes will be the focus of this course, allowing students to develop core strength in major muscle groups, improve overall speed, and increase agility. In-season and out-of-season programming will allow students to develop and execute specific weight training programs and conditioning strategies to become their physical best. This course is performance-based; therefore, development and improvement will be measured every 4-6 weeks. The goal of this course is to continue the overall objective of improving the performance and ability of the competitive athlete at Cherokee Trail.

## AQUATIC RECREATION

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: 300-yard swim and comfortable in deep water
This course may be repeated for credit.

This class will offer an alternative to the traditional swimming fitness/team sports curriculum. This course emphasizes team-building activities as well as giving students the opportunity to improve on personal fitness. Students will engage in a variety of activities such as: water polo, slot water hockey, capture the ring, and overall swim fitness.

## BLENDED LEARNING HEALTH

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit (Health)
Prerequisite: Coordinator Approval

Health course designed to give students information in health-related areas. The course format is based on a formal education program in which students learn primarily through the online delivery of content that is supplemented by face-to-face instruction.

## BODY WORKS

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
This course may be repeated for credit.

This class introduces students to the fundamentals of fitness. Skills to create and maintain a personal fitness schedule are emphasized. Activities include Pilates, yoga, strength training with hand weights and resistance bands, kickboxing, aerobics, and circuit training. This course utilizes a fitness principles book and requires some writing as well as physical fitness testing.

DANCE 1
Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness or Fine Arts credit

This beginning dance course is designed to expose students to dance as an opportunity for fitness development and as an art form. Students will learn the fundamentals of movement, dance technique, improvisation, anatomy, choreography, performance skills, and dance vocabulary. Hip-hop, jazz, tap, and ballet will be studied in this class. Dance 1 will help the dancer to develop collaboration and communication skills. Dance 1 students are required to perform in the Dance Showcase at the end of the semester. This course may be repeated for credit. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.

## DANCE 2

Grades: 9, 10, 11, 12
Semester: 0.5 Fine Arts or Wellness/Fitness credit
Prerequisite: Dance 1
Fee: $\$ 25 /$ semester
This course may be repeated for credit.

This beginning-intermediate level dance class will focus on technique development, enhancing performance skills, and the application of anatomy and kinesiology to dance, choreography, and combinations. Hip-hop, jazz, ballet, and tap dance will be studied. A beginning approach to dance composition will be utilized to aid the student in creating studies and dances for evaluation. Dance 2 students are required to perform in the Dance Showcase at the end of the semester.

## DANCE 3

Grades: 10, 11, 12
Semester: 0.5 Fine Arts or Wellness/Fitness credit
Prerequisite: Audition
Fee: $\$ 25 /$ semester
This course may be repeated for credit.

This intermediate-level dance class will focus on intermediate technical development, performance skills, choreography, and combinations. Ballet, jazz, contemporary/modern, and hip-hop dance will be studied. Students who desire to continue in the program will prepare for Dance Composition auditions in the spring. Dance 3 students are required to perform in the Dance Showcase at the end of the semester.

## DANCE COMPOSITION LB

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness or Fine Arts credit
Prerequisite: Audition
Fee: \$40
This course may be repeated for credit.

This is an intermediate-advanced dance course for the student displaying excellent dance technique, exceptional performance skills, and the desire to grow as a dancer. This course will allow the dancer to gain an understanding of choreography principles, dance production, and performance qualities. Jazz, ballet, hip hop, contemporary, and modern dance will be studied and performed. Students must audition and will be placed in the spring. Dance Composition students are required to perform in the Dance Showcase at the end of the semester".

## DANCE TECHNIQUE LB

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness or Fine Arts credit
Prerequisite: Audition
This course may be repeated for credit.

Intermediate/Advanced Dance Technique designed to improve dancer's technical skills, abilities, and performance quality. Class will focus on strength, intermediate/advanced turn, jump, and leap skill combinations specific to dance team. Intermediate to advanced level dance training required. Teacher approval only.

## HEALTH

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit (Health)
**Strongly recommended for 9th grade students.

Students enrolling in this course will develop appropriate attitudes and behaviors to make wise decisions about contemporary health issues. Students will build upon previous health knowledge by investigating the issues that directly impact lives today and in the future. Topics covered in this course include personal decision making, communication skills, conflict resolution, public health issues, consequences of behavior, family dynamics, healthy selfimage, prevention and detection of disease, and human growth and development including sexuality.

## INDIVIDUAL SPORTS

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
This course may be repeated for credit.

This is a beginning course designed to give students an appreciation for skill development in individual sports. The class will promote the fundamental skills for activities such as tennis, archery, frisbee, golf, badminton, table tennis, and pickleball. This course is designed to promote the recreational value of these units as lifelong activities. Students will learn the fundamental skills of each activity, how to keep score, and will participate in class tournaments. This course may be repeated for credit.

## LIFEGUARD TRAINING

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Prerequisite: Students must be 15 years old by the end of the semester and be able to swim 500 yards.
Fee: \$65

This course is designed by the American Red Cross to prepare students to work as a professional lifeguard. Rescue techniques, CPR, and First Aid will be taught. Students will be required to purchase a pocket mask, textbook fee, and Red Cross certification fee.

## PERSONAL FITNESS

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
This course may be repeated for credit.

Personal Fitness allows each student to focus on a personal target zone for aerobic exercise. The class utilizes innovative methods of training such as cross-fit training, functional weight training, and plyometric training to help students reach their fitness goals. The class is molded to promote life-long fitness and simulate what it would be like if they were to go to a gym or health club. Students will also learn proper techniques for the use of the weight room, the use of cardiovascular equipment, and how to make healthy choices regarding diet and food intake. All students regardless of previous experience can be successful in this class. This class is highly recommended for student that may not be involved with athletics but has a genuine interest in weight training and the new trends in fitness. This course may be repeated for credit.

## SPORTS MEDICINE CTE

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Fee: \$15

This course provides students with a general overview of the field of sports medicine. It includes students with information about careers; scope of practice; legal and ethical responsibilities; injury prevention, treatment, and management; anatomy and physiology; nutrition; basic taping and wrapping techniques, and administrative functions. The course includes preparation for the American Red Cross Certification in Responding to Emergencies certification. Contact hours outside of the classroom shadowing/assisting a sports medicine professional are required as determined by the instructor.

## SPORTS MEDICINE INTERNSHIP

Grades: 11, 12
Semester: 1.0 general elective credit/125 hours
Prerequisite: Sports Medicine, application
Grading System: S/US

Sports Medicine Internship offers the field and clinical experience to apply the related sports medicine knowledge, skills, and abilities. This is a semester course in which students will receive credit for working alongside the CTHS Athletic Training Staff, at after-school sporting events. The student and Athletic Trainer will work together and create a schedule for when and what events the student will work.

## SWIMMING

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
This course may be repeated for credit.

Students will understand the value of lifetime leisure activities, personal fitness, and survival as it pertains to aquatics. This class is designed for both beginner and advanced swimmers. Skills and information presented in this class will include but not be limited to, stroke technique, water safety, and water survival techniques, principles of fitness while swimming, and target heart rate zone training and use.

## TEAM SPORTS

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
This course may be repeated for credit.

Students will learn to be competent, literate, and enthusiastic about team sports. This course will teach students the skills needed to participate and succeed in game situations. In addition to game skills, students will learn to understand and use strategies appropriate to each game. Students will be taught in a manner that the values, rules, roles, and traditions within each sport are learned. This class requires full participation by all students and will use modified games to allow success for all. Using a sports education model, students will participate in roles such as coach, referee, trainer, safety official, scorekeeper, manager, publicist, and/or broadcaster.

## UNIFIED PE

Grades: 9,10, 11,12
Semester: 0.5 Wellness/Fitness credit
This course may be repeated for credit.

This class provides an opportunity to earn a wellness fitness credit while participating and assisting CT students with a variety of special needs. All students will learn about physical health, inclusion, and valuing differences.

## WEIGHT TRAINING

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Fee: \$15/semester
This course may be repeated for credit.

This course is designed for students who are interested in improving their level of strength while mastering the fundamentals of Olympic-style weightlifting exercises as well as learning basic principles of conditioning and core strength. The students will learn (1.) basic weightlifting exercises, (2.) safety procedures, proper lifting mechanics, and (3.) proper spotting techniques while using equipment. Throughout the course, special attention and emphasis will be placed on injury prevention for our competitive student-athletes. This course is recommended for 9th-grade competitive athletes as well as the general population students with weightlifting interests.

## WEIGHT TRAINING FOR WOMEN

Grades: 9, 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Fee: $\$ 15 /$ semester
This course may be repeated for credit.

This course is designed for students who identify as female and are looking to increase their level of strength. It will provide experience in a variety of exercise methods and weightlifting techniques specifically designed for female athletes. An emphasis will be placed on developing muscle tone and strength, speed and agility training and injury prevention, video product along with a variety of cardiovascular activities and exercises. While this course has an emphasis on the need for women's bodies, it is open to anyone.

## YOGA

Grades: 10, 11, 12
Semester: 0.5 Wellness/Fitness credit
Materials required: Yoga mat

This course is designed to be an entry level yoga class that is inclusive of all levels. Formats covered will include Vinyasa and sculpting. The practice of yoga promotes muscular strength and endurance, flexibility and breathing. Fitness assessments will be administered utilizing the Functional Movement System. The FMS is a screening tool, which measures motor control and range of motion levels.

World Languages Pathways


# World Languages Department Course Descriptions 

World language courses are a requirement for entrance into most colleges and universities. In French and Spanish classes, homework, practice, and assessments include the four skills of reading, writing, speaking, and listening as well as the culture studied in the course. French and Spanish are spoken in the classroom to introduce and practice oral patterns in the beginning levels and later as the language of communication.

## French Courses

## FRENCH 1 NCAA

Grades: 9, 10, 11, 12
Year: 1.0 credit general elective credit
Students will begin to study French by participating in the four skills of listening, speaking, reading, and writing in the language. They will also begin the study of French-speaking cultures, including their daily life, foods, and history.

FRENCH 2 NCAA
Grades: 9, 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: French 1 or French 1 ( a \& b)
Students will continue to participate in the four skills of listening, speaking, reading, and writing in French, as well as studying French-speaking cultures. The grammar and vocabulary become more complex.

## FRENCH 3 NCAA

Grades: 9, 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: French 2
Students will continue to use, strengthen, and refine the French 1 and French 2 skills while deepening their knowledge of French-speaking cultures and the diversity within those cultures. The materials will become more complex in content, vocabulary, and grammar.

## IB FRENCH 4 NCAA W

Grades: 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: French 3
The class instruction will be predominantly in French, and students will communicate in French. Students will continue to read and analyze authentic materials from French speaking countries and cultures. Students will write compositions, give oral presentations in French, and continue a comparative study of French-speaking countries and cultures. The students will develop the first phase of a portfolio reflecting their personal interest during this course. This course is open to non IB students who wish to advance their French skills.

The course will be conducted in French; the students will communicate in French. Students will focus on refinement of language skills, both oral and written, and an increased understanding of the global nature of French throughout the world. Students will write essays and give oral presentations based on the content of literary and cultural works from different French-speaking cultures. They will continue to develop and refine their personal portfolios, reflecting their interests. This course is open to non IB students who wish to advance their French skills.

## Spanish Courses

## SPANISH 1 NCAA

Grades: 9, 10, 11, 12
Year: 1.0 credit general elective credit
Students will learn Spanish, using the four skills of speaking, listening, reading, and writing in the language. Students will study Spanish-speaking cultures, interpreting similarities and differences in these cultures and their own. In reading beginning texts, the students will examine the cultural aspects and use these in original paragraphs, dialogues, skits, spontaneous conversations, and creative presentations.

## SPANISH 2 NCAA

Grades: 9, 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: Spanish 1 or Spanish 1 (a \& b)

Students will continue to learn the language enhancing skills acquired in Spanish 1. Students will develop spontaneous conversations, listening, writing, and reading at a more challenging level. Students will continue to study and interpret cultural aspects of Spanish-speaking areas around the world.

## SPANISH 2 AND 3 NCAA

Grades: 9, 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: Spanish 1 or Spanish 1 (a \& b)

This course is accelerated and designed to cover Spanish 2 and Spanish 3 in one school year. Vocabulary and grammatical concepts from Spanish 2 will be taught in the first semester and vocabulary and grammatical from Spanish 3 will be taught in the second semester. The goal of this class is to prepare students for either Spanish 4 Honors or IB Spanish 4 the following year. This course is intended to provide an opportunity for students who start with Spanish 1 their freshman year to accelerate to reach AP Spanish 5 or IB Spanish 5 their senior year. This course was created for students who plan on taking Spanish all four years of high school. All Colorado Academic Standards will be covered in Spanish 2 and 3. The Colorado Academic Standards align with the American Council on the Teaching of Foreign Languages (ACTFL) Standards and include Communication, Cultures - Intercultural Communication, Connections, and Comparisons.

Students will continue to use, strengthen, and refine the four skills of Spanish 1 and 2 while at the same time deepening their knowledge of Spanish-speaking cultures and the diversity within those cultures. The development of each skill will become more complex in content, vocabulary, and grammar.

## SPANISH 3 FOR SPANISH SPEAKERS NCAA

Grades: 9, 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: Application
This course is taught entirely in Spanish and is intended for students who speak Spanish at home, are literate in the Spanish language, but who speak English at school, and need help to bring their literacy up to higher levels. Students must meet with the teacher before enrolling in this course. Some of the skills that will be addressed for students in this course are reading and writing in Spanish, the appropriate use of register, history, culture, and traditions, Hispanic literature, improving grammatical speaking and writing accuracy. This course will allow each student to develop skills in Spanish and to reinforce the study skills necessary for success in all courses. Students will leave this course with the skills and confidence necessary to continue with their language study. Student and teacher will determine if they proceed to Spanish 4 or AP Spanish 5. Upon completion of this course, the student may qualify to receive the Seal of Biliteracy.

## SPANISH 4 HONORS NCAA W

Grades: 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: Spanish 3 or Spanish for Spanish Speakers

Students will focus on improving oral and written proficiency in Spanish. Students will also continue to refine and augment Spanish grammar learned in previous courses. The class will use literature and culture to spur the use of both oral and written Spanish. The four skills, listening, speaking, reading, and writing, will be challenged through their exposure to conversation and composition.

## AP SPANISH LANGUAGE AND CULTURE NCAA W

Grades: 11, 12
Year: 1.0 credit general elective credit
Prerequisite: Spanish 4 Honors or IB Spanish 5
Required: Summer work

This course, taught entirely in Spanish, is designed to prepare students to take the Advanced Placement Spanish Language and Culture exam in May. It is a class that will meet the needs of academically motivated students who wish to further develop their Spanish proficiency. The students will review grammar, enhance their vocabulary, improve their fluency in spoken Spanish in both formal and informal settings, develop their ability to understand the spoken language, enrich their writing skills for various situations, increase their ability to read authentic materials and grow in their understanding of the cultures where Spanish is spoken. Additional skills students will learn include understanding Spanish when you hear it and read it, holding conversations in real-life situations, and drafting stories, letters, emails, essays, and other texts. The grade for this course is weighted. All students enrolled in this class should sit for the \$90 AP exam in May. Students should expect 1.5 hours of homework per class session and/or teacher led outside-of-class AP study sessions.

## AP SPANISH LITERATURE AND CULTURE NCAA W

Grades: 11, 12
Year: 1.0 credit general elective credit
Prerequisite: AP Spanish Language and Culture or IB Spanish Language 5
Required: Summer work

This course, taught entirely in Spanish, is designed to prepare students to take the Advanced Placement Spanish Literature and Culture exam in May. It is a class that will meet the needs of academically motivated students who wish to further develop their Spanish proficiency. Students will build their language skills and cultural knowledge by exploring works of literature written in Spanish. Using Spanish to communicate, students will read, analyze, discuss, and write about works by Spanish, Latin-American, and U.S. Hispanic authors of different time periods. Skills students will learn include interpreting, analyzing, and comparing literary works, relating literary works to their cultural and historical contexts, comparing literary works to works of art, writing a literary analysis using correct literary terms, and discussing works of literature in Spanish. The grade for this course is weighted. All students enrolled in this class should sit for the $\$ 90$ AP exam in May. Students should expect 1.5 hours of homework per class session and/or teacher led outside-ofclass AP study sessions.

IB SPANISH 4 NCAA W
Grades: 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: Spanish 3 and Acceptance to IB Diploma Program

Students will continue to improve oral and written proficiency in Spanish. Students will also continue to refine their grammar. Literature and culture will be the basis of both oral and written Spanish. The four skills, listening, speaking, reading, and writing, will be challenged through exposure to conversation and composition. Students will further develop their critical thinking skills in this course.

## IB SPANISH LANGUAGE 5 NCAA W

Grades: 11, 12
Year: 1.0 credit general elective credit
Prerequisite: IB Spanish 4

Students will continue to improve oral and written proficiency in Spanish. Students will also continue to refine Spanish grammar. The class will use literature and culture as the basis of both oral and written Spanish. The four skills, listening, speaking, reading, and writing, will be challenged through their exposure to conversation and composition. Students will take the IB Spanish SL exam.

## Additional Elective Courses



# Additional Elective Courses (Not Included in Academic Pathways) 

AVID (AVID 9, AVID 10, AVID 11, and AVID 12)<br>Grades: 9, 10, 11, 12<br>Year: 1.0 credit general elective credit<br>Prerequisite: Minimum 2.5 unweighted GPA and an application/interview process

AVID (Advancement Via Individual Determination) is a program to prepare bright and driven students with the skills necessary to pursue a college prep path for admission to a four-year college or university. The AVID class will provide academic instruction and other support services to students and prepare them for eligibility into four- year colleges or universities, give students college entry skills, motivate students to seek a college education, and increase students' awareness of career opportunities and choices. Please reference the AVID Program page for more information about the AVID program. Once enrolled, students must continue to meet the grade minimum requirements to remain eligible and in the AVID program.

## ADVISORY 9, ADVISORY 10, ADVISORY 11, ADVISORY 12

Grades: 9, 10, 11, 12
Year: 0.25 credit general elective credit
Grading System: S/US
This course may be repeated for credit.
The purpose of Advisory is to create space and time within the school environment to allow students and staff to build caring, stable, trusting relationships that support the social-emotional and academic growth of students. All students will be assigned an advisory group and receive an S/US grade. Advisory meets once a week, please see bell schedule for Advisory times.

## CE CRIMINAL JUSTICE AND LAW 1 CTE

Grades: 11, 12
Year: 1.0 Fine Arts/CTE credit
*To receive CE credit, student must have grade waiver or qualifying score (Accuplacer, ACT, AP, SAT)
This course combines introduces students to the basic components of the criminal justice system in the United States. Concepts of crime, crime data, victimization, perspectives and views of crime, theory, 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. This course aligns with the Colorado Community College course Introduction to Criminal Justice (CRJ 110) and Correctional Process (CRJ 145). Students will have the opportunity to earn high school credit while at the same time enroll in and earn six community college credits with the opportunity to transfer credit to an institution of higher education. If the student is interested in earning community college credit, an additional fee application is required. More information can be found at www.cherrycreekschools.org/cte on the Concurrent Enrollment tab.

## INTERNSHIP (Media or Technology) CTE

Grades: 10, 11, 12
Semester: 0.5 Fine Arts/Practical Arts Credit
Prerequisite: Introductory Computer Programming or Communications Course, Application
Grading System: S/US
This course may be repeated for credit.

The internship program will provide an opportunity for selected students to have experience in a career field that they would like to pursue after graduation. An internship is a form of firsthand learning that integrates knowledge and theory learned in the classroom with practical application and skill development in a professional setting. Students will be trained and supervised by the CCSD educator. Within the internship, students can expect to do various work assignments, attend meetings, and complete projects on campus. Professional success also depends on the level of student's maturity, responsibility, and reliability.

## INTERNSHIP (Theater Tech)

Grades: 11, 12
Semester: 1.0 Fine Arts Credit/125 hours
Prerequisite: Application
Grading System: S/US
This course may be repeated for credit.

The Technical Theater Internship is intended to give selected students the ability to earn school credit for work experience in the world of technical theater. Students will gain firsthand experience in lighting, sound, planning, and production for events hosted at Cherokee Trail. Skills gained through this internship will be directly applicable towards future careers in backstage and front of house theater. Students will be trained and supervised by the work-study teacher and theater managers. Work hours must be scheduled so that they do not interfere with school, i.e., after school and on weekends.

## FRESHMEN FOCUS

Grades: 9
Semester: 0.5 general elective credit
Prerequisite: Teacher approval

Freshmen Focus is a class with a focus on improving study skills and study habits to developing academic confidence. The class works on building personal habits that will strengthen social and emotional confidence as well. This course will help students learn how to self-advocate, communicate with teachers, collaborate with other students, and be more organized; however, the most important lesson the student will learn in this class is: YOU are the only one who holds the key to your success.

## IB FILM W

Grades: 11, 12
Year: 1.0 general elective credit
IB Film is open to all $11^{\text {th }}$ and $12^{\text {th }}$-grade students, including non-IB students depending on staffing.
IB Film aims to develop students as proficient interpreters and makers of film texts. Through the study and analysis of film texts, and through practical exercises in film production, the film course develops students' critical abilities and their appreciation of artistic, cultural, historical, and global perspectives in film. Students examine film concepts, theories, practices, and ideas from multiple perspectives, challenging their own viewpoints and biases to understand and value those of others.

IB THEORY OF KNOWLEDGE (TOK 11 and TOK12) W
Grades: 11, 12
Year: 1.0 general elective credit
Prerequisite: Acceptance to the IB Diploma Program

IB Theory of Knowledge, or TOK, is a required course for all IB students. Students will enroll in TOK the second semester of their junior year and the first semester of their senior year. TOK, along with CAS (Creativity, Action, Service) and the Extended Essay, lie at the core of the IB curriculum. In TOK, students will explore and then acknowledge the strengths and limitations of the academic disciplines that they have pursued in their formal education. One goal of the course is for students to unlearn any automatic responses they may have regarding the acceptance of absolute truths. The purpose is not to engender cynicism, but rather to encourage reflection, self-awareness, and skepticism as they continue to pursue truth, reality, and meaning.

## OFFICE ASSISTANT

Grades: 9, 10, 11, 12
Semester: 0.5 credit general elective
Prerequisite: Approval of office supervisor
Grading System: S/US

This course is for students interested in learning office procedures, telephone etiquette, etc. and in providing a service to the school. Offices include Activities, Administration, AP/IB, Athletics, Counseling, Deans, Student Achievement Services. Students will receive 'S' or 'US' as their grade.

## PEER TUTORING

Grades: 10, 11, 12
Semester: 0.25 credit general elective credit or service hours
Prerequisite: Teacher approval
Grading System: S/US
This course may be repeated for credit.

Peer tutoring is a fun way to give back to the Cherokee Trail community. We are looking for motivated team-oriented students who have a desire to help others succeed in their course work. We provide the training and support for our tutors who have a desire to create a strong community. Peer tutors can earn . 25 credit 'S' or 'US' as their grade. per semester or Community Service hours for working half of the period they are assigned. Students must have C's or better and acceptance depends on teacher approval. Please reach out to Mrs. Robbins if you have questions:
mrobbins6@cherrycreekschools.org

## SOPHOMORE ENRICHMENT SEMINAR

Grades: 10
Year: 1.0 credit general elective credit
Prerequisite: Teacher approval

Sophomore Enrichment Seminar (SES) is a class with a focus on improving study skills and study habits to develop academic confidence. Using "7 Habits of Highly Effective Teens" as our core text, we will also work on building personal habits that will strengthen social emotional confidence as well. This course will help students learn how to selfadvocate, communicate with teachers, collaborate with other students and be more organized; however, the most important lesson the student will learn in this class is: $\underline{\text { YOU }}$ are the only one who holds the key to your success.

## SOURCES OF STRENGTH PEER LEADERS

Grades: 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: Application
This course may be repeated for credit.

Sources of Strength Peer Leaders focus on furthering understanding of the Sources of Strength wheel to help individuals get through tough times. As a class, students will help create campaigns and activities for the CT student body to interact with during the school year to spread the language of hope, help, and strength to create a community that fosters belonging and connection. Sources partners with other school and community organizations throughout the school year to champion strength-based messaging. This class will help students recognize their strengths and use their weaknesses as experience and opportunities to grow physically and mentally.

## STUDENT LEADERSHIP

Grades: 9, 10, 11, 12
Year: 1.0 credit general elective credit
Prerequisite: Application/Interview process
This course may be repeated for credit.

Student leadership is an opportunity for students of all grade levels to represent the student body at CTHS, both in the school and in the community. Students in this class serve as student body officers and class representatives. The major activities of Student Leadership include Homecoming, Wish Week, Prom, and school and community service projects. Students will learn and use leadership skills to plan and implement a wide range of school activities.

## STUDENTS SUPPORTING STUDENTS

Grades: 9, 10, 11, 12
Semester: 0.5 credit general elective credit
This course may be repeated for credit.
Grading System: S/US

The students supporting students class will have students participating in activities and supporting students in the ILC classroom. They will be student aides working with teachers and students. They will also learn about students with disabilities and how to promote awareness and understanding about ways to help accommodate for people with disabilities in their community.

## TEACHER ASSISTANT

Grades: 9, 10, 11, 12
Semester: 0.5 credit general elective credit
Prerequisite: Approval of supervising teacher
Grading System: S/US
Students will assist a teacher in a variety of duties and responsibilities. This may include, but not be limited to, clerical work, maintaining equipment, delivering correspondence, and securing supplies.

## WORK STUDY

Grades: 11, 12
Semester: 1.0 general elective credit/125 hours
Prerequisite: Counselor Approval
Grading System: S/US
This course may be repeated for credit.

The Work Study Program is intended to give students the ability to earn school credit for experience in the world of work where they meet regular work standards. Students must obtain a job and retain that job for the entire semester. Work hours must be scheduled so that they do not interfere with school, i.e., after school and on weekends. Students are supervised by the work-study teacher who monitors work experience.


What is Cherry Creek Elevation High School?
Cherry Creek Elevation is Cherry Creek School District's online and blended learning school, serving students in grades 6-
12. Cherry Creek Elevation offers many courses in various subject areas that students can take at no cost while remaining enrolled at Cherokee Trail High School. For a full list of courses and information on how to apply, please visit the Course Registration Guide and Apply for Enrollment at https://www.cherrycreekschools.org/elevation.

## Elevation Q\&A: Is Online Learning Right for Me?

The online student must take responsibility for his or her own learning. In any online education program, the student must be a self-directed learner, have the internal motivation to manage his or her own learning, and have a basic grasp of computer and internet navigation skills.

## Part Time Enrollment

Cherry Creek Elevation high school awards credit through a quarter system. Students interested in taking part-time classes at Cherry Creek Elevation must meet with their Cherokee Trail counselor to discuss their desired courses prior to applying for a part-time class at Cherry Creek Elevation. Any courses taken through part-time status at Cherry Creek Elevation must be in addition to full time status at Cherokee Trail. **Subject to approval based on availability at Elevation.

The below CTE Districtwide courses are available to all Cherry Creek School District students and take place at various locations. The registration process for CTE Districtwide courses vary. Please see the course descriptions for more information.

## Cosmetology

Scan Me

## Cosmetology I

Grade: 11, 12
Concurrent/Dual Enrollment: Multiple opportunities available
Location: Colorado's Finest High School of Choice in Englewood

Year: 6.0 credit
Prerequisite: N/A

This course takes place at Colorado's Finest High School of Choice in Englewood. Students are responsible for their own transportation. The Cosmetology program is a robust program that will prepare you to provide beauty services such as shampooing, cutting, coloring, styling, facials, manicures and pedicures. To be considered for this program, you must attend a parent meeting and orientation, as well as be on track to graduate in terms of credit hours. After applying, you will be contacted with more information. Multiple Concurrent Enrollment opportunities are available in this course. More information will be provided by the instructor. Course begins approximately August 15,2024 . The $\$ 650$ course fee includes cosmetology kit (used 1st and 2nd year; student keeps at completion of program), and consumables. Students will be responsible for purchasing uniform scrubs for the program. Anticipated session times: Option 1: Monday - Friday Morning Session (7:30-11:30am) OR Option 2: Monday - Friday Afternoon Session (12:00-4:00pm).
**Summer session runs during the month of June and is required in order to enroll in Cosmetology II. Dates are to be determined, Monday - Thursday from 7:30am-5:30pm.

To register for this course, scan the QR Code at the top of the page or visit www.cherrycreekschools.org/Page/11161 and click on the link for the CCIC Application.

## Cosmetology II

Grade: 12
Concurrent/Dual Enrollment: Multiple opportunities available Location: Colorado's Finest High School of Choice in Englewood

This course takes place at Colorado's Finest High School of Choice in Englewood. Students are responsible for their own transportation. Cosmetology II is a certificate program requiring 1,500 hours which equals 50 credits in cosmetology, hairstyling, nail technology and esthetics. Students will learn theory, practice in hair care, cuts, color, perms, styling, nail technology and skin care. Students are prepared for supervised clinical practice and entry-level jobs in the cosmetology field. Students also explore career pathways, post-secondary options and career research techniques such as application preparation, resume/letter writing, and interviewing process. This program prepares students to pass the state-licensing exam given by the Department of Regulatory Agencies Office of Barber and Cosmetology (DORA). Multiple Concurrent Enrollment opportunities are available in this course. More information will be provided by the instructor. Course begins approximately August 15, 2024. The $\$ 75$ course fee includes consumables. Students will be responsible for purchasing uniform scrubs for the program. Anticipated session times: Option 1: Monday - Friday Morning Session (7:30-11:30am) OR Option 2: Monday - Friday Afternoon Session (12:00-4:00pm).

To register for this course, scan the QR Code at the top of the page or visit www.cherrycreekschools.org/Page/11161 and click on the link for the CCIC Application.

## Esthetics

Grade: 12
Concurrent/Dual Enrollment: Multiple opportunities available
Year: 5.0 credit
Estimated Course Fees: $\$ 350$ and cost of uniform scrubs

Location: Colorado's Finest High School of Choice in Englewood
Prerequisite: N/A

This course takes place at Colorado's Finest High School of Choice in Englewood. Students are responsible for their own transportation. Estheticians, also called skin-care specialists, strive to make their clients look and feel younger and more attractive. They cleanse and beautify skin with facials and full-body treatments, apply makeup, remove facial or body hair with hot wax, give head and neck massages and may, with special training, perform microdermabrasion to remove imperfections and signs of age. Students are required to sell skin care products like those who run their own shops as entrepreneurs, involved in all phases of business management and marketing. To be considered for this program, you must attend a parent meeting and orientation, as well as be on track to graduate in terms of credit hours. After applying, you will be contacted with more information. Multiple Concurrent Enrollment opportunities are available in this course. More information will be provided by the instructor. Course begins approximately August 15, 2024. The $\$ 350$ course fee includes: esthetics kit (student keeps at completion of program) and consumables. Students will be responsible for purchasing uniform scrubs for the program. Anticipated session time is Monday-Friday, 12-3:30PM.

To register for this course, scan the QR Code at the top of the page or visit www.cherrycreekschools.org/Page/11161 and click on the link for the CCIC Application.

## Future Educator

The Future Educator Pathway is a CTE Pathway that includes innovation, dual enrollment course work, and an apprenticeship in a CCSD elementary school. University of Colorado at Denver (UCD) dual enrollment coursework counts directly towards a postsecondary teaching degree. Courses follow the hybrid model combining asynchronous and synchronous learning. For additional Future Educator Apprenticeship information, please see "Future Educator Apprenticeship" under the "Work-based Learning" section in the CTE District wide Course Guide. For more information about this program, please check the Cherry Creek Schools CTE website for schedules and links to upcoming informational sessions at www.cherrycreekschools.org/cte.


## Future Educator - Year 1

Students will select "Future Educator - Year 1" in the CTE/CCIC Application and be automatically enrolled in the following courses:

Grade: 11, 12
Concurrent/Dual Enrollment: 12 credit hours total
Location: Hybrid

Year: 2.0 credits (each course 0.5) Estimated Course Fees: may be applicable Prerequisite: N/A

## EDHD 1030 - Early Ed Field Experience

Working within the community to support children's learning requires competencies explored in this course. The experiences of seminar, paired with working at a local school or community-based context, will help students develop theoretical grounding as a community based educator. This course requires the student to be placed at a CCSD elementary school for observation hours. Students will be required to provide their own transportation to and from observation hours.

## STEM 1000 - STEM Methods

This course provides an overview of STEM practices and philosophies in PK-12 education. STEM trends, foundations of practice, and resources are examined.

## LCRT 2000 - Rebels, Villains, \& Superheroes: How Children's Literature Shapes Our Identities

This course explores both classic and contemporary children's and adolescent literature and media in traditional and digital texts, specifically focusing on developing literary understandings, exploring perspectives and personal responses to literature, and inquiring into trends and issues.

## HDFR1010 - Life Span Development in Ecological Settings

This course is designed to introduce students to human development in ecological settings in particular family, school and community contexts as it occurs across the lifespan, including emotional, physical, and cognitive development, and emphasizes personal adjustment and achievement.

## Future Educator - Year 2

Students who have successfully completed Future Educator - Year 1 courses, will select "Future Educator - Year 2" in the CTE/CCIC Application and be automatically enrolled in the following courses:

Grade: 11, $12 \quad$ Year: 2.0 credits (each course 0.5) Estimated Course Fees: may be applicable
Concurrent/Dual Enrollment: 12 credit hours total
Location: Hybrid
Prerequisite: N/A

## CLDE 1000 - Language, Power, \& Identity

This course explores the relationship between language, identity, and power in various international contexts. The course considers how legacies of inequality for particular communities are reflected in societal attitudes about languages and language users and subsequent language planning.

## SPED 1030 - Understanding (dis)Ability in Contemporary Classrooms

This course provides an overview of special education by examining the history of special education, construction of dis/ability, characteristics of individuals with disabilities, aspects of disproportionality, and introduction to evidence-based instructional practices.

## SPED 1400 - Universal Design for Learning

This course will introduce Universal Design for Learning (UDL), an important, contemporary educational philosophy, with an emphasis in a set of principles \& techniques that focus on strategies and tools to help ALL students by accommodating their differences in inclusive classroom settings. Candidates will also be exposed to foundational information about children with disabilities who are included in today's classroom.

## INTE 2000 - Digital Teaching and Learning

Survey of technology for: (1) your own learning, informally and in classes; (2) your students' learning when you become a teacher; and (3) sharing with peers and colleagues. Use tools to address problems of equity, access, and learning needs.

## Work-Based Learning

The Cherry Creek School District Work-Based Learning program is designed to connect students with career pathways of interest by partnering with businesses in the community. Through these experiences, students will have the opportunity to explore career pathways and develop career readiness skills.

## Career and Technical Education (CTE) Internship

Grade: 12 Semester: $1.0 \quad$ Estimated Course Fee: Summer School Fees Only
Concurrent/Dual Enrollment: N/A

Location: Based on Internship
Length: 100 Internship hours during Fall, Spring or Summer Semester
The CTE Internship program will provide an opportunity for selected students to have experience in a career field that they would like to pursue after graduation. An internship is a form of firsthand learning that integrates knowledge and theory learned in the CTE classroom with practical application and skill development in a professional setting. This work/learning arrangement is overseen by the Work-Based Learning Instructor for CCSD. Within the internship, students can expect to do various work assignments, attend meetings, and complete projects. Professional success also depends on the level of student's maturity, responsibility and reliability. Internships can be paid or unpaid depending on the sponsoring company. Transportation is the responsibility of the student. This program is selective. To apply, the student must have taken a CTE course in the pathway they are pursuing. Students must apply and interview and be selected for an available CTE Internship. The student will then be enrolled in the course.

Applications for CTE Internship will be open during the second semester. Information on unique applications for each job will be available on the Cherry Creek School District Work-Based Learning page: https://www.cherrycreekschools.org/domain/6101; (or scan the QR code above). After applying, the Work-Based Learning team will follow up with next steps.

## Apprenticeship - Year 1

$\begin{array}{lll}\text { Grade: 11, } 12 & \text { Year: } 2.0 \text { credit } & \text { Estimated Course Fee: N/A } \\ \text { Concurrent/Dual Enrollment: N/A } & \text { Length: } 12-16 \text { hours per week } & \end{array}$ Location: Based on Apprenticeship

Through CCSD Apprenticeships, students earn a wage while receiving hands-on work experience where they can apply their high school CTE classroom learning each week. All apprenticeships take place during part of the school day while also taking courses needed for graduation. An apprenticeship lasts between 2-to-3 years to ensure that students have the experience to either enter the workforce upon completion and pursue relevant higher education if necessary to meet their career goals. All CCSD Apprenticeships begin during junior or senior year and span 1-to-2 years after graduation. This course is for first year apprentices who are hired into a CCSD Apprenticeship during their junior or senior year. Cherry Creek School District works collaboratively with industry partners each year to bring in new apprenticeship opportunities in CTE Pathways. In addition to the onsite apprenticeship, students will be responsible for attending seminars and completing weekly online activities throughout the duration of their apprenticeship. Eligibility depends on the application and interview process, in accordance with the student's maturity, reliability, commitment, and graduation status. Transportation is the responsibility of the student (free monthly RTD passes are available). This program is selective. Additional application materials and an interview are required.

Applications for CCSD Apprenticeship opportunities will be open during the second semester. Information on unique applications for each job will be available on the Cherry Creek School District Work-Based Learning page: https://www.cherrycreekschools.org/domain/6101 (or scan the QR code above).
After applying, the Work-Based Learning team will follow up with next steps.

## Apprenticeship - Year 2

| Grade: 11,12 | Year: 3.0 credit | Estimated Course Fee: N/A |
| :--- | :--- | :--- |
| Concurrent/Dual Enrollment: N/A | Length: $16-20$ hours per week |  |
| Location: Based on Apprenticeship |  |  |

This course is for Apprentices as they continue the second year of their CCSD Apprenticeship. Current CCSD Apprentices will be given specific instructions from the Work-Based Learning team to register for this course.

## Future Educator Apprenticeship

Students in the Future Educator Pathway have the opportunity to be a Future Educator Apprentice (see Future Educator Pathway above - Year 1 \& 2 courses for course descriptions). As an apprentice, students earn valuable experience and work hours in the Education Pathway working as a paraprofessional in an elementary school within Cherry Creek School District. Students can earn college credits, wages, additional certification, classroom hours, and access to a professional network. In addition to the onsite apprenticeship, students will be responsible for attending seminars and completing weekly online activities throughout the duration of their apprenticeship. Transportation is the responsibility of the student (free monthly RTD passes are available).

Please see Future Educator Pathway course information (above) for students to register for Future Educator Pathway Year 1 or Year 2; students will indicate interest in being an apprentice in the application after selecting Future Educator Pathway Year 1 or Year 2 courses.

Automotive Technician Apprenticeship - Year 1

| Grade: 11, 12 | Year: 2.0 credit | Estimated Course Fee: N/A |
| :--- | :--- | :--- |
| Concurrent/Dual Enrollment: N/A | Length: $12-16$ minimum work hours per week |  |
| Prerequisite: Automotive Technology I or similar demonstration of skill, Automotive Technology II recommended |  |  |
| Location: CCSD Transportation Department |  |  |

The Automotive Technician Pathway Apprenticeship is offered by CTE in collaboration with our CCSD Transportation department. As an apprentice, students earn valuable experience and work hours in the Automotive Service pathway. Job duties include: assisting the vehicle maintenance department in beginning level inspection and maintenance and repairs on District equipment, vehicles and school buses. Students will earn wages and access to a professional network. In addition to the onsite apprenticeship, students will be responsible for attending seminars and completing weekly online activities throughout the duration of their apprenticeship. Transportation is the responsibility of the student (free monthly RTD passes are available). This program is selective. Additional application materials and an interview are required.

Applications for CCSD Apprenticeship opportunities will be open during the second semester. Information on unique applications for each job will be available on the Cherry Creek School District Work-Based Learning page: https://www.cherrycreekschools.org/domain/6101 (or scan the QR code above).
After applying, the Work-Based Learning team will follow up with next steps.

## Automotive Technician Apprenticeship - Year 2

Grade: 12 Year: 3.0 credit Estimated Course Fee: N/A

Concurrent/Dual Enrollment: N/A
Length: 12-16 minimum work hours per week
Prerequisite: Automotive Technician Apprenticeship - Year 1
Location: CCSD Transportation Department
This course is a continuation of the Automotive Technician Apprenticeship - Year 1 and provides additional experience working with the CCSD Transportation department.

Current CCSD Apprentices will be given specific instructions from the Work-Based Learning team to register for this course.

# CHERRY CREEK <br> INNOVATION CAMPUS <br> 2024-2025 Course Catalog <br> www.cherrycreekschools.org/CCIC 



## APPLY TO CCIC



## CCIC PROGRAMS EXPLAINED



CHERRY CREEK INNOVATION CAMPUS

Concurrent \& Dual Enrollment CHERRYOREEK
SCHOOLDISTRICT


Career and Technical Student Organizations

Career \& Technical Education (CTE) is a national program with courses teaching core academics, technical, and job-specific skills. CTE classes and programs like internships and apprenticeships, are designed to provide students with tools necessary to succeed in postsecondary education and career. All high schools in the Cherry Creek School District offer CTE courses. (CTE Website)

Cherry Creek Innovation Campus (CCIC) is a stand-alone CTE facility which opened in August, 2019. Courses at the CCIC align with the industry standards for seven in-demand and growing career pathways. Many courses offer core academic credit in English, Math, or Science and/or college credit. Transportation to and from CCIC is provided at all home high schools.

Concurrent Enrollment / Dual Enrollment (CE/DE) is an opportunity for students to earn high school and college credit simultaneously. Many courses in the Cherry Creek School District (CCSD) offer concurrent/dual enrollment credit through local colleges. Concurrent Enrollment courses are tuition-free through a local community college. Dual Enrollment courses have a minimal per-credit fee (\$50 per credit) through a local university. College credit can only be earned with a grade of ' $C$ ' or higher.

Industry Certifications are available in many CTE programs. An industry certification is recognized by industry at the local, state and national level. These certifications measure competency in an occupation, and they validate the knowledge base and skills that show mastery in a particular industry. Some certifications will be accepted for a student's demonstration of learning according to Graduation Guidelines. See your counselor for more information.

Career \& Technical Student Organizations (CTSOs) are key components to strong CTE programs. These student run organizations develop business and industry-specific skills, procedures, and values that align with coursework, activities, and events in the classroom and greater community. Students also have the opportunity to demonstrate these acquired skills at regional, state and national competitions.

Work-Based Learning is a continuum of activities that occur, in part or in whole, in the workplace, providing the learner with hands-on, real world experience and is an integral part of a student's experience at CCIC. CCIC offers work-based learning at all levels: Learning About Work, Learning Through Work and Learning at Work. (WBL Continuum Chart)

The CTE Internship and Apprenticeship programs connect students with career pathways of interest by partnering with businesses in the community. CTE partners with CCIC to identify Internship and Apprenticeship opportunities in all CCIC Pathways.

Scan to watch a video
about Apprenticeships

## CCIC REGISTRATION PROCESS

To register for CCIC courses:

## Step 1: MyCAP Planning

Use your MyCAP to help select a CTE pathway that fits your career and academic goals. Based on your career goals, you may choose to apply for a CTE course that is offered at the Cherry Creek Innovation Campus (CCIC), or through the District CTE program.

## Step 2: Course Selection

Use the information in the course catalog to help plan your course selection. Make sure you meet the grade-level requirements and any prerequisites required.

## Step 3: Counselor Input

After you've selected a CCIC or District CTE course that fits your MyCAP, consult your counselor to ensure the courses will fit with your home high school schedule and will allow you to complete all courses necessary for graduation.

## Step 4: Application

The online application opens on January 22, 2024. A link to the online application can be found on the CCIC website and in registration links on home high school websites. Applications must be submitted by Friday, March 8, 2024. In addition to the application, some courses may require a supplemental application and/or attendance at an informational meeting.

Accommodations: The Cherry Creek Innovation Campus provides accommodations and modifications identified in a student's IEP/504. Additional accommodations requested must be deemed as "reasonable accommodations." Students can self-advocate for reasonable accommodations with Alex Sabin, the CCIC 504 Coordinator, through email (asabin@cherrycreekschools.org) or phone (720-554-2604).

## Step 5: Confirmation

After submitting an application, you will receive a confirmation email, as well as information regarding additional application requirements. Please note that all application requirements must be completed to be considered for acceptance. Notification of acceptance into a CCIC course will occur by email in mid/late April. Students will also be notified by email in mid/late April if they are on a wait list for requested courses or if alternative class options are available.

## APPLICATION DUE: FRIDAY, MARCH 8, 2024

Transportation provided to and from each home high school.
Financial assistance available to students who qualify.

NOTIFICATION OF NONDISCRIMINATION
Cherry Creek School District No. 5 does not discriminate on the basis of race, color, national origin, sex, age, sexual orientation or disability in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of their operations. The Cherry Creek School District No. 5 Career and Technical Education Department does not discriminate in enrollment or access to any of the programs available. The lack of English language skills shall not be a barrier to admission or participation in the district's activities and programs. The Cherry Creek School District also does not discriminate in its hiring or employment practices.

This notice is provided as required by Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990. Questions, complaints, or requests for additional information regarding these laws may be forwarded to the designated compliance coordinator: Ms. Stephanie Davies, District Compliance Officer, Educational Services Center, 4700 S. Yosemite St., Greenwood Village, CO 80111, (720) 554-4471. or directly to the U.S. Department of Education, Office for Civil Rights, Region VIII, Federal Office Building, 1244 North Speer Blvd., Suite \#310, Denver, CO 80204.

## CCIC CORE CLASSES

CCIC core content is integrated within our pathway curriculum and meets district core standards requirements for graduation. All CCIC core classes are NCAA approved.

EngA
CP Innovator's English A (Effective Communication, Writing, and Career Success)- In this integrative English course, students demonstrate career \& college readiness, developing leadership skills, research, \& writing skills that will enable them to be successful in their pathway of purpose. Students in this course also participate in many collaborative settings where they will use rhetorical strategies to reach a decision with others who have diverse ideas. To be successful, students must contribute to conversations in professional manners. Students conduct research relating to issues in their industry, problem solving those issues to invite diversity into their writing and conversations. Students write in APA format, citing sources and developing their informational literacy skills. This course can be repeated for credit.

CP Innovator's English B (Research and Writing) - In this course, students will use argumentation, research processes, and reflection to continue to develop and experiment with their writing. It will also use an active learning approach in writing, reading, and communication processes to integrate topics into potential careers. Students will complete a college and career research project according to the APA style guide that enables them to confidently transition to postsecondary realms. This course involves continued emphasis on the writing process, critical thinking, the rhetorical nature of language, and furthers their research skills. This course can be repeated for credit.

CE Technical Writing / CP Innovator's English C - This integrated English course teaches the fundamentals of writing and pathway or industry-specific technical documents with structure, organization, diction, style, revision, editing and mechanics. Students will write for specific industry-related purposes including, but not limited to professional emails, training manuals, business proposals, blog creation and response, professional interviewing, podcast creation, and social media content writing. Finally, students will conduct research as necessary for the pathway and industry curriculum, gathering relevant information from multiple print sources related to the task. By the end of the course, students will be able to read, analyze, summarize, and apply technical information and plain language as appropriate for career preparation. This course may offer CE Credit (ENG 1031) and may be repeated for credit.

CP Innovator's Math Topics A - This course will extend students' proficiency in fundamental arithmetic topics to indepth analysis of plane, solid, and coordinate geometry as they relate to both abstract mathematical concepts as well as real-world problem situations. This course can be repeated for credit.

CP Innovator's Math Topics B - This course will extend students' proficiency in fundamental arithmetic topics to more advanced algebraic topics, including the application of trigonometric functions, standard deviation, matrix and vector analysis, logarithmic and exponential relationships, and linear systems. This course can be repeated for credit.

CP Innovator's Math Topics C - This course will extend students' proficiency in the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, and the analysis of potential solutions. This course can be repeated for credit.

CP Innovator's Math Topics D - Innovator's Math D will expand on students' proficiency in number theory and discrete mathematics topics as it applies to technology. Topics may include number systems, basic combinatorics, modular arithmetic, and prime numbers. This course can be repeated for credit.

CE Basic Anatomy \& Physiology - This course provides a deeper exploration of the human body and biological systems in great detail. Students expand their knowledge of the body and terminology/phonetic pronunciations used to describe and locate body parts as well as an overall review of human development and body processes. This course focuses on basic knowledge of body structures and function and provides a foundation for understanding deviations from normal and disease conditions. This course may offer CE Credit (BIO 1006) and may be repeated for credit.
CP Innovator's Life Science - Students will use a full range of science and engineering practices to make sense of natural phenomena and solve problems that require an understanding of how individual organisms are configured and how these structures function to support life, growth, behavior, and reproduction. This course can be repeated for credit.

CP Innovator's Physical Science - Students can use the full range of science and engineering practices to make sense of natural phenomena and solve problems that require understanding structure, properties and interactions of matter. This course can be repeated for credit.

AEROSPACE MANUFACTURING


Scanto watch a video about the Aerospace Manufacturing Pathway


## MANUFACTURING FUNDAMENTALS I

| GRADES: 10-12 | LENGTH: 1 SEMESTER | CREDITS: . 5 CTE/ . 5 MTH B | EST. FEES: \$150 |
| :--- | :--- | :--- | :--- |

Suggested Prerequisite: CAD (Computer Aided Design)
Concurrent Enrollment: Machine Shop Safety (MAC 1000, 1 credit)
Certifications: Certified SOLIDWORKS Associate - Additive Manufacturing (CSWA-AM)
Course Description: This course is designed to provide students with the skills and knowledge to be effective in production environments as a machinist, CNC operator, or supervisor. Upon completion of this course, proficient students will demonstrate safety practices concerning machining technology, proper measurement and layout techniques, reading and interpreting drawings and blueprints, production design processes, and quality control procedures. Students will complete projects using various manufacturing techniques and build intermediate skills involving manufacturing techniques. Upon completion of this course, students will be knowledgeable about potential postsecondary education and career opportunities related to machining technology and will be prepared to enroll in more advanced machining courses in high school. Students will create real world projects using CNC Plasma Cutters, Water Jet Cutters, Routers, Injection Molders, Additive Manufacturing (3D Printing) and Vacuum Formers.

## CNC MACHINING 1

## GRADES: 10-12 $\quad$ LENGTH: 1 SEMESTER $\quad$ CREDITS: . 5 CTE/ .5 MTH B $\quad$ EST. FEES: \$150

Suggested Prerequisite: CAD (Computer Aided Design)
Concurrent Enrollment: Machine Shop Safety (MAC 1000, 1 credit), Print Reading for Machinists (MAC 1002, 3 credits)
Certifications: Haas Basic Mill Operator
Course Description: This course covers fundamentals of computer numerical control (CNC), basic programming, machine setup and operation of CNC machines. The course begins with manual programming practices so that the student will understand the programming code and its structure. Geometric Dimensioning \& Tolerancing codes; G \& M codes, control functions, the letter address system, and math issues related to CNC are included. Standard safety conventions will be introduced for safe programming practice. This course allows for the further development of CNC skills with hands-on instruction related to the CNC milling machines, and CNC turning centers. The lab work includes operation of CNC machines to demonstrate the programming skills.

## MANUFACTURING FUNDAMENTALS II

\section*{| GRADES: $11-12$ | LENGTH: 1 YEAR | CREDITS: 1.0 CTE/ 1.0 MTH B | EST. FEES: \$150 |
| :--- | :--- | :--- | :--- |}

Prerequisites: Manufacturing Fundamentals I and CNC Machining I
Concurrent Enrollment: CAD/CAM 2D (MAC 2040, 3 credits)
COMMUNITY COLLEGE OF
DENVER

Certifications: Stratasys Additive Manufacturing Certification and Certified SOLIDWORKS Associate - Additive Manufacturing (CSWA-AM)
Course Description: This course is designed to provide students with the skills and knowledge to be effective in production and engineering environments as a machinist, technician, CNC operator or supervisor. Upon completion of this course, proficient students will demonstrate safety practices concerning machining technology, proper measurement and layout techniques, reading and interpreting drawings and blueprints, production design processes, and quality control procedures. Students will complete projects using various manufacturing techniques and build intermediate skills involving manufacturing techniques. Upon completion of this course, students will be knowledgeable about potential postsecondary education and career opportunities related to machining technology and will be prepared to enroll in more advanced machining courses in high school. Students will create real world projects using CNC Plasma Cutters, Water Jet Cutters, Routers, Injection Molders, Additive Manufacturing (3D Printing) and Vacuum Formers.

## CNC MACHINING II

## GRADES: 11-12 $\quad$ LENGTH: 1 YEAR $\quad$ CREDITS: 1.0 CTE/ 1.0 MTH B $\quad$ EST. FEES: \$150

Prerequisites: Manufacturing Fundamentals I and CNC Machining I
Concurrent Enrollment: CAD/CAM 2D (MAC 2040, 3 credits), Introduction to CNC Milling Operations (MAC 2005, 3 credits)
Dual Enrollment: CNC Machining \& Inspection (MET 2010, 3 credits)
Certifications: National Institute of Metalworking Skills (NIMS)
Course Description: This course prepares students to enter the manufacturing/production industry, specifically covering CAD/CAM systems, geometric modeling, process planning, tool path generation. Course content includes programming and production of complex parts. Projects focus on solid modeling for design and manufacturing applications as well as the use of commercial CAD/CAM software for automating the production cycle. Special content addresses CNC mill and lathe setups and operations not covered in the basic CNC Machining. NIMS certification preparation and testing are included in course content.


## PROJECT MANAGEMENT FOR ENTREPRENEURS I

GRADES: 10-12 $\quad$ LENGTH: 1 SEMESTER $\quad$ CREDITS: . 5 CTE/ . 5 ENG A $\quad$ EST. FEES: \$80
Suggested Prerequisite: Introductory Business and/or Marketing Course
EngA
Concurrent Enrollment: Introduction to Entrepreneurship (ENP 1005, 3 credits), Project
Management in Organizations (MAN 2041, 3 credits)
Course Description: Project Management for Entrepreneurs I explores the business skills, personality traits, and commitment necessary to successfully plan, launch, and grow an entrepreneurial venture while also investigating the concepts and applicability of project management within organizations. This course will cover the challenges and rewards of entrepreneurship and the role of entrepreneurial businesses in the United States and the world as well as their impact on our national and global economy. Students will examine the unique nature of the project management structure, including its emphasis on integrated decision making throughout the lifecycle of a product from the planning, implementing, monitoring, and controlling phases. Emphasis is on the processes of initiating, planning, executing, controlling, and closing activities of project management.

## PROJECT MANAGEMENT FOR ENTREPRENEURS II

| GRADES: $10-12$ | LENGTH: 1 SEMESTER | CREDITS: . 5 CTE/ 5 ENG B | EST. FEES: \$50 |
| :--- | :--- | :--- | :--- |

Prerequisites: Successful Completion of Project Management for Entrepreneurs I
Concurrent Enrollment: Marketing Your Image (MAR 1006, 3 credits), Marketing for Entrepreneur
(ENP 2005, 3 credits)
Certifications: Stukent Social Media Marketing Certification
Course Description: Project Management is a rapidly growing profession. Project Management for Entrepreneurs II presents a series of marketing challenges to teams of student project managers with the winners announced at the end of the semester. This course continues to prepare students in understanding how project management skills can assist in promoting an entrepreneurial venture. Students gain insights essential for using digital media to market their ideas, using innovative and financially responsible marketing strategies that are both traditional and non-traditional in nature.

## PROJECT MANAGEMENT FOR ENTREPRENEURS III

Prerequisites: Project Management for Entrepreneurs I \& II
Concurrent Enrollment: Customer Service (MAR 1060, 3 credits), Project Management in Action

EngC
(MAN 2043, 3 credits)
Certifications: PMI Project Management Ready Certification
Course Description: Project Management for Entrepreneurs III explores concepts in Project Management and Customer Service. This course introduces major activities and tools in Project Management related to resources, risk, and quality. There is a heavy focus to provide how to manage the human element of project management. Specific project management tools and methodologies are introduced and used. Students will also learn the relationship of self to customers, problem solve and understand the importance of communicating with customers. Specific emphasis is given to managing customer expectations by building customer rapport and creating positive outcomes.


## GTE CAPSTONE BUSINESS

GRADES: 11-12
LENGTH: 1 SEMESTER
CREDITS: . 5 TE/ . 5 TECH WRITING
EST. FEES: \$80
Prerequisites: Project Management for Entrepreneurs I, Project Management for Entrepreneurs II,
Project Management for Entrepreneurs III


Concurrent Enrollment: Leadership (MAN 2024, 3 credits), Technical Writing I (ENG 1031, 3 credits)
Certifications: PMI Project Management Ready, Certified Associate Project Management (CAPM)
Course Description: While working in teams, students focus on the leadership skills for contemporary organizations. Covers development and communication of a shared vision to motivate and empower employees to manage conflict, to negotiate, and to develop teams.

# Cl HEALTH \& WELLNESS 

Advanced Studies in Health Care<br>10th-12th Grade<br>Exploration of healthcare careers and content related to basic anatomy \& physiology.

Suggested prerequisite for courses in the Health \& Wellness pathway

## Certified Nurse Aide

11th-12th Grade
Students prepare to perform patient care in a nurse aide role.

## Behavioral Health Technician

11th-12th Grade
Students explore and apply basic principles of behavioral and mental health.

## Introduction to OT \& PT

11th-12th Grade
Course prepares students for patient care as a physical and occupational therapy aide.

## Pharmacy Technician

 12th GradeStudents learn the role and function of pharmacy technicians.


## ADVANCED STUDIES IN HEALTH CARE (formerly Introduction to Health Care)

## GRADES: 10-12 $\quad$ LENGTH: 1 SEMESTER $\quad$ CREDITS: . 5 CTE/ . 5 LIFE SCI <br> EST. FEES: \$50

Concurrent Enrollment: Comprehensive Medical Terminology (HPR 1040, 3 credits)
Certification: Basic Life Support (BLS) CPR through American Heart Association
Course Description: Develop a broad understanding of the many career opportunities within the healthcare field by studying the human body systems and their respective medical terminology. Through a combination of lectures, interactive activities, case studies, and practical exercises, this course aims to equip students with the necessary knowledge and skills to communicate effectively in a healthcare environment and to foster an understanding of the diverse opportunities available in the healthcare industry. Students will gain an in-depth understanding of the language of medicine, including the pronunciation, analysis, and interpretation of medical terms (common prefixes, roots, and suffixes), abbreviations, and acronyms commonly used in healthcare settings.

## CERTIFIED NURSE AIDE (CNA)

## GRADES: 11-12 $\quad$ LENGTH: 1 SEMESTER $\quad$ CREDITS: . 5 CTE/ . 5 LIFE SCI $\quad$ EST. FEES: \$175

Prerequisite: Basic Life Support (BLS) CPR through American Heart Association
Certification: Colorado State Nurse Aide Certification NNAAP ${ }^{\circledR}$ Exam (Written and Skills)
Course Description: The Nursing Aide course prepares students for the Colorado State Nurse Aide Certification NNAAP® Exam while providing students a foundation in Nurse Aide theory and skills. Students will learn the scope of practice and multiple proficiencies of working in an interdisciplinary team to provide holistic care to patients and residents. Students will participate in a minimum of 16 hours of hands-on care to residents during supervised clinical learning experiences at a local Long-Term Care facility. Content includes: introduction to the nursing aide role, communication skills, exploration of healthcare settings, ethical and legal issues, cultural sensitivity, patient/resident rights, infection control, safety and body mechanics, measures and records vital signs, admission, transfer, and discharge, bed making and caring for patients' environment, personal care, nutrition and fluid balance, toileting, restorative care, and end-of-life care.

> Note: Participation in CNA Clinicals requires students to provide documentation of active BLS CPR certification; cleared background check, drug screen, and TB screening; Up-to-date immunization records with Chickenpox/Varivax, Tetanus, MMR, Hepatitis B vaccinations. Optional but recommended vaccinations include seasonal influenza and COVID-19.

## BEHAVIORAL HEALTH TECHNICIAN

## GRADES: 11-12 $\mid$ LENGTH: 1 YEAR $\quad$ LENGTH: 1.0 CTE / 1.0 ENGLISH A $\quad$ EST. FEES: $\$ 96$

## Suggested Prerequisite: Advanced Studies in Health Care

Concurrent Enrollment: Intro to Behavioral Health Care \& Wellness (PTE 1010, 3 credits), Application of Behavioral Health Care \& Wellness (PTE 1020, 5 credits)


Certifications: Registered Behavior Technician Certification, Basic Life Support (BLS) CPR through American Heart Association

Course Description: This course explores the basic principles of behavioral health in a behavioral health care setting. This course develops interpersonal and technical skills while working with clients in psychiatric care settings. Students obtain skills used daily by Behavioral Health Technicians (BHT's) such as therapeutic communication and relationship building and conducting psychoeducational therapy groups. Students will also explore aspects of mental health and factors that influence human development and behavior.

| $\|$INTRODUCTION TO OCCUPATIONAL \& PHYSICAL THERAPY <br> GRADES: 11-12 LENGTH: 1 YEAR |
| :--- |
| Suggested Prerequisite: Advanced Studies in Health Care CREDITS: 1.0 CTE/ 1.0 A\&P EST. FEES: \$150 <br> Concurrent Enrollment: Intro to Occupational Therapy (OTA 1000, 3 credits), Intro to Medical   <br> Terminology (HPR 1038, 1 credit), Basic Anatomy \& Physiology (BIO 1006, 4 credits)   <br> Certification: Basic Life Support (BLS) CPR through American Heart Association   <br> Course Description: This course combines foundations of Occupational Therapy (OT) and Physical Therapy (PT). Students will   <br> explore profession definitions, roles and responsibilities, history, scope of practice, philosophical basis, relationships with other   <br> healthcare professionals, ethical and legal implications, industry settings, and more. Students will compare and contrast OT and   <br> PT throughout the year while learning and exploring health and wellness, diseases/conditions, and injuries. A moderate amount   <br> of human anatomy and medical terminology is included. Clinical skills include ambulation, range of motion (ROM), manual   <br> muscle testing, adaptive dressing techniques, functional transfers, physical agent modalities, clinical communication, etc.   |

## PHARMACY TECHNICIAN

| GRADES: 12 | LENGTH: 1 YEAR | CREDITS: 1.0 CTE/ 1.0 LIFE SCI | EST. FEES: \$164 |
| :--- | :--- | :--- | :--- |

## Prerequisite: Algebra I

Suggested Prerequisite: Advanced Studies in Health Care
Certifications: Certified Pharmacy Technician (CPhT), Basic Life Support (BLS) CPR through American Heart Association Course Description: This course combines foundations of pharmacology, pharmaceutical care and knowledge with hands-on applications. Students will explore real-world application of a pharmacy technician working with a licensed pharmacist in a variety of clinical and retail settings. We explore pharmacy history and laws, federal and state regulations and ethics, medical and pharmaceutical terminology, pharmacy calculations and conversions, sterile and non-sterile compounding, and communicative customer service. Students will also examine essential medical topics such as body systems, common diseases and conditions, and medication errors. This course prepares students to sit for the nationally recognized Pharmacy Technician Certification Exams. This preparation includes learning the 200 most prescribed medications.

# CC: HOSPITALITY \& TOURISM 



## PROSTART I / PROSTART II

## GRADES: 10-12 $\quad$ LENGTH: 1 YEAR $\quad$ CREDITS: 2.0 CTE $\quad$ EST. FEES: \$200

Prerequisite: *Grandview and Smoky Hill students must take ProStart I at home high school.
Dual Enrollment: ProStart I (RST 1550, 3 credits), ProStart II (RST 2550, 3 credits)

Certifications: ServSafe Food Handler, ServSafe Allergen, Colorado Restaurant Association Workforce Readiness Certificate and ProStart National Certification of Achievement. (additional certifications available upon request)
Course Description: This pre-apprenticeship course from the National Restaurant Association Educational Foundation and Colorado Restaurant Foundation introduces students to a competency-based foodservice \& hospitality management curriculum offered to students in grades 10-12. It is a study of culinary arts, restaurant and lodging management, employability skills, and business entrepreneurship coupled with paid mentored work internships in a broad spectrum of industry restaurant, foodservice, and lodging operations. Students who wish to obtain the national ProStart certification must complete a 400 -hour guided internship and pass the exams for both ProStart I \& II. Successful participants in the program will have the opportunity to receive college credits, earn industry certifications and credentials, compete in the ProStart Invitational Competitions, and apply for industry scholarships.
*Note: Students must pass the ServSafe Food Handler certification first semester in order to advance to second semester.

PROSTART III: ADVANCED CULINARY PRACTICUM (formerly Prostart Youth Apprenticeship) | GRADES: 11-12 | LENGTH: 1 YEAR | CREDITS: $\mathbf{2 . 0}$ CTE | EST. FEES: $\$ 200$ |
| :--- | :--- | :--- | :--- |

Prerequisites: ProStart I and/or ProStart II
Certifications: ServSafe Manager, ProStart National Certificate of Achievement, ServSuccess Certified Restaurant Professional, Certified Line Cook (additional certifications available upon request)
Course Description: This upper-level culinary program is an opportunity for students to put their culinary \& restaurant management knowledge to the test! Students are enrolled in the National Restaurant Association's "RYRA" (Restaurant Youth Registered Apprenticeship) program and can start earning hours towards the "Restaurant Line Cook Apprenticeship" starting at 17 years old. Students learn applicable industry skills through class instruction and can earn paid work hours outside of class time through an approved employer or through the CCICafé. In addition, students will be working alongside the Hospitality Management program to cater CCIC events, teaching them communication, leadership, cost analysis, teamwork, responsibility, and professionalism- skills they can apply to any industry they choose for their future.

# CCis 



## RESORT \& EVENT MANAGEMENT

## GRADES: 10-12 $\quad$ LENGTH: 1 YEAR $\quad$ CREDITS: 1.0 CTE /1.0 ENG B $\quad$ EST. FEES: \$165

Dual Enrollment: Hotel Industry Fundamentals (HTL 1010, 3 credits) \& Introduction to Hospitality (HLDR 1000, 3 credits)
Certifications: Certified Guest Service Professional (CGSP), ServSafe Food Handler, and Hospitality \& Tourism Specialist (HTS).
Course Description: This two-year industry-developed curriculum by the American Hotel and Lodging Educational Institute covers careers in hospitality and restaurant operations, customer service, sales, marketing, employability and soft skills, communication, guest experience cycle and food and beverage services. Successful participants in the program will have the opportunity to receive college credits, earn industry certifications and credentials, participate in a mentored internship off site and at our on-site café, and apply for industry scholarships. CCIC students will also have the opportunity to earn internship hours through our on-site cafe. Includes a 100-hour internship.

## HOSPITALITY LEADERSHIP EXPERIENCE

## GRADES: 11-12 LENGTH: 1 YEAR $\quad$ CREDITS: 1.0 CTE /.5 ENG C/.5 TECH WRITING $\mid$ EST. FEES: \$100

Prerequisites: One of the following: Resort \& Event Management or ProStart I/II
Concurrent Enrollment: Technical Writing I (ENG 1031, 3 credits)


Dual Enrollment: Resort Operations (HTL 1500, 3 credits) \& Organizational Leadership for Hospitality (HLDR 3600, 3 credits)
Certifications: AHLEI Hospitality Manager: Leadership Training, AHLEI Certified Front Desk Representative, ServSafe Unconscious Bias Training, ServSafe Sexual Harassment Training, ServSafe Manager
Course Description: This advanced program is for hospitality students who are ready for immersive work-based learning experiences within the hospitality industry. Students will start the year exploring hospitality career paths and developing their leadership styles using self-assessments and integrated mentorship experiences. Students will apply their different hospitality skills across authentic industry-directed problems of practice. In addition, students will develop goals and a plan for 150 hours of work-based learning experiences to be completed throughout the year. A digital portfolio will be utilized to showcase each student's industry experience(s) and skills they develop along with industry mentor and instructor feedback. Student's industry experience can be on campus (ex: CCIC events, CCICafé, CTE project management intern) or off campus (ex: hotel or restaurant internship or RYRA apprenticeship). The experience may be paid or unpaid (depending on the experience each student coordinates). Students should have access to transportation for off campus experiences.


## CONSTRUCTION I

## GRADES: 10-12 $\mid$ LENGTH: 1 YEAR $\quad$ CREDITS: 1.0 CTE/ 1.0 MTH A $\quad$ EST FEES: \$120

Prerequisite: Algebra I
Certifications: OSHA-10 Construction, Home Builders Institute (HBI) Pre-Apprenticeship Certificate Training (PACT)

## MthA

Course Description: This is the foundation course to basic residential construction. Students will demonstrate competencies that are nationally recognized by the construction industry. Students will learn and practice structural framing of floors, walls, ceilings, and roofs. This course also includes the use of basic construction tools and machinery, applied math, and an introduction to blueprint reading. This course teaches students industry safety including the use of all machines and tools. In addition, topics will include electrical wiring, masonry, plumbing, carpentry, HVAC, drywall, foundations, footings, stairs, doors, and employability.
Note: Construction I students must be able to carry 20 lbs. across the classroom and lift 15 lbs. overhead. Construction I students must be able to lift, bend, twist, and work overhead, as well as under a structure. Construction I students must be able to climb a ladder and work from an elevated position.

## CONSTRUCTION II

GRADES: 11-12 $\quad$ LENGTH: 1 YEAR $\quad$ CREDITS: 1.0 CTE/ 1.0 MTH A $\quad$ EST FEES: \$120
Prerequisite: Construction I
Certifications: Home Builders Institute Pre-Apprenticeship: Carpentry, Electrical, Plumbing
MthA
Course Description: In Construction II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians or supervisors, or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will gain more complex practical experience with carpentry, electrical and plumbing. Working in conjunction with the Associated General Contractors of Denver, students focus on various skills in preparation for entry into trades apprenticeships. Students will be introduced to all facets of residential and commercial wiring, installation of fixtures, plumbing and exterior and interior finish work. Carpentry in Construction II will include a more comprehensive understanding of framing, drywall, exterior siding, roofing, insulation, windows, doors, trim and cabinet installation. Students are expected to work closely with people, do physical work and solve problems independently.
Note: Construction II students must be able to carry 20 lbs. across the classroom and lift 15 Ibs. overhead. Construction II students must be able to lift, bend, twist, and work overhead, as well as under a structure. Construction II students must be able to climb a ladder and work from an elevated position.


## CYBERSECURITY II: NETWORKS \& SECURITY <br> GRADES: 10-12 <br> LENGTH: 1 SEMESTER CREDITS: . 5 CTE/. 5 MTH D <br> EST. FEES: \$0 <br> Prerequisite: Cybersecurity I: Computer Systems <br> Concurrent Enrollment: Principles of Information Assurance (CNG 1031, 3 credits), Network Security Fundamentals (CNG 1032, 3 credits)

Certifications: CompTIA Security+, CompTIA Network+
Course Description: In this course, students will dive deeper into networking and security concepts. Students will learn to design, implement, and troubleshoot issues for both wired and wireless networks. Students will also learn more about cryptography as well as security in business operations including risk management and disaster recovery. Students will be prepared to take the industry-recognized CompTIA Network+ and CompTIA Security+ exams. Cybersecurity II challenges students to develop advanced skills in concepts and terminology of cybersecurity. This course builds on previous concepts introduced in Cybersecurity I while expanding the content to include malware threats, cryptography, wireless technologies and organizational security. Upon completion of this course, proficient students will be able to demonstrate and understanding of cybersecurity ethical decisions, malware threats, how to detect vulnerabilities, principles of cryptology, security techniques, contingency plan techniques, security analysis, risk management techniques, and advanced methods of cybersecurity.

## IT PATHWAY ${ }^{3}$

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ARTIFICIAL INTELLIGENCE I formerly Data Science : Foundations)
GRADES: 10-12 LENGTH: 1 SEMESTER CREDITS: . 5 CTE/. 5 MTH C \(\quad\) EST. FEES: \(\$ 50\)
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Prerequisites: One of the following: Computer Programming I, AP Computer Science Principles or equivalent Suggested Prerequisite or Corequisite: Statistics or AP Statistics
Course Description: In this course students will be introduced to the concept of Artificial Intelligence (AI). Students will learn the basic concepts of AI and how to use it to efficiently answer questions about the world. More specifically, students will develop the fundamental computer science, mathematical reasoning, and user experience skills to eventually build AI software. This course is ideal for students who are interested in learning more about how AI can be better leveraged in careers, life and beyond.

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ARTIFICIAL INTEL_IGENCE I| (formerly Data Science II: Machine Learning)
GRADES: 10-12 LENGTH: 1 SEMESTER CREDITS: .5 CTE/.5 MTH B 左 EST. FEES: $0
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Prerequisites: Artificial Intelligence I
Course Description: This course teaches students how to apply the skills learned in Artificial Intelligence I to build their own Als. More specifically, this course introduces machine learning, deep learning, and statistical pattern recognition techniques that are used to build systems that can predict outcomes and generate new content. This course is ideal for students who are interested in pursuing careers in computer science or IT, and is especially great for students who dream of creating a computer that can learn.

## AMAZON WEB SERVICES ACADEMY: INTRODUCTION TO CLOUD COMPUTING <br> GRADES: 10-12 LENGTH: 1 YEAR CREDITS: 2.0 CTE

Concurrent Enrollment: Technical Writing I (ENG 1031, 3 credits)

Certification: AWS Certified Cloud Practitioner
Course Description: AWS Academy: Introduction to Cloud is an exploration of cloud computing. In this course, students explore cloud computing services, applications, and use cases. Students dive into cloud computing best practices and learn how cloud computing helps users develop a global infrastructure to support use cases at scale while also developing and inventing innovative technologies. This course provides students with classroom instruction that introduces cloud computing skills and accelerates students toward the next steps in their educational journey. The content of this course is aligned to the K-12 Computer Science Framework Practices including computational thinking. The seven core practices of computer science describe the behaviors and ways of thinking that computationally literate students use to fully engage in today's data-rich and interconnected world.

## STEAM PATHWAY - PRODUCT DESIGN \& FABRICATION



Scan to watch a video about the STEAM
Pathway


Product Design III 10th-12th grade Advanced work in any Drafting and Design Program of study.

## PRODUCT DESIGN I

GRADES: 10-12
EST. FEES: \$100
Suggested Prerequisite: Computer Aided Design (CAD) or similar design course
Dual Enrollment: Introduction to Industrial Design (IND 1000, 1 credit) \& Technical Drawing \& CAD (IND 1450, 3 credits

Certifications: Society of Manufacturing Engineers Additive Manufacturing Fundamentals, Certified Associate - CSWA-AM Additive Manufacturing, SOLIDWORKS Certified Associate - CSWA Mechanical Design
Course Description: Students that are interested in careers involving design, engineering and innovation. Students will utilize design thinking and the design process to research, conceptualize, design, prototype, and evaluate physical products. Students will develop their digital fabrication skills utilizing production machines. Students will design and create both as an individual and in collaborative groups, including working on/with projects directly from industry. This course is the professional practice of creating products that enhance the function, usability, value, and appearance of products with the goal of benefiting the user, manufacturer, community, and the environment. Also known as product design, industrial design education prepares students to design systems and tangible artifacts including, consumer and recreational products, medical and computer equipment, and transportation and environments. Both generalist and specialist, industrial designers tend to be part artist, part entrepreneur and engineer. This course is designed for students interested in careers in Industrial Design, Packaging Design, or Design Arts industry sector. Students will be introduced to industry standard tools, skills, and materials that they can manipulate as the primary means of manufacturing and package design. Students will explore basic applications of various tools to create projects in both digital and 3D format.

## PRODUCT DESIGN II

GRADES: 10-12 LENGTH: 1 SEMESTER CREDITS: 5 CTE/. 5 PHY SCI $\quad$ EST. FEES: \$100
Prerequisite: Product Design I
Dual Enrollment: Computer Aided Modeling (IND 3660, 3 credits)


Certifications: SOLIDWORKS Certified Associate - CSWA Mechanical Design, SOLIDWORKS Certified Professional CSWP Mechanical Design, SOLIDWORKS Certified Expert - CSWE Mechanical Design
Course Description: Students that are interested in careers involving design, engineering, and innovation. Students will explore and use the latest applications of direct digital fabrication. Emphasis will be placed on practical experience in utilizing departmental equipment to produce digital 3D files and output them to appropriate direct digital fabrication equipment. Students will solve design problems by applying knowledge of material properties, ergonomics, form vs. function, additive manufacturing (3D printing), principles of design, and elements of art. Students will design and create both as an individual and in collaborative groups, including working on/with projects directly from industry. This course prepares students to design systems and tangible artifacts and deepen understanding of manufacturing and marketing processes. Students will advance development of industry-standard tools, skills, and material usage for product manufacturing and design in Industrial Design, Packaging Design, or Design Arts industry sector.

## STEAM PATHWAY - PRODUCT DESIGN \& FABRICATION

| PRODUCT DESIGN III |
| :--- |
| GRADES: 10-12 LENGTH: 1 SEMESTER CREDITS: 5 CTE/. 5 PHY SCI |
| Prerequisite: Product Design II |
| Certifications: SOLIDWORKS Certified Associate - CSWA-Mechanical Design, SOLIDWORKS Certified Professional - <br> CSWP Mechanical Design, SOLIDWORKS Certified Expert - CSWE Mechanical Design, Stratasys Additive Manufacturing <br> Certification |
| Course Description: This course allows for advanced work in any Drafting and Design Program of Study. This advanced <br> work can be individualized to the specific program of study to allow for specialized study for the student. It may include <br> project-based learning or preparation for the end of program industry certification. Specific content and course design <br> will be determined by the instructor in collaboration with the individual student. |

## PRODUCT DESIGN IV

GRADES: 11-12 LENGTH: 1 SEMESTER
CREDITS: . 5 CTE/. 5 TECH WRITING
EST. FEES: \$100
Prerequisites: Product Design III
Concurrent Enrollment: Technical Writing I (ENG 1031, 3 credits) Certifications: SOLIDWORKS CSWA+, Stratasys Additive Manufacturing Certification
Course Description: Students who have completed Product Design III, will team with other students from various CCIC pathways to solve real world problems faced by our business \& industry partners. The teams will initiate, plan, execute, monitor and control, and close the project by presenting the sponsor with the deliverable and/or solution. The STEAM students will bring their design and fabrication skills to this process and help produce the prototype or functional product. All students enrolled in this course must be willing to improve their skills in collaboration, leadership, time management, teamwork, commitment, and perseverance. This course can be repeated for credit.


## AUTOMOTIVE TECHNOLOGY ○-



## AUTOMOTIVE TECHNOLOGY I

GRADES: 10-12 LENGTH: 1 YEAR

## CREDITS: 1.0 CTE/ 1.0 PHY SCI EST FEES: \$95

Concurrent Enrollment: Auto Shop Orientation (ASE 1001, 2 credits), Auto Maintenance I (ASE 1003, 2 credits), Basic Automotive Electricity (ASE 1020, 2 credits), Automatic Transmission/Transaxle Service (ASE 2050, 1 credit)

Certifications: Snap-on Certifications (Multimeter, Torque, Precision Measurement, Scanner and Diagnostics), Ford ACE Training

Course Description: Automotive Technology I explores automotive industry standards and terminology, career opportunities and classifications, shop operations and safety, tool identification and usage, diagnostic equipment identification and usage, automotive systems, tires and wheels, hydraulic braking systems, cooling systems, lubrication systems, and preventative maintenance. Also included is basic operation of automotive braking systems, operation, diagnosis and basic repair of disc, drum, and basic hydraulic braking systems. The basics of electrical systems, electronic systems, batteries, starting systems, charging systems, lighting systems, electrical instruments and accessories, and ignition systems will also be studied. This course focuses on the diagnosis and service of suspensions and steering systems and their components. Students who successfully complete all Automotive Technology courses will have the knowledge needed to pass the ASE certification exam for MLR. Students who pass the exam and meet the work-based requirement will be eligible and encouraged to enter the workforce as an ASE-Certified MLR Technician.

## AUTOMOTIVE TECHNOLOGY !-0.

## AUTOMOTIVE TECHNOLOGY II


Prerequisite: Automotive Technology I; secondary application \& skills assessment required

Concurrent Enrollment: Automotive Brake Service I (ASE 1010, 2 credits), Suspension \& Steering I (ASE 1040, 2 credits), Automotive Electrical Safety Systems (ASE 1022, 1 credit), Introduction to Automotive Heating and Air Conditioning (ASE 2064-1 credit) - only available to students who completed concurrent enrollment in Auto Tech I

Certifications: Snap-on Certifications (Wheel Service \& Alignment, Advanced Scanner Diagnostics, Pro-Cut on-car Rotor Machining, Battery Starting and Charging), ASE Student Automobile Certifications (Brake Systems, Suspension \& Steering Systems, Electrical/Electronic Systems, and Engine performance), ASE Maintenance \& Light Repair (MLR), Ford ACE Training, Subaru University Level I, Toyota TECS Elite
Course Description: Automotive Technology II is the second course in the Automotive Technology program of study and covers important skills and knowledge on becoming a professional service technician. The Automotive Technology II course prepares students for entry into Automotive Technology III. Students study automotive general electrical systems, starting and charging systems, batteries, lighting, and electrical accessories. Students who successfully complete all Automotive Technology courses will have the knowledge needed to pass the ASE certification exam for MLR. Students who pass the exam and meet the work-based requirement will be eligible and encouraged to enter the workforce as an ASE-Certified MLR Technician.

## AUTOMOTIVE TECHNOLOGY III


Prerequisites: Automotive Technology I and II; secondary application and skills assessment required
Certifications: Continuation of Snap-on Certifications (Wheel Service \& Alignment, Advanced Scanner Diagnostics, Pro-Cut on-car Rotor Machining, Battery Starting and Charging), ASE Student Automobile Certifications (Brake Systems, Suspension \& Steering Systems, Electrical/Electronic Systems, and Engine performance), Ford ACE Training
Course Description: Students learn advanced diagnostic techniques including high performance concepts. Do you love automotive technology, but want to know more about how to make cars go fast? Do you have a mechanical mind, and don't just love working with cars, but want to maximize horsepower to achieve top speed at the race track? Does this sound like you? In Automotive Technology III you will be part of a team that: Builds a high-performance engine and runs it on a specialized test stand, is exposed to all aspects of engine machining, learns how to tune engines for maximum output and drivability using various data acquisition tools, learns to improve performance of engines and maintain peak performance of racing engines, and learns aspects of high-performance chassis, brake and suspension modifications including those on our in-house NASCARs. In addition, students will have opportunities to compete in our SkillsUSA program. Students study and service suspension and steering systems and brake systems. Students who successfully complete all Automotive Technology courses will have the knowledge needed to pass the ASE certification exam for MLR. Students who pass the exam and meet the work-based requirement will be eligible and encouraged to enter the workforce as an ASE-Certified MLR Technician.

## AVIATION MAINTENANCE

## TWO YEAR ACCELERATED AVIATION MAINTENANCE PATHWAY

YEAR 1

| Accelerated |
| :---: |
| General Aircraft Maintenance I \& II |
| (Half Day, Every Day, 1 Yr ) |
| 11th-12th grade |
| Foundation of the Aviation |
| Maintenance program. |

SUMMER

| Airframe I |
| :---: |
| (7.5 Hrs, Every Day, 20 days) |
| 11th-12th grade |
| Introduction to |
| Airframe Studies. |

YEAR 2
Airframe II \& III
(Half Day, Every Day, 1 Yr) 11th-12th grade
Continuation of aircraft structures and systems.

## SUMMER

Airframe IV
(7.5 Hrs, Every Day, 20 days) 12th grade
Completion of the Airframe education and exam preparation.

## THREE YEAR AVIATION MAINTENANCE PATHWAY

YEAR 1

General Aircraft Maintenance I
(Half-Day, Every Other Day, 1 Yr) 10th-12th grade

Foundation of the Aviation Maintenance program.

YEAR 2

General Aircraft Maintenance II (Half-Day, Every Other Day, 1 Yr) 11th-12th grade

Continuation of General Aircraft Maintenance I.

SUMMER

Airframe I
(7.5 Hrs, Every Day, 20 days)

11th-12th grade
Introduction to Airframe Studies.

YEAR 3

Airframe II \& III
(Half Day, Every Day, 1 Yr) 11th-12th grade

Continuation of aircraft structures and systems.

SUMMER

Airframe IV
(7.5 Hrs, Every Day, 20 days)

12th grade
Completion of Airframe education and exam preparation.

## ACCELERATED GENERAL AIRCRAFT MAINTENANCE I \& II

## Suggested Prerequisite: Algebra I

Certifications: Snap-on Multimeter, Snap-on Torque, Snap-on Precision Measurement
Course Description: This course covers basic subjects, such as mathematics for aviation, basic physics for aviation, and basic electricity. In addition, this course will provide a foundation for further studies in the aviation maintenance pathway including the FAA coursework for General Aviation Mechanics. With successful completion of this class, the student may sit for the General Knowledge Exam portion of the FAA written tests.

## GENERAL AIRCRAFT MAINTENANCEI

## THREE YEAR

GRADES: 10-12 LENGTH: 1 Year
CREDITS: 1.0 CTE/ 1.0 MTH B
Suggested Prerequisite: Algebra I
Certifications: Snap-on Multimeter
Course Description: This course is an introduction to foundational subjects, such as mathematics for aviation, physics for aviation, and basic electricity. In addition, this course will provide for further studies in the aviation maintenance pathway including the FAA coursework for General Aviation Mechanics.

## GENERAL AIRCRAFT MAINTENANCE II

## THREE YEAR

GRADES: 11-12 LENGTH: 1 Year
Prerequisite: General Aircraft Maintenance I
Certifications: Snap-on Torque, Snap-on Precision Measurement
Course Description: This course builds on the subjects addressed in General Aircraft Maintenance I and prepares students for future studies in the program. This class includes Regulations, Maintenance Forms, Records, and Publications, Fluid lines and fitting, weight and balance, aircraft materials, aircraft ground operation, cleaning and corrosion, aircraft drawings, and inspection techniques. Many of these subject areas afford the student opportunities to work on the program's aircraft in the hangar. With successful completion of this class, the student may sit for the General Knowledge Exam portion of the FAA written tests.

## CC: TRANSPORTATION

## AVIATION MAINTENANCE

## AIRFRAME I (SUMMER)

 TWO \& THREE YEARGRADES: 11-12 LENGTH: 7.5 hrs/day, 20 days CREDITS: 1.0 CTE
EST. FEES: \$150
Prerequisites: General Aircraft Maintenance I \& II
Course Description: This course builds on General Aircraft Maintenance I \& II. This course will cover wood structures, aircraft coverings, non-metallic structures, and aircraft finishes.

## AIRFRAME II \& III GRADE: 11-12 $\quad$ LENGTH: 1 Year (meets daily) CREDITS: 3.0 CTE/ 1.0 MTH B <br> Prerequisites: General Aircraft Maintenance I \& II, Airframe I is recommended for class / required if pursuing certification <br> Course Description: In Airframe II \& III, students will continue their study of Airframe Maintenance. Topics include aircraft sheet metal, electrical systems, hydraulic and pneumatic power systems, fuel systems, water and waste systems, and landing systems.

## TWO \& THREE YEAR

## AIRFRAME IV (SUMMER)

TWO \& THREE YEAR
GRADES: 12 LENGTH: 7.5 hrs/day, 20 days
CREDITS: 0.5 CTE/ 0.5 PHY SCI
EST. FEES: \$150
Prerequisites: General Aircraft Maintenance I \& II, Airframe I, II, \& III
Certifications: After completing this final course in the pathway, Airframe IV, students may be eligible to take 2 FAA
written tests: General and Airframe. Once the written tests are passed, students may be eligible to take an oral and practical test with a Designated Mechanic Examiner (DME). Contact instructor for further details.

Course Description: This course is the conclusion of Airframe Maintenance required by the FAA prior to testing. Topics for the class include instrument systems, communication and navigation systems, and inspection processes.


## CC TRANSPORTATION

AVIATION FLIGHT PATHWAY

## PRIVATE PILOT GROUND SCHOOL

GRADES: 10-12 LENGTH: 1 SEMESTER
CREDITS: . 5 CTE/. 5 MTH B
EST. FEES: \$105
Dual Enrollment: Aviation Fundamentals (AES 1100, 4 credits)
Certification: FAA Private Pilot Knowledge Examination

Course Description: This course presents the fundamentals of aviation for the beginning student which includes a study of the airplane and its components, aerodynamics, basic aircraft systems, the airport environment, air-traffic control procedures, Federal Aviation Regulations, the basic elements of air navigation including radio navigation, and a review of aviation weather. At the end of the course students will be prepared to take the FAA Private Pilot Knowledge Test (aka "Written Exam"). Students wishing to complete their Private Pilot Certificate will need to find an FAA certified flight instructor and receive flight instruction to prepare for the FAA Private Pilot Practical Test. Passing the Knowledge Test ("written"), together with passing the Practical Test ("FAA check ride"), are required to earn a Private Pilot Certificate.

## DRONE PILOT

GRADES: 10-12 $\quad$ LENGTH: 1 SEMESTER $\quad$ CREDITS: . 5 CTE/. 5 MTH B EST. FEES: $\mathbf{\$ 1 0 5}$
Dual Enrollment: Introduction to Unmanned Aircraft Systems (AES 1040, 3 credits)
Certifications: FAA Remote Pilot Certification (Part 107)

MthB

Course Description: Concepts in this course include drone components, drone operation, drone pilot skills, drone pilot careers, airspace, weather, airport operations, authorizations and waivers and the regulations governing drone operations. At the end of the course students will be prepared to take the FAA Remote Pilot Exam (Part 107). This course would be an applied applications course and could include instruction in aerial photography for commercial purposes, recording instrumentation, topics in inspection for industrial purposes, and data analytics.



