WELCOME to Cherokee Trail High School!

The Cherokee Trail High School Course Registration guide contains important information about the courses to be offered during the 2020-21 school year. This information will be helpful as you select courses. Each year, Cherokee Trail High School creates a new master schedule based on data derived from the student course request process. The expectation is that these course requests represent decisions made collaboratively with the student, the student’s teachers and counselor, and the student’s parents. On the basis of these requests, courses are scheduled, faculty members are employed, textbooks are purchased, and classrooms are allocated.

Careful planning is essential to 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.

This guide is also available on our website: https://www.cherrycreekschools.org/cherokeetrail
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Careful planning is essential to 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.

For the most up to date Course Registration Guide, 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
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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 as 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, which meets the required hours of instruction as defined in state law.

To prepare students for a successful post-secondary educational 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. At least two years of World Language is recommended by the Colorado Commission on Higher Education for admission to four-year public colleges and universities in Colorado.

Beginning with the class of 2021, 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. Minimum credit requirements in various areas shall be as follows:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Required Credits</th>
<th>Important Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>English *</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>Mathematics *</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Science *</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Social Studies *</td>
<td>3.0</td>
<td>Including: 1 credit in U.S. History and 0.5 credit in Civics/Government.</td>
</tr>
<tr>
<td>Wellness/Fitness **</td>
<td>2.0</td>
<td>Including: 0.5 credit in Health.</td>
</tr>
<tr>
<td>Fine Arts, Business/Marketing/Technical,</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>or Career and Technical Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Total Required Credits</td>
<td>16.5</td>
<td></td>
</tr>
<tr>
<td>Minimum Total of Elective Credits</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Minimum Total Credits</td>
<td>22.0</td>
<td></td>
</tr>
</tbody>
</table>

*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 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.

*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.
Starting with the graduating class of 2021, students must meet or exceed the following graduation requirements to receive a diploma from the Cherry Creek School District. The Cherry Creek School District engaged community stakeholders (parents, students, staff, graduates, local business owners) in the process of updating graduation requirements effective for the class of 2021. The next iteration of excellence in Cherry Creek requires a focus on innovative teaching, thinking and learning in a systemic manner for all students, in every school - every day!

1 Course Requirements

Board Policy IKF

A minimum of 22 units of credit shall be necessary for high school graduation.

- **English:** 4.0 units
- **Mathematics:** 3.0 units
- **Science:** 3.0 units
- **Social Studies:** 3.0 units
- **Physical Education:** 2.0 units
- **Fine Arts or CTE:** 1.5 units
- **Elective Offerings:** 5.5 units

2 College and Career Ready Demonstration Requirement for Graduation in Cherry Creek

Regulation IKF-E

In addition to required coursework, all students must demonstrate career or college readiness in mathematics and English Language Arts through at least one menu option below.

<table>
<thead>
<tr>
<th>Next Generation Accuplacer</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>241 on Reading OR 236 on Writing</td>
<td>255 on Arithmetic (AR) OR 230 on Quantitative Reasoning, Algebra and Statistics (QAS)</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classic Accuplacer</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
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</thead>
<tbody>
<tr>
<td>62 Reading Comprehension OR 70 Sentence Skills</td>
<td>61 on Elementary Algebra</td>
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<table>
<thead>
<tr>
<th>ACT</th>
<th>English Lang. Arts</th>
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<td>18</td>
<td>18</td>
<td>19</td>
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<table>
<thead>
<tr>
<th>ACT WorkKeys</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
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<tbody>
<tr>
<td>Bronze or higher</td>
<td>Bronze or higher</td>
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</table>

<table>
<thead>
<tr>
<th>Advanced Placement</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
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<tbody>
<tr>
<td>2</td>
<td>2</td>
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</table>

<table>
<thead>
<tr>
<th>ASVAB (AFQT score)</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
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</thead>
<tbody>
<tr>
<td>31st percentile</td>
<td>31st percentile</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Concurrent Enrollment</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
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</thead>
<tbody>
<tr>
<td>Passing Grade</td>
<td>Passing Grade</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>International Baccalaureate</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SAT</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
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</thead>
<tbody>
<tr>
<td>470</td>
<td>500</td>
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</table>

<table>
<thead>
<tr>
<th>District Capstone</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Literacy Assessment</td>
<td>Portfolio of Skills Exams</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry Certificate</th>
<th>English Lang. Arts</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Determined</td>
<td>District Determined</td>
<td></td>
</tr>
</tbody>
</table>

3 Essential Skills for Success

The following skills are critical to success in College and Career.

- Innovation
- Critical thinking skills
- Real world experiences
- Problem solving
- Curiosity / Inquiry
- Relevancy
- Working in teams
- Communication skills
- Project based learning
- Flexibility / Adaptability
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.*

**Students may meet with their counselor to address the following schedule error corrections during the first two days of school:**
- 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)
- Straight drop that will not make the schedule short the required number of classes
- Additional class 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.**

**Withdraw Pass-Withdraw Fail:**
If there is a need to drop a class during the first four weeks of the semester, a WP/WF from will be required. A WP/WF is noted on the permanent transcript and the following procedure must be followed:
- 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.

**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, he/she will not be allowed to drop the class. Drop with an F forms 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, parents, and the student. If a level change is appropriate, the procedure below should be followed:
- The student may obtain the Level Change Form through the department coordinator. The student must secure signatures from the current teacher, the department coordinator, his/her parent and their assigned counselor. The student will give the completed form to his/her assigned counselor for processing.
- 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)

2nd semester corrections: Scheduling errors can be addressed in person by the student during the first two days of the semester following the scheduling policy outlined above.

Important note about 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.
Cherokee Trail High School

Individual Career and Academic Plan (ICAP)

ICAP is a multi-year process that intentionally guides students in academic, career, and post-secondary exploration. Through our ICAP lessons, students will develop the awareness, knowledge, attitudes, and skills to create their own meaningful and powerful pathways to be career and college ready.

ICAP 201: Career Pathway Discovery, part 2
1. Students complete personality and skills research using the “Do What You Are” survey in Naviance.
2. Students connect personality traits to a list of matching career choices.
3. Using the list of matching career choices, students begin to make connections to a variety of post-graduate options.

ICAP 202: Planning for Final 2 Years of HS
1. Students review graduation requirements and benchmarks.
2. Students review post-secondary options and CTHS Plans of Study.
3. Students complete course registration for the next school year.

ICAP 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 list of possible colleges and/or programs that best fit selected career interests.
3. Students meet with their counselor to review post-secondary plan and begin implementation.
4. Students graduate with a completed Individual Career and Academic Plan (ICAP).

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

ICAP 102: Academic & Post-Secondary Planning
1. Students complete a Learning Styles Inventory to dissect how they learn best.
2. Students learn about graduation requirements.
3. Students learn about different Post-Secondary pathways and indicate which one they are considering.

ICAP 103: Career Pathway Discovery, Part 1
1. Students learn about the CTHS Plans of Study and select the one that is most appropriate for them.
2. Students learn how to calculate their GPA.
3. Students complete course registration for the next school year.

ICAP 301: Researching post-secondary pathways
1. Students will learn about financial literacy as it pertains to their post-secondary plan.
2. Students will learn about specific resources that will help them investigate and explore their post-secondary plans.
3. Students meet with their counselor to review selected career and post-secondary pathway.
4. Students select the appropriate post-secondary pathway based on individual career interest.
5. Students begin research on specific colleges and/or programs.
6. Students review registration process for 12th grade.

Students continue onto 4-year college/university, 2-year community college, military, Career & Technical Education programs, gap year, or straight to work.
C THS Career Pathway Plans of Study

CTHS College/Career Core Preparatory Pathways

9th: English 9 (Pre-AP, Pre-IB), World Geography (Pre-AP, AP), Algebra 1 or higher, Biology (H), World Language
10th: English 10 (Pre-AP, Pre-IB), Government/Economics (AP), Geometry or higher, Chemistry (H, AP), World Language
11th: English 11 (AP, IB, H), US History (AP, IB, CE), Algebra 2 or higher (AP, IB, CE), Physics (AP, IB), World Language
12th: English 12 (AP, IB, CE), Senior Social Studies (AP, IB), College Algebra or higher (AP, IB, CE), Senior Science (AP, IB)

AP = Advanced Placement, IB = International Baccalaureate, CE = Concurrent Enrollment. All CTHS core pathways meet college admissions standards.

Cherokee Trail students begin to build their Individual Career and Academic Plans (ICAP) by selecting specific career pathways in 9th and 10th grade to use as guides in academic and post-graduate planning.
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:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Math (Algebra 1 level and higher)</td>
<td>4</td>
</tr>
<tr>
<td>Natural Sciences (2 credits must be lab-based)</td>
<td>3</td>
</tr>
<tr>
<td>Social Sciences (at least 1 credit of U.S. or World History)</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language (must be same language)</td>
<td>1</td>
</tr>
<tr>
<td>Academic Electives (see note below)</td>
<td>2</td>
</tr>
</tbody>
</table>

**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 http://highered.colorado.gov/. Hover over “Students & Parents” and click on “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 less demanding courses.

*Please be aware that these requirements differ slightly from Cherry Creek School District graduation requirements.

Factors Influencing College Admissions

Each year, the National Association for College Admission Counseling (NACAC) surveys colleges and universities to determine the top factors influencing admission decisions. According to the 2019 “State of College Admission Report,” the following factors, in order of importance, were:

1. Grades in All Courses
2. Grades in College Prep Courses
3. Strength of Curriculum
4. Admission Test Scores
5. Essay or Writing Sample
6. Student’s Demonstrated Interest
7. Counselor Recommendation
8. Teacher Recommendation
9. Class Rank
10. Extracurricular Activities
11. Portfolio
12. Subject Test Scores (AP, IB)
13. Interview
14. Work
15. State Graduation Exam Scores
16. SAT 11 Scores
Colleges Strongly Recommend the Following

**Academics:**
- **Choose a rigorous course load.** Seek out courses that are challenging. 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 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 the college admission tests (SAT and ACT) is to read.

**Extracurricular:**
- Find activities, both in and out of school, which 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
Grades and test scores: GPA 4.0+, SAT 1300+, ACT29+

**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 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 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 State 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 writing components. Please check with individual institutions.**
NCAA Eligibility Requirements

Students who wish to participate in collegiate athletics at the Division I or II level must apply for certification through the National Collegiate Athletic Association (NCAA) Eligibility Center. The process for certification should be started during the sophomore year, with full completion by the end of junior year. Cherokee Trail High School counselors can assist students in completing the necessary application. The website is https://web3.ncaa.org/ecwr3/.

The most comprehensive guide for athletes is the NCAA Guide for the College Bound Student Athlete produced by the NCAA.

This Guide has been designed to help you and your family understand the NCAA initial-eligibility process and to prepare you for transitioning from high school to becoming an NCAA Division I or II student-athlete. With more than 1,000 colleges and universities across three divisions, NCAA schools offer a variety of academics and athletics programs to meet your needs. The NCAA Eligibility Center encourages you, the student, to take an active role in this process. Take time to complete the registration yourself or jointly with your parents. As a future student-athlete, it is important that you become personally involved.


List of NCAA Approved Courses

The NCAA Initial Eligibility Center has approved courses for use in establishing the certification status of student athletes from Cherokee Trail High School. If you intend to participate in college athletics, please see your counselor concerning how this list affects your registration for classes.

To access Cherokee Trail’s List of Approved Core courses:

- Go to https://web3.ncaa.org/hsportal/exec/hsAction?hsActionSubmit=searchHighSchool
- Click on “List of NCAA Courses”
- Enter our high school code 060086 in the box and click “Search”
- Click on the “Show all Approved Courses” box
- You now have the most up to date list of our approved Core courses

* Be aware that not all CTHS Core Courses are approved by the NCAA Eligibility Center. We strongly encourage student-athletes and parents to consult with their counselor and the list of approved Core Courses.
Concurrent Enrollment (CE)

Cherokee Trail High School works with the Community College of Aurora to offer college credit (CE) to qualifying candidates within the English, Math, Social Studies, Technology, Performing Arts, and Business/Marketing departments.

To qualify for these opportunities, a student must first complete prerequisites which may include prerequisite completion or a qualifying score on Accuplacer, ACT, or SAT.

<table>
<thead>
<tr>
<th>High School Course</th>
<th>Semester</th>
<th>CCA Course – Qualifying Scores on ACT, SAT, Next Generation Accuplacer</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 2</td>
<td>Yearlong</td>
<td>ACC 121 - ACTE 17 &amp; ACTM 19 or SATV 470 &amp; SATM 500 or WR 236 &amp; AAF 235</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Acting</td>
<td>Yearlong</td>
<td>THE 111/112 – ACTE 17 or SATV 470 or WR 236</td>
<td>6</td>
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<tr>
<td>Calculus</td>
<td>Yearlong</td>
<td>MAT 201 – ACTM 25 or SATM 600</td>
<td>5</td>
</tr>
<tr>
<td>CE US History 101</td>
<td>Fall</td>
<td>HIS 121 – ACTE 17 or SATV 470 or WR 236</td>
<td>3</td>
</tr>
<tr>
<td>CE US History 102</td>
<td>Spring</td>
<td>HIS 122 – ACTE 17 or SATV 470 or WR 236</td>
<td>3</td>
</tr>
<tr>
<td>College Algebra</td>
<td>Yearlong</td>
<td>MAT 093/121 – ACTM 19 or SATM 500 or AAF 235</td>
<td>5</td>
</tr>
<tr>
<td>College Algebra</td>
<td>Fall</td>
<td>MAT 121 – ACTM 23 or SATM 550 or AAF 245</td>
<td>4</td>
</tr>
<tr>
<td>College Trigonometry</td>
<td>Fall or Spring</td>
<td>MAT 122 – ACTM 24 or SATM 560 or AAF 280</td>
<td>3</td>
</tr>
<tr>
<td>Computer Aided Design</td>
<td>Yearlong</td>
<td>CAD 256 – No qualifying scores required</td>
<td>6</td>
</tr>
<tr>
<td>Computer Applications</td>
<td>Spring</td>
<td>CIS 118 – ACTE 17 or SATV 470 or WR 236</td>
<td>3</td>
</tr>
<tr>
<td>Criminal Justice-Crime Science</td>
<td>Yearlong</td>
<td>CRJ 127 – ACTE 18 or SATV 470 or WR 246 (offered alternate year of CRJ 110)</td>
<td>3</td>
</tr>
<tr>
<td>Criminal Justice-Intro to Criminal Justice</td>
<td>Yearlong</td>
<td>CRJ 110 – ACTE 18 or SATV 470 or WR 246 (offered alternate year of CRJ 127)</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Drawing/Design</td>
<td>Yearlong</td>
<td>CAD 257 – No qualifying scores required</td>
<td>6</td>
</tr>
<tr>
<td>English Composition 121</td>
<td>Yearlong</td>
<td>ENG 121 – ACTE 18 or SATV 470 or WR 246</td>
<td>3</td>
</tr>
<tr>
<td>English Composition 121</td>
<td>Fall</td>
<td>ENG 121 – ACTE 18 or SATV 470 or WR 246</td>
<td>3</td>
</tr>
<tr>
<td>English Composition 122</td>
<td>Fall</td>
<td>ENG 122 – ACTE 26 or SATV 600</td>
<td>3</td>
</tr>
<tr>
<td>Intro to Literature 115</td>
<td>Spring</td>
<td>LIT 115 – ACTE 18 or SATV 470 or WR 246</td>
<td>3</td>
</tr>
<tr>
<td>Marketing 2</td>
<td>Yearlong</td>
<td>MAR 216 – ACTE 17 or SATV 470 or WR 236</td>
<td>3</td>
</tr>
<tr>
<td>Medical Careers</td>
<td>Fall or Spring</td>
<td>HPR 178 – No qualifying scores required</td>
<td>3</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>Spring</td>
<td>MAT 135/136</td>
<td>4</td>
</tr>
<tr>
<td>Survey of Calculus</td>
<td>Spring</td>
<td>MAT 125 – ACTM 24 or SATM 560 or AAF 280</td>
<td>4</td>
</tr>
</tbody>
</table>

Some facts you should know:
- 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 concurrent credit.
- Students are required to complete all necessary steps to qualify for Community College of Aurora credit. These steps include:
  1. Application to CCA (online)
  2. Registration for College Opportunity Fund (COF); credit earned will be deducted from the COF lifetime account (145.0 credit hours)
  3. Completed 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 the transferability of the course.
- Students may enroll in courses without earning college credit.

**Concurrent Enrollment 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 to courses may change at any time.**
What is ASCENT?
ASCENT stands for Accelerating Students through Concurrent Enrollment. It is a “5th Year Program” that allows seniors to remain enrolled at the high school and take a fifth year consisting entirely of college classes, if they have met all their high school graduation requirements and have taken 12 credit hours of college classes prior to the end of their senior year. How do students qualify for the program?

Students must:

- Remain enrolled at the high school for a fifth year (they do not attend classes at the high school).
- Be under the age of 21.
- Have a GPA of at least 2.0.
- Be on track to meet all high school graduation requirements by the end of their senior year.
- Have completed, or be on track to complete, at least 12 credit hours of college coursework prior to the completion of the 12th grade year (AP classes do not count as they are high school classes. CU Succeed and Concurrent Enrollment classes count).
- Not need basic skills or remedial course work as defined by the Colorado Commission on Higher Education’s (CCHE) remedial education policy.
- Have satisfied the minimum prerequisites for the college courses before enrollment in the course, including having the required ACT or Accuplacer scores.
- Complete an Individual Career and Academic Plan (ICAP) with your high school counselor.
- Apply to and be accepted into the Colorado postsecondary institution where they plan to take college classes.
- Have not participated in the ASCENT program in previous years.
- Courses earning Developmental Ed credit do not count towards ASCENT.

If students stay enrolled at the high school for a 5th year, when will they be considered a high school graduate? Until students complete the 5th year ASCENT program, they will still be classified as a high school student. High school transcripts will show high school graduation requirements have been met and students are considered enrolled in ASCENT for a 5th year. Once students complete or stop participating in the ASCENT program, they will receive their high school diploma and be classified as a high school graduate. It is important for families to weigh all their financial options before committing to the ASCENT program.

How much college tuition will Cherry Creek pay?
Cherry Creek will pay tuition at the local community college tuition rate. If a student attends a school other than a community college, they will only be eligible for tuition at the local community college tuition rate. The payment of any tuition charged above the community college rate would be the responsibility of the student. Online classes and summer classes are not covered under the ASCENT program.

Will students be able to participate in a high school graduation?
Yes! Students will still participate in the graduation ceremony with their high school class. Students will receive certificates stating that they are ASCENT students for the 2020-21 school year. At the completion of the ASCENT year, they will receive a high school diploma.

Where can students take college classes?
Students can take classes at any two-year or four-year Colorado school that has an ASCENT agreement in place with Cherry Creek Schools. The agreements are currently under development.

Can a student participate in college activities and athletics?
Students may participate in college activities and club sports but are not eligible to participate in inter-collegiate athletics. Students who plan to play NCAA athletics should not participate in ASCENT.
Advanced Placement (AP) Classes

Advanced Placement (AP) courses are some of the most rigorous courses offered at CTHS and will receive weighted grades.

AP courses offered include the following: AP English Language, AP English Literature, AP Government and Politics, AP United States History, AP Psychology, AP World History, AP Human Geography, AP Calculus AB, AP Calculus BC, AP Statistics, AP Biology, AP Chemistry, AP Environmental Science, AP Physics, AP Spanish Language, AP Computer Science, AP Computer Science Principles, AP Music Theory, AP Seminar, and AP Research.

Advantages of Taking AP Classes
• AP courses and exams begin the journey through college level academic challenges.
• Collegiate institutions recognize that applicants with AP experience are better prepared for the demands of college.
• Tuition savings are realized for students whose AP 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.

Advanced Placement Considerations
• All CTHS students are encouraged to take at least one AP level course in high school.
• Before committing to multiple AP exams, students should consider the following:
  * Increased amount of homework for each class
  * Increased rigor of coursework
  * Time management skills around balancing multiple high-level courses
  * Extra-curricular activities that might impair ability to fulfill course requirements
• AP courses have weighted grades; however, students might experience lower grades as result of the intense study and homework requirements.
• AP students should expect to complete a minimum of one and a half hours of homework per AP class each night. This is in addition to non-AP classes.
• Students enrolled in Advanced Placement classes at CTHS are expected to sit for May exams.
• AP exams cost approximately $100 per exam.
• Exam fees are due first semester of next school year.
• Financial aid is available for exam fees.
• Many AP courses require summer work. See teacher or school website for specifics.
• Research supports the fact that high school students enrolled in AP courses have a higher success rate during freshman year of college.
AP Scholar Awards Program

**AP Scholar**: Granted to students who receive grades of 3.0 or higher on three or more AP exams on full year courses (or the equivalent).

**AP Scholar with Honor**: Granted to students who receive an average grade of at least 3.25 on all AP exams taken and grades of three or higher on four or more of these exams on full year courses (or the equivalent).

**AP Scholar with Distinction**: Granted to students who receive an average grade of at least 3.5 on all AP exams taken and grades of three or higher on five or more of these exams on full year courses (or the equivalent).

**National AP Scholar**: Granted to students in the United States who receive an average grade of at least 4.0 on all AP exams taken, and grades of four or higher on eight or more of these exams on full year courses (or the equivalent).

AP Capstone Program

The College Board’s AP Capstone is an innovative and engaging college-level program for high school students 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 life. AP Capstone encourages a passion for learning, transforming students into curious, collaborative, and independent thinkers with skills that are valued and sought after by colleges and universities.

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. 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. These stipulations are directed by the College Board.
International Baccalaureate (IB)
Diploma 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. The student who satisfies the demands 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.

Brief History
The International Baccalaureate is located in Geneva, Switzerland. The IB has authorized individual schools throughout the world to offer an IB curriculum since 1968. Cherokee Trail High School received this official authorization in April 2005. Worldwide, there are over 4000 IB Programs in 151 countries. For further information about the Cherokee Trail IB Program, contact the IB Office at 720-886-2040 or visit the Cherokee Trail website. Worldwide information about IB and university recognition policies can be found at www.ibo.org.

Advantages of Receiving an IB-Diploma
- The IB Diploma has become a symbol of academic integrity and intellectual promise.
- 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.
- Participation in the IB Program is widely lauded by American as well as international universities.
- Potential tuition savings for students whose IB performance awards them college credit.
- Students receive an International Diploma recognized worldwide.

Pre-IB Diploma for Ninth and Tenth Grade
Cherokee Trail High School provides a Pre-Diploma Program for grades 9 and 10. Students wishing to enroll in the Pre-Diploma program must follow application procedures to be accepted into the program. Pre-Diploma courses receive weighted grades (World Languages courses may be the exception).

IB for Eleventh and Twelfth Grade
The International Baccalaureate curriculum* for juniors and seniors consists of six subject groups:

Language A  English, including selections from world literature written in English  
Language B (learned language) French or Spanish  
Individuals and Societies History of the Americas  
Experimental Sciences Biology, chemistry, and physics  
Mathematics Mathematical studies, mathematics  
Electives Business and management, economics, design technology, film, music, psychology, sports, exercise, health science, theatre, visual arts, and a second subject from one other IB subject areas.

*IB courses receive weighted grades (excluding world language classes levels 1-3).  
*All IB Diploma candidates are required to complete an exam in each of the six groups. IB exam fees apply.

To receive the IB Diploma, students must also complete three additional requirements:
- The extended essay of no more than 4,000 words that provides the experience of an independent research.  
- A course entitled Theory of Knowledge (TOK), which explores the relationships among various disciplines.  
- Participation in 150 hours of CAS activities (Creativity, Action, Service).
Performing/Visual Arts Distinction

The Performing Arts/Visual Arts Distinction within the Liberal Arts Baccalaureate recognizes students who demonstrate excellence in upper level visual and/or performing arts while demonstrating a dedication to overall academic success.

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

- Two full credits in visual and/or performing arts.
- 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 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

The Business Distinction within the Liberal Arts Baccalaureate recognizes students who are competent and proficient in business and marketing concepts and skills, which contributes to their future success in their chosen careers. There are two options for students to meet the requirements for the Business Distinction. Option One will primarily apply to students who have taken Business/Marketing courses throughout high school, whereas Option Two will primarily apply to students who have taken upper level Business/Marketing courses during their junior and/or senior year.

**OPTION ONE:**  
Students must earn a total of 5 points by taking Business and Marketing courses and earning a B or better. A minimum of 2 points must be earned during the student’s junior and/or senior year.

**OPTION TWO:**  
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.

Regardless of which option the student selects, all students must meet these additional requirements:  
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).

<table>
<thead>
<tr>
<th>ELIGIBLE BUSINESS/MARKETING COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>.5 POINTS PER SEMESTER</strong></td>
</tr>
<tr>
<td>Accounting 1</td>
</tr>
<tr>
<td>Business Law</td>
</tr>
<tr>
<td>Business Management</td>
</tr>
<tr>
<td>Career Connections</td>
</tr>
<tr>
<td>Computer Applications</td>
</tr>
<tr>
<td>Personal Finance</td>
</tr>
<tr>
<td>Marketing 1</td>
</tr>
<tr>
<td>Multimedia 1</td>
</tr>
<tr>
<td>Web Page Design 1</td>
</tr>
</tbody>
</table>
Science, Technology, Engineering, and Mathematics (STEM) Baccalaureate

The world has a need for 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 post-secondary course work 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 three areas of technology. These three areas of technology are: engineering technology, computer programming, and/or web development.

The STEM Baccalaureate is open to all students including those in the International Baccalaureate Program. In order 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).

<table>
<thead>
<tr>
<th>Four years of science AND four years of math are required for all STEM baccalaureate options</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
</tr>
<tr>
<td>Four years of math, including at least one of the following: AP Calculus AB, AP Calculus BC, Calculus, IB Math (SL1, SL2, HL1, HL2), Trigonometry/Pre-Calculus Honors, AP Stats</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPLETE THE ENTIRE COLUMN FOR ONE OF THE THREE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGINEERING TECH OPTION</strong></td>
</tr>
<tr>
<td>SELECT ONE OR TWO TO TOTAL 1.0 CREDITS:</td>
</tr>
<tr>
<td>Pre-Engineering Tech 1, Pre-Engineering Tech 2, Robotic Tech, Manufacturing Production and Design, Engineering Design, Architectural Design, IB Design Tech HL 1, or STEM Projects</td>
</tr>
<tr>
<td><strong>PROGRAMMING OPTION</strong></td>
</tr>
<tr>
<td>2.0 CREDITS FROM THE FOLLOWING:</td>
</tr>
<tr>
<td>Intro to Computer Programming 1</td>
</tr>
<tr>
<td>Intro to Computer Programming 2</td>
</tr>
<tr>
<td>Robotics</td>
</tr>
<tr>
<td>AP Computer Science Principles</td>
</tr>
<tr>
<td>AP Computer Science</td>
</tr>
<tr>
<td><strong>WEB DEVELOPMENT OPTION</strong></td>
</tr>
<tr>
<td>Computer Applications</td>
</tr>
<tr>
<td>Multimedia</td>
</tr>
<tr>
<td>Web Page Design 1</td>
</tr>
</tbody>
</table>

| SELECT ONE: |
| Applied Tech Sr. Project, 12th Grade Project Drawing, IB Design Tech HL2 or STEM Projects Year 2 |
| Web Page Design 2 |

REGARDLESS OF THE OPTION YOU CHOOSE, YOU MUST EARN A WEIGHTED B OR HIGHER IN ALL COURSES APPLIED TO THE STEM DISTINCTION
Frequently Asked Questions (FAQs)

Q: **Why are different baccalaureate programs offered at CTHS?**
A: We wish to provide students with the greatest opportunity to be successful in college, university, and any post-secondary career opportunities. Each baccalaureate program (academic pathway) is unique and will allow junior and senior students to focus on areas of interest. The baccalaureate programs give CTHS a distinctive identity.

Q: **Can junior and senior students take classes in any of the baccalaureate programs?**
A: Yes, providing they meet the prerequisites and/or teacher approval.

Q: **Are there special diplomas associated with each baccalaureate program?**
A: The International Baccalaureate Diploma is awarded to students who successfully complete all requirements. This diploma is in addition to a student’s high school diploma and is presented by IBO in Geneva, Switzerland. Students fulfilling requirements for baccalaureate programs will have a special distinction during commencement.

Q: **Who can participate in the pre-diploma program?**
A: The CT Pre-IB program is open to students who can fulfill two years of honors/pre-diploma classes prior to becoming an IB diploma candidate in 11th grade, and other students with approval.

Q: **What curriculum options are there for high achieving students?**
A: Cherokee Trail High School offers honors courses in all core areas as well as World Languages. Students can participate in Advanced Placement or Concurrent Enrollment courses, or the IB program.

Q: **How many classes does a student take each year?**
A: 9th grade students are required to take seven classes including seminar, 10th grade students are required to take six classes, 11th grade students are required to take six classes, and 12th grade students are required to take six classes first semester and five classes second semester.

Q: **What schedule does Cherokee Trail High School utilize?**
A: CTHS follows the alternating block schedule.

Q: **Are career and technical education courses available?**
A: A variety of CTE courses are available to 9th–12th grade CTHS students. Many of these opportunities are hosted at CT and at the Cherry Creek Innovation Campus. Students are encouraged to see their counselor for more information.
Technology Platforms

**MyCherryCreek**
The My.CherryCreekSchools.org web portal is a one stop shop for both students and parents. Access to PowerSchool and Schoology provide valuable information regarding academic progress. Parents can check their child’s attendance and grade history by logging in to PowerSchool via my.cherrycreekschools.org website using the email and password they used when they registered their student. Students can also check their attendance and grades using their separate UserID and password.

**PowerSchool**
PowerSchool is a web-based student information system (SIS) which provides real-time information to school administrators, teachers, parents, and students. Parents can check their child’s attendance and grade history by logging in to PowerSchool via my.cherrycreekschools.org website using the email and password they used when they registered their student. Students can also check their attendance and grades using their separate User ID and password.

**Schoology**
Schoology is our learning management system. Here, students will find access to their current courses containing teacher announcements, homework, quizzes, and other materials used in the classroom. Access is obtained via my.cherrycreekschools.org.
Definitions

ADVANCED PLACEMENT (AP): 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: 94-minute 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 district 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.

The International Baccalaureate (IB) program is designed for those students who begin the program in the 9th grade by taking CT Pre-IB/honors courses, and successfully complete the requirements leading to the prestigious International Baccalaureate Diploma. Students must apply and be accepted to participate in the International Baccalaureate Diploma Program. All CT Pre-IB/honors and IB classes have weighted grades (excluding World Language levels 1-3).

During the 11th and 12th grades, students will have the flexibility to select courses from the other baccalaureate programs at Cherokee Trail High School—the STEM Baccalaureate and the Liberal Arts Baccalaureate.

CREDIT (HIGH SCHOOL UNIT OF CREDIT): One unit of credit equals two successfully completed semesters of high school work. One semester of successfully completed high school work earns 0.5 credits. All students must earn a minimum of 22 credits (per Board policy, please see pg.5) 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: A 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 classes, honors, CT Pre-IB and IB classes (excluding World Language levels 1-3), levels 4 and 5 World Languages, and post-secondary 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.

NCAA APPROVED: All student athletes considering playing at the collegiate level need to be aware of the NCAA rules governing approved courses. Cherokee Trail High School’s current list of approved courses (48H List) can be found at www.ncaaclearinghouse.net. Please check with your school if you have questions or concerns.

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

**CE** Course is eligible for concurrent credit through either Community College of Aurora or Arapahoe Community College as delineated within the course description.

**I** Instrument cost.

**LB** Course fulfills requirements for Liberal Arts Baccalaureate distinction.

**NCAA** Course is approved through NCAA rules for students considering competing in collegiate level athletics.

**STEM** Course fulfills requirements for STEM Baccalaureate distinctions.

**U** Uniform cost.

**W** Course earns weighted grades.

* All Advanced Placement (AP) level courses and International Baccalaureate (IB) program courses are indicated in the course title.

Community College of Aurora (CCA)

Arapahoe Community College (ACC)

Technology Students Association (TSA)

National Aeronautics and Space Administration (NASA)
Cherokee Trail High School

Business & Marketing Department

Potential 4-Year Pathways

**General Business**
- Business Management (Semester course)
- Business Law (Semester course)
- Accounting 1
- IB Business Management SL
- Career Exploration
- International Baccalaureate
  - IB Business Management SL
  - IB Business Management HL 1
  - IB Business Management HL 2

**Finance**
- Business Management (Semester course)
- Personal Finance (Semester course)
- Accounting 1
- Accounting 2

**Marketing**
- Business Management (Semester course)
- Computer Applications (Semester course)
- Marketing 1/DECA
- Marketing 2/DECA
- Sports & Entertainment Marketing/DECA
- Marketing CO-OP
  - (Semester course)
  - (May be taken concurrently with Marketing 2 or Sports & Entertainment Marketing)

**Business Technology**
- Business Management (Semester course)
- Computer Applications (Semester course)
- Web Page Design 1 (Semester course)
- Web Page Design 2 (Semester course)
- Multimedia (Semester course)
- Multimedia 2 (Semester course)
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 determinant 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.

Business Courses

**ACCOUNTING 1 LB**

Grades: 9, 10, 11, 12  
Year: 1 credit

Accounting 1 is an introductory course designed to acquaint students with the accounting cycle and an understanding of the role accounting plays in the ongoing operation of a business. During this year-long class, students will learn the fundamentals of accounting using a sole proprietorship and corporation as a basis for study. Students will develop an understanding of business activities by recording and summarizing basic accounting transactions, preparing financial statements, payroll records, income tax forms, and interpreting financial statements as part of the management decision-making process. A combination of manual and PC-based automated accounting systems will be used. This course is the first in a two-year program. Students who elect to complete the two-year program will receive community college credit. **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 services to others, social and competitive events.**

**ACCOUNTING 2 LB CE**

Grades: 10, 11, 12  
Year: 1 credit

Prerequisite: Successful completion of Accounting 1 or teacher recommendation

This course aligns with the Colorado Community College course Accounting Principles I (ACC 121). Students will earn high school credit while at the same time enroll in and earn 4 community college credits with the opportunity of transferring credit to a four-year university.

In this course, students learn the fundamentals of accounting using sole proprietorship, partnerships, and corporations organized as service providers, merchandising, and manufacturing concerns. Students develop an understanding of business activities by recording and summarizing business transactions, preparing financial statements, payroll records, and financial analysis of business data. A combination of manual and PC-based automated accounting systems will be used. **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. Professional certification available through this course at an additional fee.**
**BUSINESS LAW 1 LB**

Grades: 9, 10, 11,12  
Semester: .5 credit

Business Law will address legal topics concerning business and the individual. Topics of discussion will include contracts (e.g. renting an apartment, buying a car, obtaining a credit card, laws affecting minors, fraud), negligence (e.g. slipping/falling, car accidents), intentional torts (e.g. trespassing, defamation, assault, battery, invasion of privacy), civil procedure (e.g. trial process), crimes, constitutional law and the court systems, intellectual property law, employment law, credit, and ethics/social responsibility. The course will also include guest speakers and law-related movies and/or videos illustrating the legal topics discussed in the classroom. **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 to others, social and competitive events.**

**BUSINESS MANAGEMENT LB**

Grades: 9, 10, 11, 12  
Semester: .5 credit

This course will introduce students to the concepts of entrepreneurship and business management. Students will be provided with information and skills that lead to success in developing and managing businesses, including international business opportunities. The curriculum includes units on management theory, finance, marketing, entrepreneurship, ethics business communications, decision making, and business law. **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 to others, social and competitive events.**

**CAREER EXPLORATION LB**

Grades: 11, 12  
Semester: .5 credit

Students enrolled in Career Exploration will learn about a wide variety of careers and career pathways and develop a strong understanding of themselves. Students will participate in numerous activities and complete a variety of assessments to help them identify their strengths, interests, preferences and values. Additionally, students will hear from numerous guest speakers representing careers in high growth industries in Colorado as well as careers of student interest. They will also have the opportunity to tour local community businesses in these areas. Career tours will introduce students to careers in a particular industry and expose them to a variety of work environments. Through Career Exploration students also have the opportunity to develop job readiness skills such as: career analysis, interview techniques, work place etiquette and ethics, interpersonal skills and develop leadership skills. Instruction also focuses on personal message, social media and financial literacy. Upon completion of the course, students will have a clearer idea of where they fit into the world of work and have an understanding of pathways to a given career.

**COMPUTER APPLICATIONS LB STEM CE**

Grades: 9, 10, 11, 12  
Semester: .5 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 Introduction to PC Applications (CIS 118). Students will earn high school credit while at the same time enroll in and earn 3 community college credits with the opportunity of transferring credit to a four-year university.

With increased use of online testing for all high school students, the need for keyboarding skills has increased. Comp Apps will provide students with basic keyboarding skills in addition to an introduction to digital applications that use photos, audio and video for public presentations. Software applications include - Word, Excel, Access, and PowerPoint. Instruction in Office 2016 teaches toward Microsoft Certification. The knowledge of these applications is vital for the students’ college and career readiness. Students are taught to apply problem solving, organizational, and motivational skills. This course is recommended for most business courses. **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 to others, social and competitive events.**
**IB BUSINESS MANAGEMENT HL 1 LB W**
Grade: 11
Year: 1 credit

Prerequisite: Acceptance to IB program

IB Business and Management HL1 is a rigorous and critical study of the ways in which individuals and groups interact in a dynamic business environment. It is an academic discipline that examines how business decisions are made and how these decisions make an impact on the internal and external environments. A fundamental feature of this course is the concept of synergy. In a technical sense, it is a concept that means an organization should see an overall return greater than the sum of its parts. Senior IB students will also be required to complete an Internal Assessment research project during HL2. IB Business management HL1 is the first year of a two-year course. The IB exam is at the end of the second year. **Membership in DECA (An Association of Marketing Students) and FBLA (Future Business Leaders of America) is strongly encouraged.**

**IB BUSINESS MANAGEMENT HL 2 LB W**
Grades: 11, 12
Year: 1 credit

Prerequisite: IB Business Management SL1

IB Business and Management HL is a rigorous and critical study of the ways in which individuals and groups interact in a dynamic business environment. It is an academic discipline that examines how business decisions are made and how these decisions make an impact on the internal and external environments. A fundamental feature of this course is the concept of synergy. In a technical sense, it is a concept that means an organization should see an overall return greater than the sum of its parts. It is a third-year course in the Marketing program and can be a 6th subject for senior IB students who have competed IBM SL. One of the major objectives of IBM HL is to prepare IB seniors for the HL exam in May. Senior IB students who choose to test at the HL will also be required to complete an Internal Assessment research project. **Membership in DECA (An Association of Marketing Students) and FBLA (Future Business Leaders of America) is strongly encouraged.**

**IB BUSINESS MANAGEMENT SL 1 LB W**
Grades: 11, 12
Year: 1 credit

The program in IB Business and Management is designed to provide a broad-ranging introduction to the principles and some of the practices of organizations currently pursuing the activities outlined below, and set in a scene of international markets, exchange and production. Organizational Studies incorporates a wide range of activities designed to manage efficiently the production, distribution and exchange of goods and services, at the minimum cost within the framework of a personnel-oriented employment policy. **This course is required for the Management Advanced pathway. Membership in DECA (An Association of Marketing Students) and FBLA (Future Business Leaders of America) is strongly encouraged.**

**PERSONAL FINANCE LB**
Grades: 9, 10, 11, 12
Semester: .5 credit

This course aligns with all Colorado Financial Literacy Standards and is designed to help students develop their abilities to make wise financial decisions by recognizing, understanding and comparing the alternatives facing them as individuals. Additionally, students will learn how businesses manage their finances. Topics include: decision making, earning a living, managing finances and budgeting, saving and investing, buying goods and services, banking, using credit, and protecting against risk. Personal Finance course units integrate and align with Colorado Financial Literacy Standards. **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 to others, social and competitive events. Professional certification available through this course at an additional fee.**
Marketing Courses

IB BUSINESS MANAGEMENT HL 1 LB W
Prerequisite: IB Business Management SL
Grade: 11
Year: 1 credit

IB Business Management HL 1 is a rigorous and critical study of the ways in which individuals and groups interact in a dynamic business environment. It is an academic discipline that examines how business decisions are made and how these decisions make an impact on the internal and external environments. A fundamental feature of this course is the concept of synergy. In a technical sense, it is a concept that means an organization should see an overall return greater than the sum of its parts. Senior IB students will also be required to complete an Internal Assessment research project during HL2. IB Business Management HL 1 is the first year of a two-year course. The IB exam is at the end of the second year. **Membership in DECA (An Association of Marketing Students) is strongly suggested.**

IB BUSINESS MANAGEMENT HL 2 LB W
Prerequisite: IB Business Management SL
Grades: 11, 12
Year: 1 credit

IB Business Management HL 2 is a rigorous and critical study of the ways in which individuals and groups interact in a dynamic business environment. It is an academic discipline that examines how business decisions are made and how these decisions make an impact on the internal and external environments. A fundamental feature of this course is the concept of synergy. In a technical sense, it is a concept that means an organization should see an overall return greater than the sum of its parts. It is a third-year course in the Marketing program and can be a 6th subject for senior IB students who have completed IBM SL. One of the major objectives of IBM HL is to prepare IB seniors for the HL exam in May. Senior IB students who choose to test at the HL will also be required to complete an Internal Assessment research project. **Membership in DECA (An Association of Marketing Students) is strongly suggested.**

IB BUSINESS MANAGEMENT SL 1 LB W
Prerequisite: Acceptance to IB Diploma Program
Grades: 11, 12
Year: 1 credit

The program in IB Business Management is designed to provide a broad-ranging introduction to the principles and some of the practices of organizations currently pursuing the activities outlined below, and set in a scene of international markets, exchange and production. Organizational Studies incorporates a wide range of activities designed to manage efficiently the production, distribution and exchange of goods and services, at the minimum cost within the framework of a personal-oriented employment policy. This course is required for the Management-Advanced pathway. **Membership in DECA (An Association of Marketing Students) is strongly suggested.**

MARKETING 1 LB
Grades: 10, 11, 12
Year: 1 credit

Marketing 1 designed for the student who wants to learn more about marketing and sales systems. This course will build skills in sales, marketing, communications and professionalism. Some units of study are: advertising, promotion, marketing, display, salesmanship, merchandising, marketing math and job seeking skills. **Membership and participation in DECA (An Association of Marketing Students) is required.** This course is required for entry into Marketing 2, Sports & Entertainment Marketing, and Co-op.
**MARKETING 2 LB CE**

Grades: 11, 12  
Year: 1 credit

Prerequisite: Marketing 1

*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 Principles of Marketing (MAR 216). Students will earn high school credit while at the same time enroll in and earn 3 community college credits with the opportunity of transferring credit to a four-year university.

Marketing 2 is designed to teach analysis of marketing processes and the strategies and their application to business and the individual consumer. Students will study social media marketing, leadership and communication skills, international marketing, as well as how to develop and present a formal marketing plan. **Membership and participation in DECA (An Association of Marketing Students) is required AND Marketing Co-op is encouraged.**

**MARKETING CO-OP**

Grades: 11, 12  
Semester: .5 credit

Prerequisite: Marketing 1 or teacher recommendation

Marketing Co-op is a course that is strongly recommended for students to take in conjunction with either Marketing 2, Sports and Entertainment Marketing, or IB Business Management. Co-op is a semester course in which students will receive credit for working at a marketing-related job outside of the school. Students will receive 1 full credit for working 250 hours per semester and ½ credit for working 125 hours each semester. Evaluations for each semester are given by the student's employer. Students must be enrolled in a marketing course to enroll in Co-op.

Marketing I students may only enroll in Co-op if working in the DECA school store. For all DECA students employed in the school store, Co-op is required. For working in the DECA school store, 0.5 credit per semester will be awarded. Required hours for credit are calculated based on the school store schedule for the current school year. Co-op will appear in the students’ schedule as a class, though there is no official meeting time. **Membership in DECA (An Association of Marketing Students) is an integral part of the marketing program.**

**SPORTS & ENTERTAINMENT MARKETING LB**

Grades: 11, 12  
Year: 1 credit

Prerequisite: Marketing 1

With Sports and Entertainment Marketing you 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. **Membership and participation in DECA (An Association of Marketing Students) is required.**

### Instructional Technology Courses

**MULTIMEDIA 1 LB STEM CE**

Grades: 9, 10, 11, 12  
Semester: .5 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 Adobe Illustrator (MGD 102). Students will gain extensive knowledge of Adobe CC, the ultimate playground for bringing out the best in your digital images, photo-editing, transforming images and text into anything you can imagine, and showcasing images and text in extraordinary ways. Students will learn skills in Photoshop, Illustrator, InDesign, and Flash. This course introduces the types of equipment and technical considerations used in multimedia productions and the multimedia professions, including the use of tablets for drawing and the green screen for video. Students will have the opportunity to design “real life” projects for themselves and CTHS departments. Students will earn high school credit while at the same time enroll in and earn 3 community college credits with the opportunity of transferring credit to a four-year university.
**MULTIMEDIA 2 LB STEM CE**

Grades: 10, 11, 12  
Semester: .5 credit

Prerequisite: Multimedia 1  
*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 Adobe Photoshop I (MGD 111). Students will build upon their Multimedia skills to design and integrate projects using Adobe CC Photoshop, Illustrator, InDesign, Flash, Dreamweaver and Adobe Premiere Elements. Students explore a wide range of selection and manipulation techniques that can be applied to photos, graphics and videos, including the Adobe Photoshop Touch software for tablets. Students apply digital applications that support digital writing and use photos, audio and video for public presentations. This course provides instruction in Adobe CC and teaches toward Adobe Certification. It is recommended for most business and marketing courses. Students will earn high school credit while at the same time enroll and earn 3 community college credits with the opportunity of transferring credit to a four-year university. 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 services to others, social and competitive events.

**WEB PAGE DESIGN 1 LB STEM**

Grades: 9, 10, 11, 12  
Semester: .5 credit

Students will be introduced to HTML code and use it to build basic web page and/or sites. Students will also be introduced to HTML editors and coding, elements of design, CSS style sheets, and graphics editors using the latest software. Elements built using these tools will be incorporated to create powerful web pages and/or sites. Students will learn ethical responsibilities, searching and information retrieval and the importance of verifying the validity of information posted on the web. 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 services to others, social and competitive events.

**WEB PAGE DESIGN 2 LB STEM CE**

Grades: 10, 11, 12  
Semester: .5 credit

Prerequisite: Successful completion of Web Design 1 or teacher recommendation  
*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 Web Design 1 (MGD 141). Students will earn high school credit while at the same time enroll in and earn 3 community college credits with the opportunity of transferring credit to a four-year university. Students will continue their study of the Web and the current developments in that area of technology. Students will expand their knowledge of Web design using start-of-the-art hardware and software to incorporate video, sounds, CGI, applets, and other Web developments in their sites. Students will learn to use cascading style sheets (CSS) to provide different looks for a website quickly and effectively. Students will learn to use CSS for page layout as required by the World Wide Web Consortium (W3C) standards. 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 services to others, social and competitive events.
Engineering Technologies and Computer Science
Department Course Descriptions

These courses offer students a variety of experiences that will help them choose and prepare for the 21st century technology careers. Students that 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.

All Engineering Technology courses qualify as CTE (Career and Technical Education) courses.

**AP COMPUTER SCIENCE LB STEM**
Grades: 10, 11, 12
Year: 1 credit
Prerequisite: Intro to Computer Programming 1, AP Computer Science Principles

Advanced Placement Computer Science is a college-level course in the study of computer programming and applications of a computer to solve problems. Students will continue their study of programming and study the Java programming language. The course requires well-developed organizational skills, a high degree of motivation and intensive study. Students may have to put in extra time outside of the class for review and lab work. The structure of the course is designed to prepare students for the Advanced Placement test in AP Computer Science. 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, please plan accordingly. Students should expect 1.5 hours of homework per class session and teacher-led outside-of-class AP study sessions. If applicable, mandatory summer work for this course can be found on the school website. Partial exam scholarships are available. **Students are encouraged to join 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.**

**AP COMPUTER SCIENCE PRINCIPLES STEM**
Grades: 10, 11, 12
Year: 1 credit
Prerequisite: Intro to Computer Programming 1 or teacher recommendation

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of computer science including: programming, abstraction, algorithms, large data sets, the internet, cyber security, and how computing impacts society. AP Computer Science Principles will give students the opportunity to address real world problems and build relevant solutions. The AP exam is comprised of three parts: 1) the “Explore Project” which involves extensive research to create an artifact and a written report to explain a technology innovation, 2) the “Create Project” where students create a program to accomplish a task and demonstrate the use of abstraction and algorithms, and 3) a comprehensive multiple choice test given on the AP exam date. **Students are encouraged to join 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.**

**APPLIED TECH SENIOR PROJECT/TSA STEM**
Grades: 11, 12
Semester: .5 credit
Prerequisite: Teacher approval
Materials fee: $25

Students will work with the teacher to design an independent advanced project in which they have developed a strong interest. Students will be required to document all work through either approved social media or engineering, publicly promote the project at an approved school event, and make formal videos and/or presentations. **Membership in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required.**
**ARCHITECTURAL DESIGN/TSA STEM**

Grades: 10, 11, 12  
Year: 1 credit

Materials fee: $20

Architectural Design provides an introduction to the study of residential design and construction. Students will learn how to design and create detailed floor plans with supplemental plans such as elevation, sectional, site, electrical and plumbing drawings. An introduction to construction topics related to the residential design will be included. Students will complete all the steps necessary to design a custom home. The course will culminate with students taking the Revit User Certification exam, an industry level exam used to demonstrate a student’s level of expertise using Revit. **Membership and participation in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required.**

**COMPUTER AIDED DESIGN STEM CE**

Grades: 9, 10, 11, 12  
Year: 1 credit

This course aligns with the Colorado Community College course Solid Works Basic (CAD 256). Students will earn high school credit while at the same time enroll in and earn community college credit with the opportunity of transferring credit to a four-year university. 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. **Membership and participation in TSA (Technology Students Association) is an integral part of the technology program and is highly encouraged.**

**ENGINEERING DESIGN/TSA STEM CE**

Grades: 10, 11, 12  
Year: 1 credit

Prerequisite: Computer Aided Design

Materials fee: $20

This course aligns with the Colorado Community College course Solid Works Mechanical (CAD 257). Students will earn high school credit while at the same time enroll in and earn community college credit with the opportunity of transferring credit to a four-year university. Engineering Design is the second in a series of classes offered in the area of 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 will work on achieving SOLIDWORKS certifications throughout the year. **Membership and participation in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required.**

**ENGINEERING TECHNOLOGIES CO-OP/TSA STEM**

Grades: 10, 11, 12  
Year: 1 credit

Prerequisite: Manufacturing Production Design/Dev or IB Design Technologies and teacher recommendation

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. **Membership and participation in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required. This course may be repeated for credit.**
**IB DESIGN TECHNOLOGY HL 1**  
Prerequisite: Acceptance to the IB Diploma Program  
Materials fee: $25

The program in IB Design Technology is designed to provide a broad introduction to the design process. In-depth coverage of the responsibility of the designer, materials science, production processes and techniques, computer-aided design/computer-aided manufacturing, and clean technology and green design will be the focus of the program. Students will also receive practical experience in developing knowledge of the aforementioned topics through an internal assessment. Design Technology allows students to explore how products are designed from theory to production, and how the product interacts with the consumer and the environment. The student will have the opportunity to conduct an intensive and self-directed design project. IB Design Technology HL 1 is the first of two years in the program. A student can take HL 1 and HL 2 and then test at the SL level as a senior.

**IB DESIGN TECHNOLOGY HL 2**  
Prerequisite: IB Design Technology HL 1  
Materials fee: $25

Design Technology HL, in addition to covering topics in SL, will include the topics of User-centered design (UCD), Sustainability, Innovation and Markets, and Commercial Production. Additionally, the Design Project, which will allow students to apply theory learned in the classroom in a practical manner, will be the focus of the 2nd year. While the class stresses the concepts of design, engineering, architecture, and business, any student will come away with a broad knowledge base, regardless of their career plans. A student can take HL 1 and HL 2 and then test at the SL level as a senior.

**INTRO TO COMPUTER PROGRAMMING 1**  
Prerequisite: IB Design Technology HL 1  
Materials fee: $25

This course introduces students to the fundamentals of programming using the Python programming language in integrated development environment. Students will learn to use the Python programming language to learn core programming concepts including variables, data types, if statements, loops, lists, strings, functions, methods, parameter passing and classes. Students will be exposed to both text-based and graphics-based programming methods. Students will be introduced to microcontrollers and concepts of physical computing. This course will serve as an introduction to concepts taught in Programming 2 and AP Computer Science. Students are encouraged to join 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.

**INTRO TO COMPUTER PROGRAMMING 2**  
Prerequisite: Intro to Computer Programming 1 or teacher recommendation

Programming 2 combines problem-solving techniques with computer game design and implementation to introduce the student to basic gaming concepts. Students design, implement, and test computer games using software that allows for basic game creation through a wide variety of game creation tools. Students will use various software API’s to create interactive computer games across a broad spectrum of topics. This course will serve as an introduction to concepts taught in AP Computer Science. Students are encouraged to join 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/DEVTS A  STEM  Grades: 9, 10, 11, 12  Semester: .5 credit
Prerequisite: Pre-Engineering Technology 1 or Computer Aided Design
Materials fee: $20

In this enterprise class, 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. **Membership in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required.** May be repeated for credit.

MEDICAL & SUSTAINABLE TECHNOLOGY  Grades: 9, 10, 11, 12  Semester: .5 credit
Materials fee: $20

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, bio plastics, biofuel, alternative food production, waste management and prosthetics.

PRE-ENGINEERING TECHNOLOGY 1  STEM  Grades: 9, 10, 11  Semester: .5 credit
Materials fee: $20

Pre-Engineering Technology 1 is an overview of many different technologies and the starting point for most technology classes at Cherokee Trail. Students will have the opportunity to explore technological areas such as 3D printing, laser cutting/engraving, 3D video game design, renewable energy, electro-mechanical systems, home design and the engineering process. Students will learn how to use many of the tools in the fabrication lab.

PRE-ENGINEERING TECHNOLOGY 2/TSA  STEM  Grades: 9, 10, 11  Semester: .5 credit
Prerequisite: Pre-Engineering Technology 1
Materials fee: $20

This course allows the students to continue their study of technology education and builds upon the skills learned in Pre-Engineering 1. Students may explore technological areas such electronics, microcontrollers, engineering problem solving, circuit board, and computer aided manufacturing. **Membership in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required.**

ROBOTIC TECHNOLOGIES/TSA  STEM  Grades: 10, 11, 12  Semester: .5 credit
Prerequisite: Pre-Engineering Technology 1 or Programming 1 and teacher recommendation

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. Students will work through a series of simulations and experience challenges based upon state and nationally recognized competitions. **Membership and participation in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required.**
The Senior Project Technology class allows seniors to continue their study of engineering design and/or architectural design. Students will work collaboratively with the teacher to design an independent advanced project in which they have developed a strong interest. Students will be required to document all work through an engineering notebook, complete a job shadow, publicly promote the project at an approved school event, and make formal presentations. Time management and independent learning are skills are required in this course. This class will be instrumental in helping students make future career and educational decisions. Membership and participation in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required.

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 advance 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 upon 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. Membership and participation in TSA (Technology Students Association) is an integral part of the technology program and membership dues ($25) are required. This course may be repeated for credit.
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 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 LITERATURE HONORS W NCAA**
Grade: 11  Year: 1 credit
Prerequisite: English 10
Required: Summer reading assignment

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. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.

**AP ENGLISH LANGUAGE AND COMPOSITION W NCAA**
Grades: 11, 12  Year: 1 credit
Prerequisite: Pre-AP English 10, Pre-IB English 10, or American Lit Honors, and teacher recommendation
Required: Summer reading assignment

The course is designed for academically motivated students who read and write well above grade level. The course is fundamentally a freshmen 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. Students should expect 1.5 hours of homework per class session and/or teacher led outside-of-class AP study sessions. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.
**AP ENGLISH LITERATURE & COMPOSITION W NCAA**
Grades: 12  
Year: 1 credit

Prerequisite: American Literature Honors or AP English Language and Composition, and teacher recommendation
Required: Summer reading assignment

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. Students should expect 1.5 hours of homework per class session and/or teacher led outside-of-class AP study sessions. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.

**CP ENGLISH 12 NCAA**
Grade: 12  
Year: 1 credit

Prerequisite: Junior-level English

The purpose of the course is to ensure that students meet the college readiness standards as defined by ACT in writing and reading by the end of their senior year. 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 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. In an effort 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 credit

Prerequisite: English 9

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.

**ENGLISH COMPOSITION 121 CE NCAA**
Grade: 12  
Year: 1 credit

Prerequisite: 11th Grade English and teacher recommendation
* 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 English Composition 121 (ENG 121). 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.
ENGLISH COMPOSITION 121 CE NCAA
Prerequisite: 11th Grade English and teacher recommendation
* 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 English Composition 121 (ENG 121). 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.

ENGLISH COMPOSITION 122 CE NCAA
Prerequisite: Passed the A.P. Lang. exam as a junior at CT or 121 at another school
* 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 English Composition 122 (ENG 122). 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 English Composition 121. 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 English Composition 121 MUST enroll in English Literature 115 or English Composition 122 second semester.**

ENGLISH LITERATURE 115 CE NCAA
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 Colorado Community College course English Literature 115 (LIT 115). 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.

ENGLISH TUTORIAL (SENIOR)
Co-requisite: Currently enrolled in a regular-level senior English class and instructor approval

This course is designed to be a support class for seniors transitioning from an essentials level to a regular level English class or for students who would like additional support in their senior English elective classes. Reading/writing strategies and organizational skills are reinforced. The instructor supports students in order to help them be successful in regular English.

IB ENGLISH HL 1 W NCAA
Prerequisite: Acceptance to the IB Diploma Program
Required: Summer reading assignment required

This is the first level of a two-year in-depth study of world literature designed to prepare IB candidates for the Language A-1 HL assessments required of the International Baccalaureate program. Students analyze literary works for their literary excellence, social significance, and personal meaning. Students compare literature from other cultures and read works originally written in another language and translated into English. Students present written and oral commentaries as well as essays dealing with these works (both prepared and timed responses). They also begin World Literature papers 1 and 2, which they polish the fall of their senior year. Grades are weighted. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.
IB ENGLISH HL 2  W NCAA  
Grade: 12  
Year: 1 credit  
Prerequisite: IB English HL 1  
Required: Summer reading assignment required  

This is the second level of a two-year in-depth study of world literature designed to prepare IB candidates for the Language A-1 HL assessments required of the International Baccalaureate program. Students analyze works for their literary excellence, social significance, and personal meaning. They complete the IB Oral Commentary and prepare for the exams which are completed in May. Grades are weighted. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.

IB FILM SL  W  
Grades: 11, 12  
Semester:.5 elective credit  
Prerequisite: Acceptance to the IB Diploma Program or teacher approval  

Through the study and analysis of film texts, this course explores film history, theory, and socio-economic background. The course develops students’ critical thinking abilities, enabling them to appreciate the multiplicity of cultural and historical perspectives in film. To achieve an international understanding within the world of film, students are taught to consider film texts, theories, and ideas from the points of view of different individuals, nations, and cultures. At the core of the course lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement, and imaginative synthesis that is achieved through practical engagement in the art and craft of film.

NEWCOMER ENGLISH LANGUAGE SUPPORT  
Grades: 9, 10, 11, 12  
Year: 1 credit  
Prerequisite: ELA teacher approval  

This course is intended only for students whose 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 will not count as a core year for NCAA clearinghouse.

PRE-AP ENGLISH 9  W NCAA  
Grade: 9  
Year: 1 credit  
Prerequisite: Assessment data or teacher recommendation  
Required: Summer reading assignment  

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 AP work during junior/senior years. Grades are weighted. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.

PRE-AP ENGLISH 10  W NCAA  
Grade: 10  
Year: 1 credit  
Prerequisite: Pre-AP English 9 or Pre-IB English 9 and teacher recommendation  
Required: Summer reading assignment  

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. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.
PRE-IB ENGLISH 9  W NCAA
Grade: 9  Year: 1 credit
Prerequisite: Acceptance to IB Diploma program
Required: Summer reading assignment

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. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.

PRE-IB ENGLISH 10  W NCAA
Grade: 10  Year: 1 credit
Prerequisite: Acceptance to the IB Diploma Program
Required: Summer reading assignment

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. A summer reading assignment is required for this class. The assignment will be available on the Cherokee Trail website by June 1.

READING LAB 1
Grade: 9  Semester: .5 elective credit
Prerequisite: Assessment data
Co-requisite: Currently enrolled in a grade level English

The goal of Reading Lab 1 is to develop the skills of its students so that they are able to 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  Semester: .5 elective credit
Prerequisite: Assessment data
Co-requisite: Currently enrolled in a grade level English

The ultimate 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 are able to 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: .5 elective credit
Prerequisite: Assessment data
Co-requisite: Currently enrolled in a grade level English

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.
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.

**Communication Arts Courses**

**All communication arts courses count towards the Fine Arts, Business/Marketing/Technical, or Career and Technical Education graduation requirement.**

**BEGINNING DEBATE**
Grades: 9, 10, 11, 12
Year: 1 fine arts credit
Materials Fee: $150/year for materials and competitions

This yearlong class is competitive in nature, but specifically designed for students who have never participated in Debate. By definition, Speech/Debate is competitive speaking, acting, and debate. This course focuses on the third of those three categories of competitive events. This course is co-curricular, and students are required to participate in competitive speech and debate competitions which are held on selected weekdays and Saturdays. Students will focus on the national cross-examination topics and public policy issues. They will research both affirmative and negative sides of the topic. Emphasis is on research, logic, writing critique briefs, use of evidence, speaking, and cross-examination techniques. Specific event descriptions can be found at [www.ctspeech.org/about](http://www.ctspeech.org/about).

**BROADCAST JOURNALISM/TV PRODUCTION**
Grades: 10, 11, 12
Year: 1 fine arts credit
Prerequisite: Video Production 1 or Intro to Journalism and application
Materials Fee: $30/year (Access to Adobe CC/SD Cards)

This course will address the production of broadcast journalism from conception through completion. Skills will be taught in advanced design, layout, filming, lighting, editing, and post-production techniques. Students will produce individual news packages as well as group packages about our school community and beyond. The student’s work is featured on [www.ctstoday.org](http://www.ctstoday.org).

**COMPETITIVE DEBATE**
Grades: 10, 11, 12
Year: 1 fine arts credit
Prerequisite: Beginning Debate
Materials Fee: $150/year for materials and competitions

This elective course explores the fundamentals of the communication process (speaking, listening, and nonverbal communication) and public debating. Units of study include communication theory as well as various forms of individual, partner, and team 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 contests. Students enrolled in this class will have the opportunity to become members of the National Speech and Debate Association as they participate in speech/debate tournaments, which are held on selected weekdays and Saturdays. This course may be repeated for credit.
**COMPETITIVE SPEECH**

Grades: 9, 10, 11, 12  
Year: 1 fine arts credit

Course Fee: $150/year for materials and competitions

This yearlong course is competitive in nature. By definition, Speech/Debate is competitive speaking, acting, and debate. This 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 competitive 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 www.ctspeech.org/about.

**INTRODUCTION TO JOURNALISM**

Grades: 9, 10, 11, 12  
Semester: .5 fine arts

Course 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 copy editing 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 four student publications: CT-TV, CTHSToday.org, The Guide, and/or The Legend in a limited capacity.

**NEWSPAPER**

Prerequisite: Application and teacher recommendation or Introduction to Journalism/Video Production 1  
Grades: 10, 11, 12  
Year: 1 fine arts credit

Course Fee: $30

To work on the school newsmagazine, *The Cherokee Trail Guide*, students must enroll in Newspaper. As they plan and produce this print publication and contribute to CTHSToday.org, students will study journalistic style and the basic requirements of investigative reporting. In addition, students will examine the production of newspapers and magazines, the history of journalism, and journalistic ethics. Students will be responsible for every aspect of creating a student publication: reporting, news and editorial writing, interviewing, editing, photography, layout and design, advertising design, advertising sales, and positive public relations. Students should plan to work periodically after school, evenings, and/or weekends. This course may be repeated for credit.

**PUBLIC SPEAKING**

Grades: 9, 10, 11, 12  
Semester: .5 fine arts

Public Speaking is highly recommended for all students. The aim of the course is to develop students' poise, self-confidence, 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**

Grades: 9, 10, 11, 12  
Semester: .5 fine arts

Course 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.
**YEARBOOK**  
Grades: 10, 11, 12  
Year: 1 fine arts credit

Prerequisite: Application and teacher recommendation or Introduction to Journalism/Video Production 1  
Course Fee: $30

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 and 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. This course may be repeated for credit.
Cherokee Trail High School

Math 2020-21

Collegiate Prep: Algebra 1, Geometry, Algebra 2, OPTIONS

Calculus HS Condensed: Algebra 1, Geometry/Precalculus, Algebra 2/Precalculus, OPTIONS

Calculus MS Condensed: Geometry, Algebra 2, OPTIONS

Multi-Variable Calculus: Geometry/Precalculus, Algebra 2/Precalculus, OPTIONS

Options:

Concurrent Enrollment:
- Intro to College Algebra
- Intermediate College Algebra
- College Algebra
- College Trigonometry
- Survey of Calculus
- Statistical Analysis
- Calculus

All CE options are contingent on prior courses and assessment scores.

Advanced Placement:
- AP Statistics
- AP Calculus AB
- AP Calculus BC

International Baccalaureate:
- Algebra 1/Geometry
- Pre-IB Algebra 2
- 11th—12th IB Options
- IB Math SL Applications
- IB Math SL Analysis
- IB Math HL Analysis

A path for every student can be built based on these courses. Not every student will follow these pathways exactly. Please make sure to speak to your counselor, math teacher or math coordinator if you have specific questions.
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 in order to meet graduation requirements. The paths are:

* College Prep  * Calculus HS Condensed  * Calculus MS Condensed  * Multi-Variable Calculus

**ALGEBRA 1 NCAA**
Grade: 9  Semester: .5 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 the underlying mathematical structures that they are. 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 1 NCAA**
Grade: 9  Semester: 1 credit
Prerequisite: Successful completion of Math 8

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 the underlying mathematical structures that they are. 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 1x1**
Grade: 9  Year: 1 credit

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 for remediation. Students will explore functions, graphing and writing equations of linear equations, sequences, 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.

This course **will not** count as a core year for NCAA clearinghouse.
**ALGEBRA 1X2**  
Grade: 10  
Year: 1 credit

Prerequisite: Successful completion of Algebra 1x1

This course is a part of a 2-year sequence with Algebra 1x1, 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 for 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 similarity and differences of the three types of functions covered in the Algebra 1 standards: linear, quadratic, and exponential functions. Topics for Algebra 1x1 will continue to be spiraled and reviewed, including solving linear equations, systems of equations, and sequences.

This course **will not** count as core year for NCAA clearinghouse.

**ALGEBRA 2  NCAA**  
Grades: 10, 11  
Year: 1 credit

Prerequisite: Geometry  
Graphing Calculator: Required

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 and hone 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. Summer work for this course can be found on the school website.

**ALGEBRA 2 HONORS W NCAA**  
Grades: 10, 11  
Year: 1 credit

Prerequisite: Geometry or Geometry/Pre-Calculus Honors  
Graphing Calculator: Required

This course covers the same content as Algebra 2, but with more depth. This is a rigorous class for advanced math students. Students will expand their knowledge of algebraic theory with a strong emphasis on algebraic applications. All of the topics in Algebra 2 will be covered in more depth along with the addition of conics and combinations. Problem solving will be emphasized. Summer work for this course can be found on the school website.

**ALGEBRA 2/PRE-CALCULUS HONORS W NCAA**  
Grades: 9, 10, 11  
Year: 1 credit

Prerequisite: Geometry/Pre-Calculus Honors (B or better) or teacher recommendation  
Required: Summer course work

For students interested in studying Advanced Placement Calculus in high school and/or STEM related careers post-graduation, 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 the mathematics. Summer work for this course can be found on the school website.
**AP CALCULUS AB W STEM NCAA**  
Grades: 11, 12  
Year: 1 credit  
Prerequisite: College Algebra and College Trigonometry or teacher recommendation  
Required: Summer course work

This course emphasizes a multi-representational approach to calculus, 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 W STEM NCAA**  
Grades: 11, 12  
Year: 1 credit  
Prerequisite: Algebra 2/Pre-Calculus Honors or Trig/Pre-Calculus 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.

**AP STATISTICS W STEM NCAA**  
Grades: 11, 12  
Year: 1 credit  
Prerequisite: Algebra 2 or Teacher Recommendation

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.

**APPLIED MATHEMATICS**  
Grade: 11, 12  
Year: 1 credit  
Prerequisite: Algebra 1x2 or Teacher Recommendation

This course is designed for students who have not met college and career readiness benchmarks in mathematics throughout their high school career. Students will be focused on mathematical and graphing literacy, application of Algebra and Geometry standards to the real world and increasing their mathematical fluency. Significant time will be spent on understanding the math being used in the real-world through 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 be represented.

This course will not count as a core year for NCAA clearinghouse.

**CALCULUS STEM CE NCAA**  
Grade: 12  
Year: 1 credit  
Prerequisite: College Algebra and College Trigonometry (C or better in both courses)  
*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 Calculus I (MAT 201). Students who earn a C or better in the class will receive 5 community college credits. These are guarantee 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.
This course aligns with the Colorado Community College course College Algebra 121 (MAT 121). Students who earn a C or better in the class will receive 4 community college credits. These are guarantee 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.

This course aligns with the Colorado Community College course Trigonometry (MAT 122). 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 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.

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/PRE-CALCULUS HONORS W NCAA**

Grades: 9, 10  
Year: 1 credit

Prerequisite: Algebra 1 and teacher recommendation  
Graphing Calculator: Required

For students interested in studying Advanced Placement Calculus in high school and/or STEM related careers post-graduation, 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 the mathematics. Summer work for this course can be found on the school website.

**INTERMEDIATE COLLEGE ALGEBRA NCAA**

Grades: 11, 12  
Semester: .5 credit

Prerequisite: Algebra 2 and qualifying Accuplacer score  
Graphing Calculator: Required

This course aligns with the Colorado Community College course (MAT 055). This course is a further exploration of the algebra of the real number system with extension into the complex numbers. It will emphasize problem solving with further study of equations, slope, 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 student has successfully completed Algebra 2.

**INTRODUCTORY COLLEGE ALGEBRA NCAA**

Grades: 11, 12  
Semester:.5 credit

Prerequisite: Successful completion of Algebra 2 and qualifying Accuplacer score

This course includes first-degree equations, inequalities, formulas, polynomials, algebraic fractions, factoring polynomials, solving quadratic equations by factoring, and applications. Coordinate geometry, graphing linear equations and inequalities, and systems of linear equations will be included.

*This class will not count as an additional core year for NCAA Clearinghouse if student has successfully completed Algebra 2.

**IB MATH SL 1 APPLICATIONS W NCAA**

Grade: 10  
Year: 1 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 Mathematics Applications Standard level test in the Spring of the 2nd year.
**IB MATH SL 1 APPLICATIONS W NCAA**

Prerequisite: IB Math SL 1 Applications

Graphing Calculator: Required

Grades: 10, 11  
Year: 1 credit

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 Mathematics Analysis Standard level test in the Spring of the 2nd year.

**IB MATH HL 1 ANALYSIS W NCAA**

Prerequisite: Acceptance to the IB program

Graphing Calculator: Required

Grade: 11  
Year: 1 credit

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 Mathematics Analysis Higher level test in the Spring of the 2nd year.

**IB MATH HL 2 ANALYSIS W NCAA**

Prerequisite: IB Math HL 1 Analysis or AP Calculus BC

Graphing Calculator: Required

Grade: 12  
Year: 1 credit

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 Higher level test in the Spring.
This course is designed for students who are planning on continuing through the International Baccalaureate program during their 11th and 12th 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 through the use of technology in order to guide their decision for the following year when deciding between IB Math SL 1 Applications and IB Math SL 1 Analysis.

STATISTICAL ANALYSIS  CE NCAA  Grade: 12  Semester: .5 credit
Prerequisite: Intermediate College Algebra (MAT 055) or CE College Algebra (MAT 121) (C or better).
*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 Introduction to Statistics (MAT 135). Students who earn a C or better in this class will receive 3 Community College credits. These are guarantee 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.
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.

Dance Courses

U: Uniform cost $25 - $80 Per Semester

DANCE 1 U
Grades: 9, 10, 11, 12  Semester: .5 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 strong collaboration and communication skills. Dance 1 students are required to perform in the semester Dance Showcase. This course may be repeated for credit. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.

DANCE 2 U
Grades: 9, 10, 11, 12  Semester: .5 credit

Prerequisite: Dance 1 or teacher recommendation

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 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 semester Dance Showcase. This course may be repeated for credit. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.

DANCE 3 U
Grades: 10, 11, 12  Semester: .5 credit

Prerequisite: Teacher recommendation/audition

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 semester dance showcase. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.

DANCE COMPOSITION U LB
Grades: 10, 11, 12  Year: 1 Credit

Prerequisite: By audition only; Intermediate/Advanced dance skills

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 both semester dance showcases. This course may be repeated for credit. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.
# Music Courses

**I: School owned instrument usage and maintenance:** $72 per year or $8 per month  
**U:** $40-$115 uniform cost

### AP MUSIC THEORY  
**W LB**

Grades: 11, 12  
Year: 1 credit  
Prerequisite: Introduction to Music Theory or teacher recommendation

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. This course is scheduled to be offered in school years beginning with odd numbers (i.e. 21-22 school year); however, the course may be offered every year depending on enrollment.

### ARS NOVA  
**U LB**

Grades: 10, 11, 12  
Year: 1 credit  
Prerequisite: Audition by director

This is a highly select mixed ensemble. 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. This is a select group and may be repeated for credit.

### BELLA VOCE  
**U**

Grades: 10, 11, 12  
Year: 1 credit  
Prerequisite: Audition by director

This is an auditioned 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 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. This is a select group and may be repeated for credit.

### CANTARE  
**U**

Grades: 10, 11, 12  
Year: 1 credit  
Prerequisite: Audition by director

This is the advanced treble ensemble. This course is designed to expand and refine all skills learned in Choralaires and Bella Voce. Students will develop more advanced ensemble techniques, appropriate vocal technique, 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. This is a select group and may be repeated for credit.

### CHAMBER ORCHESTRA  
**I LB**

Grades: 10, 11, 12  
Year: 1 credit  
Prerequisite: Audition by director

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. Private lessons are strongly recommended. 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.
CHORALAIRES
Grades: 9, 10, 11, 12
Year: 1 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. This course may be repeated for credit.

CON Brio U LB
Prerequisite: Audition by director
Grades: 10, 11, 12
Year: 1 credit
This is a highly select mixed ensemble. 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 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. This is a select group and may be repeated for credit.

CONCERT BAND I
Prerequisite: Prior instrument experience
Grades: 9, 10, 11, 12
Year: 1 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. This course may be repeated for credit.

GUITAR
Grades: 9, 10, 11, 12
Semester: .5 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. This course may be repeated for credit.

GUITAR 2
Prerequisite: Guitar 1 or Teacher Approval
Grades: 9, 10, 11, 12
Semester: .5 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. This course may be repeated for credit.

HISTORY OF ROCK AND ROLL
Grades: 9, 10, 11, 12
Semester: .5 credit
This course will explore the history and development of rock and roll and its relationship to other genres of American popular music. Through the detailed study of important artists and works, students will learn to appreciate all music with a deeper level of understanding.
**IB MUSIC WLB**
Grades: 11, 12  
Year: 1 credit  
Prerequisite: Introduction to Music Theory or teacher recommendation

In the IB Music course, students engage in a journey of imagination and discovery through partnership and collaboration. Students develop and affirm their unique musical identities while expanding and refining their musicianship. Throughout the course, students are encouraged to explore music in varied and sometimes unfamiliar contexts. Additionally, by experimenting with music, students gain hands-on experience while honing musical skills. Through realizing and presenting samples of their musical work with others, students also learn to communicate critical and artistic intentions and purpose. As students develop as young musicians, the course challenges them to engage practically with music as researchers, performers and creators, and to be driven by their unique passions and interest while also broadening their musical and artistic perspectives. This course is scheduled to be offered in school years beginning with even numbers (i.e. 20-21 school year); however, the course may be offered every year depending on enrollment.

**INTRODUCTION TO MUSIC THEORY**
Grades: 10, 11, 12  
Semester: .5 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, IB Music, or wish to increase their music knowledge for success in performance-based classes.

**JAZZ BAND 1 I**
Grades: 9, 10, 11, 12  
Year: 1 credit  
Prerequisite: Prior instrument experience

Jazz Band 1 is the introductory level jazz band at Cherokee Trail. Students will be exposed to jazz music, history, and performance techniques with 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. This course may be repeated for credit.

**JAZZ BAND 2 U I**
Grades: 10, 11, 12  
Year: 1 credit  
Prerequisite: Audition by director

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. Private lessons are strongly recommended. 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.

**JAZZ BAND 3 U I LB**
Grades: 10, 11, 12  
Year: 1 credit  
Prerequisite: Audition by director

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. Private lessons are strongly recommended. 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.

**PERCUSSION (ENSEMBLE)**
Grades: 9, 10, 11, 12  
Year: 1 credit

Percussion Ensemble is open to all aspiring percussionists. This entry level group will teach the basics of music and percussion playing (including mallets and drums). A variety of music will be studied and performed through this class. 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.
PERFORMING ARTS EXPLORATION  
Grades: 10, 11, 12  
Semester: .5 credit  
Prerequisite: Teacher recommendation only

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 with enrollment in this class.

PIANO  
Grades: 9, 10, 11, 12  
Semester: .5 credit  

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. This course may be repeated for credit.

PIANO 2  
Grades: 9, 10, 11, 12  
Semester: .5 credit  
Prerequisite: Piano 1 or Teacher Approval

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. This course may be repeated for credit.

STRING ORCHESTRA  
Grades: 9, 10, 11, 12  
Year: 1 credit  
Prerequisite: Prior instrument experience

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.

SYMPHONY ORCHESTRA  
Grades: 10, 11, 12  
Year: 1 credit  
Prerequisite: Audition by director

Symphony Orchestra is an intermediate performance group at CTHS. Open to sophomores, juniors, and seniors by audition only, this select group combines winds, strings, and percussion to explore the best music written by the best composers. Instrumentation is limited throughout the ensemble. Extensive practice time is required for this course. Private lessons are strongly recommended. 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.

VOCALIS  
Grades: 9, 10, 11, 12  
Year: 1 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. This course may be repeated for credit.
**WIND ENSEMBLE U I LB**
Prerequisite: Audition by director

Grades: 10, 11, 12
Year: 1 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. Private lessons are strongly recommended. 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.

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**Theatre Courses**

**ADVANCED ACTING LB CE**
Grades: 11-12
Year: 1 credit

Prerequisite: Theatre 2 or teacher approval
*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 Acting II (THE 112). 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 through classroom and showcases performances. You will discover your individual technique of acting and your process of creating character within a monologue/scene/play. This course is a concurrent enrollment course through Community College of Aurora.

**PERFORMING ARTS EXPLORATION**
Grades: 10, 11, 12
Semester: .5 credit

Prerequisite: Teacher recommendation only

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 with enrollment in this class.

**TECHNICAL THEATRE 1**
Grades: 9, 10, 11, 12
Year: 1 credit

Materials fee: $20

This course offers students a hands-on opportunity to learn many aspects of stagecraft for the production of 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 THEATRE 2 LB**
Grades: 10, 11, 12
Year: 1 credit

Prerequisite: Successful completion of Technical Theater 1 and teacher recommendation; application required
Materials fee: $20

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 particular aspects of stagecraft for the production of plays. This course focuses heavily on the design aspects in creating after school theatrical productions through group collaboration. Students must attend at least two live theatre performances outside of class. This course may be repeated for credit.
**THEATRE 1**

Grades: 9, 10, 11, 12  
Semester: .5 credit

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**

Prerequisite: Theatre 1

Grades: 10, 11, 12  
Year: 1 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 play 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.

**THEATRE 3**

Prerequisite: Theatre 2 or audition by director

Grades: 11, 12  
Year: 1 credit

This is a year-long course which focuses on ensemble acting, world theatre traditions, and directing. Students will explore theatre as a collaborative art through creating, writing, and directing original and published one-act plays. Students will direct and perform several one-act plays or one full-length play at the end of the year.
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.

All students must earn a minimum of 3.0 science credits.

**ANATOMY & PHYSIOLOGY NCAA**
Grade: 12
Year: 1 credit
Prerequisite: Biology, Chemistry or teacher recommendation.

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 W STEM NCAA**
Grade: 12
Year: 1 credit
Prerequisite: Successful completion of Biology or teacher recommendation.
Recommended: Completion of or concurrent enrollment with a chemistry course.

AP Biology is designed to be the equivalent of a college introductory Biology course. The curriculum for this class is the College Board Advanced Placement Biology Curriculum. Units of study will include: 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 W STEM NCAA**
Grades: 11, 12
Year: 1 credit
Prerequisite: Biology, Algebra 2, Chemistry or Chemistry Honors, or teacher recommendation.

AP Chemistry is designed to be the equivalent of a college introductory Chemistry course. The curriculum for this class is the College Board Advanced Placement Chemistry Curriculum. Units of study will include: 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. Summer work for this course can be found on the school website.
**AP ENVIRONMENTAL SCIENCE W STEM NCAA**

Grade: 12  
Year: 1 credit  
Prerequisite: Biology, Chemistry, or teacher recommendation.

AP Environmental Science is designed to be the equivalent of a college introductory 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 W STEM NCAA**

Grades: 11, 12  
Year: 1 credit  
Prerequisite: Biology Honors, Chemistry Honors or teacher recommendation.

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, student could 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 2 W STEM NCAA**

Grades: 11, 12  
Year: 1 credit  
Prerequisite: Biology Honors, Chemistry Honors, AP Physics 1 or teacher recommendation.

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, student could 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 W STEM NCAA**

Grade: 12  
Year: 1 credit  
Prerequisite: Biology Honors, Chemistry Honors, AP Physics 1 or teacher recommendation. Completion or concurrent enrollment in AP Calculus AB or AP Calculus BC

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.
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<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Year</th>
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<tr>
<td><strong>ASTRONOMY</strong></td>
<td>12</td>
<td>1 credit</td>
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<tr>
<td>Prerequisite: Biology, Chemistry or Physics or Teacher recommendation.</td>
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<td>This elective science course involves studying the history of astronomy, planetary motion, models of the solar system, the tools of the astronomer and the contents of the solar system including the planets, moons, asteroids, and comets, and meteoroids, as well as stars, black holes and neutron stars, galaxies, cosmology, and the search for life in the Universe. Weekly observations of the night sky are part of learning to be an amateur astronomer and studying the techniques of professional astronomers. Minor mathematical skills in reasoning and algebra are required.</td>
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| **BIOLOGY NCAA**       | 9     | 1 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 W NCAA** | 9     | 1 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. |

| **CHEMISTRY NCAA**     | 10    | 1 credit   |
| Prerequisite: Biology and Algebra 1 or teacher recommendation. |
| 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 W NCAA** | 10    | 1 credit   |
| Prerequisite: Biology Honors or teacher recommendation. |
| 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. This course is required as a prerequisite for students planning to take AP Chemistry, and is highly recommended either as a prerequisite or concurrent with AP Biology, and Anatomy and Physiology. |

| **ECOLOGY NCAA**       | 12    | .5 credit  |
| Prerequisite: Teacher recommendation |
| This class is accessible for seniors of all levels and is intended for students who are interested in the study of how the living and non-living environment impacts life. Specifically, students will investigate biomes, population ecology, weather and how humans impact ecosystems. |
GENETICS  
Prerequisite: Teacher recommendation.

This class is accessible for seniors of all levels and is intended for students who are interested in studying the cell, cell processes and genetics. Specifically, students will investigate the cellular basis of inheritance, patterns of inheritance, DNA, human genetics, and modern applications of DNA technology.

**IB BIOLOGY HL 1 W STEM NCAA**

Prerequisite: Acceptance to the IB Diploma Program, Biology Honors and Chemistry Honors

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 W STEM NCAA**

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.

**IB CHEMISTRY HL 1 W STEM NCAA**

Prerequisite: Acceptance to the IB Diploma Program, Biology Honors and Chemistry Honors or AP Physics 1

This is year one of a two-year higher-level chemistry course for IB students. It is a rigorous, college-level chemistry course that requires strong skills in mathematics. Topics to be covered include stoichiometry, bonding, thermochemistry, kinetics, acids and bases, and organic chemistry. Students will also complete an extensive chemistry investigation as part of the IB curriculum. This investigation will require student-designed experimentation and background research. At the end of the second year all students will take the IB chemistry exams.

**IB CHEMISTRY HL 2 W STEM NCAA**

Prerequisite: IB Chemistry HL 1

This is year two of a two-year higher-level chemistry course for IB students. It is a rigorous, college-level chemistry course that requires strong skills in mathematics. Topics to be covered include stoichiometry, bonding, thermochemistry, kinetics, acids and bases, and organic chemistry. Students will also complete an extensive chemistry investigation as part of the IB curriculum. This investigation will require student-designed experimentation and background research. At the end of the second year all students will take the IB chemistry exams.

**IB PHYSICS HL 1 W STEM NCAA**

Prerequisite: Acceptance to the IB Diploma Program, Biology Honors, Chemistry Honors

Corequisite: Concurrent enrollment in IB Math SL

This class is a lab-based survey investigation of the physical world from Newtonian mechanics through the beginnings of 20th 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 with STEM **NCAA**  
Grade: 12  
Year: 1 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 SL with STEM **NCAA**  
Grade: 11, 12  
Year: 1 credit  
Prerequisite: Biology Honors and Chemistry Honors.

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 sport 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.

**METEOROLOGY NCAA**  
Grades: 12; second semester  
Semester: .5 credit  
Prerequisite: Enrolled in Oceanography Semester 1.

This course is a semester-long course designed to focus on topics in Meteorology such as weather patterns, clouds and cloud formation, weather forecasting, and hazardous weather. Hazardous weather studies will include tornadoes, hurricanes, blizzards, and other damaging weather phenomena.

**OCEANOGRAPHY NCAA**  
Grades: 12; first semester  
Semester: .5 credit  
Prerequisite: Biology, Chemistry and/or Physics.

Oceanography such as ocean currents, ocean life, and productivity, sustainable fishing practices, bathymetry (the ocean floor), coastal formation, waves and tides, climate influence, and ocean acidification. Hazardous ocean phenomena will be studied, such as tsunamis, rogue waves, rip currents, and ocean acidification.

**PHYSICAL SCIENCE NCAA**  
Grade: 10  
Year: 1 credit  
Prerequisite: Biology or teacher recommendation.

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.

**PHYSICS NCAA**  
Grades: 11  
Year: 1 credit  
Prerequisite: Biology and Chemistry or teacher recommendation.

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 to illustrate the experimental and mathematical nature of physics.
Cherokee Trail High School

Social Studies

9th-12th

10th-12th

11th-12th

12th

Colorado History
Contemporary Issues
Contemporary World History
Ethnic Studies
Psychology
Street Law

AP World History
AP Psychology
AP Macroeconomics
AP Human Geography
IB Psychology

IB History of the Americas (including US History*)

IB Theory of Knowledge

IB Economics
IB Psychology

* Government and US History are required for graduation.
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, as a world. In its essence, social studies is 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.

All students must earn a minimum of 3.0 social studies credits to graduate from Cherry Creek School District. Per state mandate, of the 3.0 credits, one credit must be achieved in US History (Regular, AP, or CE level or through IB History of the Americas at CTHS). Students must also achieve .5 credit of Government for graduation (Regular or AP level at CTHS).

While only 3.0 credits are required for graduation, it is highly recommended that all students who plan to attend college take 4 credits of social studies.

**AP HUMAN GEOGRAPHY W NCAA**
Grade: 9
Year: 1 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. Exam fees apply.

**AP MACROECONOMICS W NCAA**
Grade: 12
Year: 1 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 W NCAA**
Grade: 12
Year: 1 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 U.S. GOVERNMENT AND POLITICS  W NCA A
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 W NCA A
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 self-motivation. 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  W NCA A
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 U.S. HISTORY 101 and 102 W NCA A
*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 History 201 and 202. U.S. History 101: This course surveys events, trends, peoples, groups, cultures, ideas, and institutions in North America and United States history, including the multiple perspectives of gender, class, and ethnicity, between the period when Native American Indians were the sole inhabitants of North America, and the American Civil War. 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-H11. U.S. History 102: This class explores events, trends, peoples, groups, cultures, ideas, and institutions in United States History, including the multiple perspectives of gender, class, and ethnicity, between the period of the American Civil War and the present. 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-H11. 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 HISTORY  NCAA  Grade: 12  Semester: .5 credit

Colorado History is a comprehensive study of the state of Colorado. Topics covered will include geographic underpinnings, exploration and conquest, the 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 21st 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, field work, GIS and other technological data will be used as a primary source. Students will gain insights into the diversity and continual development of Colorado, realizing their relation to Colorado history.

CONTEMPORARY ISSUES  NCAA  Grade: 12  Semester: .5 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.

CONTEMPORARY WORLD HISTORY  NCAA  Grade: 12  Semester: .5 credit

This course is designed for non-IB/AP students to better understand the concepts of continuity and change, cause and effect, complexity, unity and diversity during the eighteenth, nineteenth, and twentieth centuries in World History with a focus on the East-West dichotomy. Students will use the historical method of inquiry to ask questions, evaluate primary and secondary sources, critically analyze and interpret data, and develop multiple interpretations defended by evidence. While there is exposure to a broad range of places and developments, a focus is to provide students with an understanding of the events, individuals, philosophies, and institutions which have contributed to the modern world.

CRIMINAL JUSTICE - CRIME SCIENCE  CE  Grades: 11, 12  Year: 1 elective credit

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

This course aligns with Colorado Community College Course Intro to Crime Scene Investigation (CRJ 127). This course features basic procedures in crime scene management to include photography and preparing initial reports and sketches, processing evidence, and related criminalistic procedures. Covers interviewing suspects, witnesses, and victims including the recording of identifications and descriptions. Incorporates lab and lecture. Warning: This class may expose students to extremely graphic images of authentic crime scenes; lectures may include detailed descriptions and photo work of homicides and other crimes of violence.

CRIMINAL JUSTICE - intro to criminal justice  CE  Grades: 11, 12  Year: 1 elective credit

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

This course aligns with Colorado Community College Course Introduction to Criminal Justice (CRJ 110). This course 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 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.

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.

The government 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 which are undertaken by non-governmental actors will be identified, as well as the how-to’s of accessing and influencing 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.

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 over a time period from the First World War through the end of the Cold War. The aims of this course are: 1) to give students an opportunity 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 TWENTIETH CENTURY  W NCAA  
Grade: 12  
Year: 1 credit
Prerequisite: 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  W NCAA  
Grade: 11, 12  
Year: 1 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  W NCAA  
Grade: 9  
Year: 1 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.

PSYCHOLOGY NCAA  
Grade: 12  
Semester: .5 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 a foundation for further study in the field.
Note: Sensitive subject matter will be covered in this class.

STREET LAW NCAA  
Grades: 12  
Semester: .5 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 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.
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.
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 coursework and modifications and or accommodations necessary to help the student be successful.

**Students will register for classes in this department only as a result of a staffing decision.** Eligibility for SAS is determined after a number of research-based 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. Annual reviews are held. 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.

A number of academic mainstream courses will be **co-taught.** These courses provide a Student Achievement Services instructor in the class at all times to help accommodate or make necessary modifications for students with an IEP. It also will provide a small pupil to teacher ratio.

**ACADEMIC SUPPORT LAB** 
Prerequisite: IEP and teacher recommendation

| Grades: 9, 10, 11, 12 | Year: 1 elective credit |

This course is for students who are able to be successful in academic coursework in mainstream classes. The Academic Support Lab offers academic coaching and tutoring, adult guidance, and academic structure in support of their mainstream coursework. **This course may be taken more than once for credit.**

**AFFECTIVE ED** 
Prerequisite: IEP and coordinator approval

| Grades: 9, 10, 11, 12 | Year: 1 elective credit |

This course 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 inter personal skills, skills streaming, 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 credit |

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 for remediation. Students will explore functions, graphing and writing equations of linear equations, sequences, 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.

This course **will not** count as a core year for NCAA clearinghouse.
**ALGEBRA 1X2**

Prerequisite: Successful completion of Algebra 1x1

Grade: 10
Year: 1 credit

This course is a part of a 2-year sequence with Algebra 1x1, 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 for 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 similarity and differences of the three types of functions covered in the Algebra 1 standards: linear, quadratic, and exponential functions. Topics for Algebra 1x1 will continue to be spiraled and reviewed, including solving linear equations, systems of equations, and sequences.

This course **will not** count as core year for NCAA clearinghouse.

**APPLIED MATHEMATICS**

Prerequisite: Algebra 1x2 or Teacher Recommendation

Grade: 11, 12
Year: 1 credit

This course is designed for students who have not met college and career readiness benchmarks in mathematics throughout their high school career. Students will be focused on mathematical and graphing literacy, application of Algebra and Geometry standards to the real world and increasing their mathematical fluency. Significant time will be spent on understanding the math being used in the real-world through 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 be represented.

This course **will not** count as a core year for NCAA clearinghouse.

**FOUNDATIONS OF READING**

Prerequisite: IEP and teacher recommendation

Grades: 9, 10, 11, 12
Year: 1 elective 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. **This course may be taken more than once for credit.**

**ILC ACE**

Grade: 11, 12
Year: 1 elective credit

This is a self-contained class taught by an ILC teacher. It is designed to help students acquire the skills necessary for successful transition to the post-secondary working life. Topics include: critical thinking, academic knowledge, money management, and hands on experiences. **This course may be taken more than once for credit.**

**ILC COMMUNITY**

Prerequisite: IEP and teacher recommendation

Grades: 9, 10, 11, 12
Year: 1 elective 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 jobsite 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**

Prerequisite: IEP and teacher recommendation

Grades: 9, 10, 11, 12
Year: 1 English 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 Math credit  
Prerequisite: IEP and teacher recommendation  

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. Material taught is dependent on the student’s math goals as written on their IEP. **This course may be taken more than once for credit.**

**ILC SCIENCE**

Grades: 9, 10, 11, 12  
Year: 1 Science credit  
Prerequisite: IEP and teacher recommendation  

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. **This course may be taken more than once for credit.**

**ILC SOCIAL STUDIES**

Grades: 9, 10, 11, 12  
Year: 1 Social Studies credit  
Prerequisite: IEP and teacher recommendation  

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. **This course may be taken more than once for credit.**

**UNIFIED PERFORMING ARTS**

Grades: 10, 11, 12  
Semester: .5 Fine Arts credit  
Prerequisite: IEP and teacher recommendation  

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 assists will receive Fine Arts credit with enrollment in this class. **This course may be taken more than once for credit.**

**UNIFIED PHYSICAL EDUCATION**

Grades: 10, 11, 12  
Semester: .5 Wellness Fitness credit  
Prerequisite: IEP and teacher recommendation  

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. **This course may be taken more than once for credit.**

**UNIFIED VISUAL ARTS**

Grades: 10, 11, 12  
Semester: .5 Fine Arts credit  
Prerequisite: IEP and teacher recommendation  

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 assists will receive Visual Art elective credit with enrollment in this class. **This course may be taken more than once for credit.**
Visual Arts

Course Sequence—previous art experience recommended for enrollment in Level 1 courses

Drawing/Painting 1
9, 10, 11, 12
→
Drawing/Painting 2
9, 10, 11, 12
→
Drawing/Painting 3
10, 11, 12 (R)
→
AP Studio Art Drawing and Painting
11, 12

Photography 1
9, 10, 11, 12
→
Photography 2
9, 10, 11, 12 (R)
→
AP Art 2-D Photo
10, 11, 12

Graphic Design 1
9, 10, 11, 12
→
Graphic Design 2
9, 10, 11, 12
→
Advanced Graphic Design (Graphic Design 3)
10, 11, 12 (R)
→
AP Art 2-D Graphic Design
11, 12

Ceramics 1
9, 10, 11, 12
→
Ceramics 2
9, 10, 11, 12
→
Ceramics 3
10, 11, 12 (R)
→
AP Studio Art 3-D
11, 12

Sculpture 1
9, 10, 11, 12
→
Sculpture 2
9, 10, 11, 12 (R)

Additional Elective Classes—no previous art experience required

Beginning 3D Art*
9, 10, 11, 12

Digital Art (Digital Painting)
9, 10, 11, 12 (R)

Unified Visual Arts
9, 10, 11, 12 (R)

There are no prerequisites required for IB although it is strongly recommended to take at least 2 visual arts courses in preparation for IB visual art.

IB Visual Arts HL 1
11

IB Visual Arts HL 2
(Grade 12 only)

IB Visual Arts SL 1
11, 12

* See program of study course descriptions for suggested courses to continue your study of art
Visual Arts Department
Course Descriptions

The Visual Arts Department recognizes and nurtures 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 three-dimensional 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 financial need exists, please contact the Visual Arts Department Coordinator.

A note about sequence: Beginning 3-D Art, Foundations of Art and Photography/Digital Mixed Media are introductory courses designed to offer students of varying abilities the opportunity to explore art. Level one courses are designed for those art students who like to create and have some previous art experience.

**ADVANCED GRAPHIC DESIGN (GRAPHIC DESIGN 3) LB**
Grades: 10, 11, 12
Semester: .5 credit
Prerequisite: Graphic Design 1 and 2
Materials Fee: $25

This course provides students with an opportunity to further their knowledge in design principles as it pertains to production level graphics. Process and production are emphasized within this course. Upon completion of this course, you will have a portfolio of work that can be used for college entry submissions. This course may be repeated for credit.

**AP STUDIO ART 2D DESIGN (PHOTOGRAPHY) LB W**
Grades: 10, 11, 12
Year: 1 credit
Prerequisite: Photo 1 and Photo 2
Materials 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 enrolled in this class will be encouraged to participate in the portfolio submission in April. The course fee exists to cover the cost of materials and equipment.
AP ART 2D DESIGN (GRAPHIC DESIGN) LB W

Grades: 10, 11, 12
Year: 1 credit
Prerequisite: Graphic Design 2 (Advanced Graphic Design strongly recommended)
Materials 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. 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 STUDIO ART 3D DESIGN LB W
Grades: 10, 11, 12
Year: 1 credit
Prerequisite: Ceramics 2 or Sculpture 2 or by Teacher Recommendation
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 encouraged to participate in the portfolio submission in April. The course fee exists to cover the cost of materials and equipment.

AP STUDIO ART DRAWING AND PAINTING LB W
Grades: 10, 11, 12
Year: 1 credit
Prerequisite: Drawing/Painting 3 (or Drawing/Painting 2 with instructor approval)
Materials 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 encouraged to participate in the portfolio submission in April. The course fee exists to cover the cost of materials and equipment.

BEGINNING 3D ART
Grades: 9, 10, 11, 12
Semester: .5 credit
Materials Fee: $15

This introductory course is designed to offer students of varying abilities the opportunity to explore materials including clay, wire, cardboard, and stone. This course introduces students to both additive and subtractive sculptural techniques. Students will concentrate on visually communicating ideas in 3-dimensional form using materials and techniques present in the course. The final for this course is a project designed to combine the conceptual process with the culmination of skills taught throughout the semester. This course may not be repeated for credit; students wishing to continue their study of art following this course are encouraged to sign up for Ceramics 1 or Sculpture 1.
CERAMICS 1
Prerequisite: Previous 3-D art experience recommended
Materials Fee: $25
Grades: 9, 10, 11, 12
Semester: .5 credit

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
Prerequisite: Ceramics 1
Materials Fee: $25
Grades: 9, 10, 11, 12
Semester: .5 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, coil building larger than 14 inches, and they will create additional self-directed ceramic pieces. Students will learn to stack ceramic pieces using the potter’s wheel, as well as throw lids for cylinders and spouts for teapots. Students will continue to develop ceramic surfaces learned in Ceramics 1 and be introduced to stain washes and saggar firing techniques. The course will focus on historical and contemporary ceramics as a means of cultural and artistic expression. The final for the course will be the presentation and critique of the student’s digital portfolio of 3-dimensional artwork.

CERAMICS 3
Prerequisite: Ceramics 2
Materials Fee: $25
Grades: 10, 11, 12
Semester: .5 credit

This course is a continuation of Ceramics 2 with an emphasis on hand-building, wheel throwing, surface treatments and the development of a digital portfolio. Students will be introduced to slip casting and burnout firing techniques. Using hand-building and wheel throwing techniques, students will develop a series of self-directed ceramic pieces. The course will focus on historical and contemporary ceramics as a means of cultural and artistic expression. Students will continue to develop ceramic surfaces learned in Ceramics 2 and will design their own decals, mix their own cone 6 reduction glaze, and engage in glaze testing. The final for the course will be the presentation and critique of the student’s digital portfolio of 3-dimensional artwork. This course may be repeated for credit.

DIGITAL ART (DIGITAL PAINTING)
Materials Fee: $25
Grades: 9, 10, 11, 12
Year: 1 credit

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. This course may be repeated for credit.
**DRAWING AND PAINTING 1**
Recommended: Prior 2-D art experience
Materials Fee: $25

This course opens up 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. This class offers fast-paced instruction and it is strongly recommended that the student have prior 2-D art experience.

**DRAWING AND PAINTING 2**
Prerequisite: Drawing and Painting 1
Materials Fee: $25

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. This course cannot be repeated for credit.

**DRAWING AND PAINTING 3**
Prerequisite: Drawing and Painting 2
Materials Fee: $25

This course will explore many different materials and techniques used in modern 2-D paintings, drawings, and printmaking. Media covered may include, but are not limited to, oil paints, acrylic paints, watercolors, pastels, pen and ink, fabric painting, woodburning, and a variety of mixed media techniques. This course develops critical thinking and sharpens visual observations in solving visual problems as well as developing advanced drawing and painting skills. Students will begin to develop a portfolio and work geared to AP studies in 2-D. Historical and contemporary artist movements, and theories are studied. This course may be repeated for credit.

**FOUNDATIONS OF ART**
Materials Fee: $15

This studio art class is designed for students of all ability levels and enables them to explore a variety of tools, techniques and media. The focus is on elements of art as they apply many art disciplines. Projects include drawing, painting, collage, and printmaking. This course may not be repeated for credit; students wishing to continue their study of art following this course are encouraged to sign up for Drawing and Painting 1 or Graphic Design 1.

**GRAPHIC DESIGN 1**
Materials 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. This course is a prerequisite for Graphic Design 2. This course may not be repeated for credit.
GRAPHIC DESIGN 2
Grades: 9, 10, 11, 12           Semester: .5 credit
Prerequisite: Graphic Design 1
Materials Fee: $25

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. This course may not be repeated for credit.

IB VISUAL ARTS HL 1  LB W
Grade: 11           Year: 1 credit
Prerequisite: Prior art training or teacher recommendation
Materials 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 multicultural 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 credit
Prerequisite: IB Visual Arts HL 1
Materials Fee: $60

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 multicultural 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 SL 1  LB W
Grades: 11,12           Year: 1 credit
Prerequisite: Prior art training or teacher recommendation
Materials 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 multicultural 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/DIGITAL MIXED MEDIA  
Grades: 9,10,11,12  
Semester: .5 credit  
Materials Fee: $40

This is an introductory course which explores a variety of photographic processes in both darkroom and digital platforms. Students will learn the history of photography hands on by experimenting with alternative photographic techniques and processes that preceded even 35 mm film photography. Students will learn and apply basic design and composition concepts as well as critiquing and analyzing their art and the art of others. Access to digital SLR and 35 mm cameras is strongly recommended; a limited number of cameras are available for students to check out. This course may not be repeated for credit; students wishing to continue their study of art following this course are encouraged to sign up for Photography 1 or Graphic Design 1.

PHOTOGRAPHY 1  
Grades: 9, 10, 11, 12  
Semester: .5 credit  
Materials Fee: $40

This course is designed to offer the student the fundamentals of black and white photography with a darkroom experience that precedes the concepts, tools, and technology of digital imaging. Students will learn about analogue photographic equipment and processes and how to use them while concentrating on basic design and composition concepts. Students will also begin to analyze and critically respond to their art, as well as the art of others. Upon completion of this course, students will be better equipped to continue exploring digital photography in Photography 2. A 35 mm SLR camera is highly recommended; specifications and materials list will be available the first day of class. This course may not be repeated for credit.

PHOTOGRAPHY 2  
Grades: 9,10, 11, 12  
Semester: .5 credit  
Prerequisite: Photography 1  
Materials Fee: $40

This course is designed for students who wish to build on the skills learned in Photography 1. This class will introduce the concepts, tools, and technology of digital imaging. Students will learn about digital photography equipment, software, storage devices, and printers in order 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 camera; specifications and materials list will be available the first day of class. This course may be repeated for credit.

SCULPTURE 1  
Grades: 9, 10, 11, 12  
Semester: .5 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. This course may not be repeated for credit.

SCULPTURE 2  
Grades: 9, 10, 11, 12  
Semester: .5 credit  
Prerequisite: Sculpture 1  
Materials Fee: $25

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. This course may be repeated for credit with teacher approval.
UNIFIED VISUAL ARTS

Grades: 9,10,11,12
Semester: .5 credit

Prerequisite: Teacher recommendation

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.

This course may be taken more than once for credit.
Cherokee Trail High School
Wellness and Fitness

Health
Graduation Requirement .5 credits
Strongly Suggested for 9th grade students

The remaining 1.5 Wellness/Fitness graduation credits must come from the courses below
All courses are 1 semester (.5 credits)
All courses can be repeated for credit
Dance classes are available for Wellness/Fitness OR Performing Arts credit

9th-12th

Personal Fitness 1
Individual Sports
Body Works

Weight Training 1
(Non-Varsity Athletes)
$15/semester

Weight Training for Women
(Non-Varsity Athletes)
$15/semester

Advanced Weight Training
for Girls
(Varsity Level Athletes)
$15/semester

Advanced Weight
(Varsity Level Athletes)
$15/semester

Sport Specified Advanced
Weight Training
(Football, Basketball, Wrestling, Baseball)
$15/semester

Swimming
(Beginning Swimmers)

Swim Fitness
(Advanced Swimmers)

10th-12th

Aquatic Recreation
(pre-req: 300 yards)

Lifeguarding
(Must be 15 years old)
$60/semester

Sports Medicine

Team Sports

Yoga
(pre-req: Body Works or Personal Fitness)
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 the practical experiences and knowledge related to establishing a healthy lifestyle, both as an adolescent and as a maturing adult. The cardiovascular fitness, agility, strength, flexibility, training, and nutrition.

Requirements for graduation:
All students are required to have the equivalent of two credits in this area to meet graduation requirements established by the Board of Education. Of the two credits:

- 0.5 must include the successful completion of Health
- Must include the completion of two active participation/cardiovascular fitness classes
- 0.5 from other wellness and fitness classes
- ALL courses may be repeated for credit with the exception of Sports Medicine

Students who have completed a season of athletics in a CCSD sanctioned sport may be granted a waiver of 0.5 of the required 1.5 credits. This waiver does not reduce the total number of units required for graduation. Health may not be waived.

Uniforms are required for all activity classes and may be purchased through RevTrek or on first day of class from any wellness and fitness instructor. Onetime fee for uniform is $10. Weight Room classes have a $15 fee per semester.

ADVANCED WEIGHT TRAINING U
Grades: 9, 10, 11, 12  
Semester: .5 credit

Prerequisite: Teacher or Coach recommendation only
Course Fee: $15

This course is designed for students who participate in athletics or are serious weight lifters. This course will include approximately 93 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. Students will develop and execute specific weight training programs and conditioning strategies designed for students 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. This course may be repeated for credit.

ADVANCED WEIGHT TRAINING FOR GIRLS U
Grades: 9, 10, 11, 12  
Semester .5 credit

Prerequisite: Teacher or Coach recommendation only

This Course is designed for female students who participate in varsity level athletics or are serious weight lifters. The female sport specific focus of this course will allow athletes to develop core strength in major muscle groups, improve speed, agility, and overall athleticism, as well as assist in the prevention of injuries. The training will allow the females a higher level of intensity with regards to their fitness components. This is a performance-based class. This course may be repeated for credit.
**AQUATIC RECREATION**  
Grades: 10, 11, 12  
Semester: .5 credit  
Prerequisite: 300-yard swim and comfortable in deep water

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. This class offers a variety of activities such as: water polo, slot water hockey, capture the ring, and overall swim fitness. This course may be repeated for credit.

**BLEND ED LEARNING HEALTH**  
Grades: 9, 10, 11, 12  
Semester: .5 credit  
Prerequisite: Counselor Approval  
**Fulfills District Health Requirement**

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

**BODY WORKS U**  
Grades: 9, 10, 11, 12  
Semester: .5 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. The course may be repeated for credit.

**DANCE 1 U**  
Grades: 9, 10, 11, 12  
Semester: .5 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 strong collaboration and communication skills. Dance 1 students are required to perform in the semester Dance Showcase. This course may be repeated for credit. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.

**DANCE 2 U**  
Grades: 9, 10, 11, 12  
Semester: .5 credit  
Prerequisite: Dance 1 or teacher recommendation

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 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 semester Dance Showcase. This course may be repeated for credit. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.

**DANCE 3 U**  
Grades: 10, 11, 12  
Semester: .5 credit  
Prerequisite: Teacher recommendation/audition

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 semester dance showcase. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.
DANCE COMPOSITION  U LB  Grades: 10, 11, 12  Year: 1 Credit
Prerequisite: By audition only; Intermediate/Advanced dance skills

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 both semester dance showcases. This course may be repeated for credit. Dance can be applied toward graduation credit in Wellness and Fitness or Fine Arts.

HEALTH  Grades: 9, 10, 11, 12  Semester: .5 credit

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 self-image, prevention and detection of disease, and human growth and development including sexuality. Passing this course will enable students to meet the required health graduation requirement. Strongly recommended for 9th grade.

INDIVIDUAL SPORTS  U  Grades: 9, 10, 11, 12  Semester: .5 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 pickle ball. 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: .5 credit
Prerequisite: Students must be 15 years old by the end of the semester and be able to swim 500 yards.
Course Fee: $65

This course is designed by the American Red Cross to prepare students to work as professional lifeguards. 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 (approximately $65.00).

PERSONAL FITNESS 1  U  Grades: 9, 10, 11, 12  Semester: .5 credit

Personal Fitness 1 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 the cardiovascular equipment, and how to make health choices regarding diet and food intake. All students regardless of previous experience can be successful in this class. This class is highly recommended for the 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 1
Course Fee: $15
Grades: 10, 11, 12 Semester: .5 credit
This semester course is designed for juniors and seniors considering careers in Exercise Physiology/Kinesiology related fields such as athletic training, physical or occupational therapy, sports medicine, medical careers, nursing, physical education, and/or coaching. Students will experience laboratory application pertaining to athletic injury prevention and treatment, and on/off site field trips for first hand health-related career experiences, including information on preparation for such careers. Students will also complete CPR/FA certification during semester, allowing students the opportunity to work with the CTHS training staff as a student trainee.

SWIMMING
Grades: 9, 10, 11, 12 Semester: .5 credit
This class is designed for the beginning or first-time swimmer. This class is designed for the student who has had little swimming experience. Students will learn basic strokes and water safety, and water survival techniques. This course may be repeated for credit.

SWIMMING FITNESS
Grades: 9, 10, 11, 12 Semester: .5 credit
Students will understand the value of lifetime leisure activities, personal fitness, and survival as it pertains to aquatics. This class is designed for the advanced swimmer. Advanced is defined as proficient in each swimming stroke and able to swim longer distance (500 yards +). It is suggested that students should have past and/or present experience on a swim team. New skills and information presented in this class will be the use of a pace clock, Principles of Fitness while swimming and target heart rate zone training and use. This course may be repeated for credit.

TEAM SPORTS U
Grades: 10, 11, 12 Semester: .5 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: coaches, referees, trainers, safety officials, scorekeepers, managers, publicists, and broadcasters. This course may be repeated for credit.

UNIFIED PHYSICAL EDUCATION U
Prerequisite: Teacher recommendation
Grades: 10, 11, 12 Semester:.5 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 peer partners is available through teacher recommendation and application only. With full participation in class activities and interaction with students with special needs, peer partners will receive Wellness/Fitness credit with enrollment in this class. This course may be repeated for credit.

WEIGHT TRAINING 1 U
Course Fee: $15
Grades: 9, 10, 11, 12 Semester: .5 credit
This course is designed for students who are interested in learning about basic weight training. Students will master the fundamentals of several Olympic style weight lifting exercises as well as learn basic principles of conditioning and core strength. The beginning weight lifter will learn (1.) basic weight lifting 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 athlete. This course is recommended for all freshmen competitive athletes and can be repeated for credit.
**WEIGHT TRAINING 1 & PERSONAL FITNESS FOR GIRLS U** Grades: 9, 10, 11, 12 Semester: .5 credit

Course Fee: $15

This course is designed for female athletes who are not yet competing at the varsity level. It will provide experience in a variety of exercise methods and weight lifting techniques specifically designed for female athletes. An emphasis will be placed on developing muscle tone and strength, speed and agility training and injury prevention. Students will be exposed to a variety of cardiovascular activities and exercises. Best for off season athletes. This course may be repeated for credit.

**YOGA U** Grades: 10, 11, 12 Semester .5 credit

Prerequisite: Body Works or Personal Fitness

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. Materials needed for the course include a yoga mat and 2 yoga blocks. This course may be repeated for credit.
Cherokee Trail High School

World Languages

8th
- No middle school world language

9th
- French 1
- Spanish 1

10th
- French 2
- Spanish 2

11th
- IB French 3
- IB Spanish 3

12th
- IB French 4
- IB Spanish 4

International Baccalaureate

French 1 or 1A & 1B
Spanish 1 or 1A & 1B

French 2
Spanish 2

Pre-IB French 3
Pre-IB Spanish 3

Pre-IB French 4
Pre-IB Spanish 4

IB French 5
IB Spanish 5

AP Spanish Language

Standard/Advanced

No middle school world language

French 1
Spanish 1

French 2
Spanish 2

French 3
Spanish 3

French 4 Honors
Spanish 4 Honors

French 5 Honors
Spanish AP Lang

French 2
Spanish 2

French 3
Spanish 3

French 4 Honors
Spanish 4 Honors

French 5 Honors
Spanish AP Lang

Spanish for Spanish Speakers
9th, 10th, 11th
By application only

Spanish 4 Honors
and/or
Spanish AP Lang
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.

Materials for French and Spanish classes may include textbooks, workbooks, literature, software, videos, the Internet, MP3 players and other technology.

All classes labeled Pre-IB/IB include the prerequisite of acceptance into the International Baccalaureate Program.

French Courses

**FRENCH 1 NCAA**
Grades: 9, 10, 11, 12 Year: 1 credit
Prerequisite: None

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 the daily life, foods, and history.

**FRENCH 2 NCAA**
Grades: 9, 10, 11, 12 Year: 1 credit
Prerequisite: Successful completion of French 1 or middle school French 1 (a & b) or teacher recommendation

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 credit
Prerequisite: Successful completion of French 2 or middle school French 1 (a & b) or teacher recommendation

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.

**FRENCH 4 HONORS W NCAA**
Grades: 10, 11, 12 Year: 1 credit
Prerequisite: Successful completion of French 3 or teacher recommendation

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.

**FRENCH 5 HONORS W NCAA**
Grades: 11, 12 Year: 1 credit
Prerequisite: Successful completion of French 4 or teacher recommendation

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.
**IB FRENCH 3  NCAA**

Grade: 11  
Year: 1 credit

Prerequisite: Successful completion of French 2 or middle school French 1 (a & b) and 2 or teacher recommendation or Successful completion of 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.

**IB FRENCH 4  W NCAA**

Grades: 11, 12  
Year: 1 credit

Prerequisite: Successful completion of Pre-IB French 3 or IB French 3 or teacher recommendation

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.

**IB FRENCH LANGUAGE 5  W NCAA**

Grades: 11, 12  
Year: 1 credit

Prerequisite: Successful completion of IB French 4 or Pre-IB French 4 or teacher recommendation

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.

**PRE-IB FRENCH 3  NCAA**

Grades: 9, 10  
Year: 1 credit

Prerequisite: Successful completion of French 2 or middle school French 1 (a & b) and 2 or teacher recommendation

Students will communicate in French, and class instruction will be predominantly in French. Students will continue to learn French through the four skills of speaking, listening, reading, and writing and will continue to demonstrate knowledge of the language as well as certain aspects of the French-speaking cultures throughout the world. Students will study the literature of French-speaking cultures. Students will begin to develop a portfolio reflecting their own interests during the second semester of this course.

**PRE-IB FRENCH 4  NCAA**

Grade: 10  
Year: 1 credit

Prerequisite: Successful completion of French 3 or Pre-IB French 3 or teacher recommendation

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.
Spanish Courses

**AP SPANISH LANGUAGE W NCA A**

Grades: 11, 12  
Year: 1 credit

Prerequisite: Successful completion of Spanish 4 or IB Spanish 5

This course, taught entirely in Spanish, is designed to prepare students to take the Advanced Placement Spanish Language 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. The grade for this course is weighted. It is expected that all students enrolled in this class will sit for the $90 May exam. 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.

**IB SPANISH 3 NCAA**

Grade: 11  
Year: 1 credit

Prerequisite: Successful completion of Spanish 2 or middle school Spanish 1 (a & b) and 2 or teacher recommendation

Students will communicate in Spanish, and class instruction will be predominantly in Spanish. Students will continue to learn Spanish through the four skills of speaking, listening, reading, and writing and will continue to demonstrate knowledge of the language as well as certain aspects of the Spanish-speaking cultures throughout the world. Students will study samples of literature from Spanish-speaking cultures.

**IB SPANISH 4 W NCA A**

Grades: 11, 12  
Year: 1 credit

Prerequisite: Successful completion of Pre-IB Spanish 3 or IB Spanish 3 or teacher recommendation

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 W NCA A**

Grades: 11, 12  
Year: 1 credit

Prerequisite: Successful completion of IB Spanish 4 or teacher recommendation

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 IB Spanish SL exam.

**PRE-IB SPANISH 3 NCAA**

Grades: 9, 10  
Year: 1 credit

Prerequisite: Successful completion of Spanish 2 or middle school Spanish 1 (a & b) and 2 or teacher recommendation

Students will communicate in Spanish, and class instruction will be predominantly in Spanish. Students will continue to learn Spanish through the four skills of speaking, listening, reading, and writing, and will continue to demonstrate knowledge of the language as well as certain aspects of the Spanish-speaking cultures throughout the world. Students will study samples of literature from Spanish-speaking cultures.
**PRE-IB SPANISH 4 with NCAA**  
Grade: 10  
Year: 1 credit  
Prerequisite: Successful completion of Pre-IB Spanish 3 or teacher recommendation

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.

**SPANISH FOR SPANISH SPEAKERS**  
Grades: 9, 10, 11  
Year: 1 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 1 with NCAA**  
Grades: 9, 10, 11, 12  
Year: 1 credit  
Prerequisite: Highly recommended that student is concurrently enrolled in English 9 or higher

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 with NCAA**  
Grades: 9, 10, 11, 12  
Year: 1 credit  
Prerequisite: Successful completion of Spanish 1 or middle school Spanish 1 (a & b) or teacher recommendation

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 3 with NCAA**  
Grades: 9, 10, 11, 12  
Year: 1 credit  
Prerequisite: Successful completion of Spanish 2 or middle school Spanish 1 (a & b) or teacher recommendation

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 4 HONORS with NCAA**  
Grades: 10, 11, 12  
Year: 1 credit  
Prerequisite: Successful completion of Spanish 3 or teacher recommendation

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.
Additional Elective Courses

**AP RESEARCH (Year 2 of the AP Capstone Program) W**  
Grade: 12  
Year: 1 credit  
Prerequisite: Successful completion of 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 (Year 1 of the AP Capstone Program) W**  
Grade: 11  
Year: 1 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.

**AVID (Advancement via Individual Determination)**  
Grades: 9, 10, 11, 12  
Year: 1 credit  
Prerequisite: Application/Interview process

Advancement Via Individual Determination is a program to prepare bright but underachieving students with the skills necessary to pursue a college prep path for admission to a four-year college or university. The objectives of AVID are:

- To provide academic instruction and other support services to students and prepare them for eligibility into four-year colleges or universities.
- To give students college entry skills.
- To increase the “coping skills” of program participants.
- To motivate students to seek a college education.
- To increase students’ awareness of career opportunities and choices.

AVID is an elective college preparatory program for selected students with academic potential. Upon entering AVID, students enroll in an advanced level college preparatory class that fulfills college entrance requirements. Students should have a minimum GPA of 2.5, unweighted.

**IB THEORY OF KNOWLEDGE W NCAA**  
Grades: 11, 12  
Year: 1 credit  
Prerequisite: Acceptance to the IB Diploma Program

IB Theory of Knowledge, or TOK, is a required course for all IB students. They will be enrolled 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 which they have pursued in their formal education. A goal is for students to unlearn any automatic responses they may have had in the past in accepting 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.
MEDIA AND TECHNOLOGY CENTER ASSISTANT  
Grades: 9, 10, 11, 12  
Semester: .5 credit

Prerequisite: Application/Interview with MTC staff

MTC assistants learn several marketable skills including book circulation, shelving, filing and inventory, online research skills, basic computer maintenance and A/V equipment use (such as video editing). Graduates of this course are often successful finding employment at public and college libraries and in bookstores.

MEDICAL CAREERS  
Grades: 10, 11, 12  
Semester:.5 elective credit

This elective credit course is designed for students who will explore the healthcare industry as an extension of the Sports Medicine 1 course. The curriculum includes basic anatomy and physiology, medical terminology, health care systems, medical, legal and ethical issues, and health career exploration. Students will be exposed to experts in the health care industry through guest speakers and field trips. Students will develop a professional portfolio, with employment skills and leadership skills through Health Occupation Students of America (HOSA).

OFFICE ASSISTANT  
Grades: 9, 10, 11, 12  
Semester: .5 credit

(Counseling, Deans, Administration, Pupil Services)

Prerequisite: Approval of supervisor

This course is for students interested in learning office procedures, telephone etiquette, etc. and in providing a service to the school. This course may not be repeated for credit. Students will receive ‘S’ or ‘US’ as their grade.

STUDENT LEADERSHIP  
Grades: 9, 10, 11, 12  
Year: 1 credit

Prerequisite: Application/Interview process

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  
Grade: 9, 10, 11, 12  
Year: 1 credit

Prerequisite: Teacher recommendation

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: .5 credit

Prerequisite: Approval of supervising teacher

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. This class may not be repeated for credit. Students will receive ‘S’ or ‘US’ as their grade.

WORK STUDY  
Grades: 11, 12  
Year: 1-2 credits

Prerequisite: Meet criteria for acceptance, Counselor Approval

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 can be recommended for this course via the counselors, teachers, and administration. Students are supervised by the work-study coordinator who monitors work experience. This course is repeatable for credit.
What is CareerWise?
CareerWise is a statewide modern youth-apprenticeship system. Colorado's economy is growing, and students in Colorado are graduating with a skill gap that is negatively affecting businesses and career prospects for students and businesses. Using the Swiss apprenticeship system as a model for inspiration and partnership with Colorado state agencies CareerWise is uniting businesses and educators to provide a business-led, student-centered program that addresses real-world needs.

How does the program work?
Students are released from school for 16+ hours per week to earn and learn in their host company; some time is spent in high-quality training as well (usually for college credit). Whether at school or in the workplace, students are fulfilling graduation requirements, building their resume, and a college portfolio. Students will often have the opportunity to participate in sports and other extracurricular activities just the same as a non-apprentice. In most situations, the student will graduate high school but continue their apprenticeship. They will be supported with strong advising and encouraged to continue their education in parallel with their apprenticeship. They will continue to earn college credit for their apprenticeship. In addition, companies may support tuition reimbursement for college coursework—either in the last year or upon completion of the apprenticeship.

What are the minimum requirements?
A potential apprentice must be on track to graduate high school and must work with their counselor to ensure their school schedule can support a work schedule. An apprentice must be able to commit to working for 3 years and be 16 years old when they begin working. Job openings are currently available in Advanced Manufacturing, Technology, Business Operations, Healthcare and Finance/Insurance.

How does a student apply?
First, a student should check with their counselor to make sure their school schedule can support an apprenticeship work schedule. A student can apply from December 1 to March 1 on the Marketplace and interview soon after. The Marketplace will house all of the job openings for the year. CareerWise will ensure all documentation is prepared for the employer, but the student will be hired directly by the business.
Cherry Creek Elevate High School

What is Cherry Creek Elevate 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.

Elevate 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 during the course of study, 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.
Your life, your world, your future.

2020-2021 Course Catalog

www.cherrycreekschools.org/CTE

Updated 1/10/2020
**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 post-secondary education and career. All high schools in the Cherry Creek School District offer CTE courses.

**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.

**Career Connections** is a CTE program designed to guide students through career exploration by partnering with local business and industry. This program includes the **Career Exploration** class, **Executive Internship** and **Apprenticeship** programs. All programs help students develop necessary skills for transition to career and/or post-secondary education.

**Concurrent Enrollment (CE)** is an opportunity for students to earn high school and college credit simultaneously. Many course in the Cherry Creek School District (CCSD) offer concurrent enrollment credit through local colleges. As an additional benefit, CCSD will pay the tuition for students who apply for the College Opportunity Fund (COF). College credit can only be earned with a grade of ‘C’ or better.

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

**Career & Technical Student Organizations (CTSO)** 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.
REGISTRATION PROCESS

HOME HIGH SCHOOL CTE COURSE REGISTRATION

Information about CTE elective courses offered at your home high school can be found in the high school’s course catalog. The course catalog provides information regarding the pathway of your selected CTE course, as well as any pre-requisites you may need to complete. To register for a course, follow home high school’s registration process.

CCIC AND CTE DISTRICT COURSE REGISTRATION

Step 1: ICAP Planning
Use your ICAP 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 CTE course catalog to help you 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 ICAP, 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
Once you have received counselor approval, complete the CTE online application, opening on January 21, 2020. A link to the CTE 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 6, 2020. In addition to the application, some courses may require a supplemental application and/or attendance at an informational meeting.

Step 5: Confirmation
After submitting an application, you will receive a confirmation email, as well as information regarding additional application requirements. Note that all application requirements must be completed in order to be considered for acceptance. Notification of acceptance into a CCIC or District CTE course will occur by email in late April/early May.

APPLICATION DUE: FRIDAY, MARCH 6, 2020
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.
CTE PATHWAYS AND PROGRAMS

Cherry Creek School District offers CTE courses in the below career pathways and programs:

CTE Pathways:
- Advanced Manufacturing
- Arts & Design
- Business Services
- Cosmetology
- Criminal Justice
- Family & Consumer Science
- Future Educator
- Health Sciences
- Hospitality & Tourism
- Infrastructure Engineering
- IT & STEAM
- Transportation

CTE Programs:
- Alternative Cooperative Education (ACE)
- Career Connections

The below chart outlines which pathways and programs are available at individual schools. Off-site pathways are offered through partnership school districts.

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<tr>
<th>Pathway/Program</th>
<th>Cherokee Trail</th>
<th>Cherry Creek</th>
<th>CCIC</th>
<th>Eaglecrest</th>
<th>Endeavor &amp; I-Teams</th>
<th>Grandview</th>
<th>Overland</th>
<th>Smoky Hill</th>
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<td>Advanced Manufacturing</td>
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Pathway and Program Pages

All CTE courses are part of a CTE Pathway, which is a sequence of courses within a specific area of interest. The following pages provide basic information about the Pathways and Programs offered within Cherry Creek School District. Following the Pathway and Program pages, you will find specific descriptions for district CCIC and CTE courses. CTE courses offered at the home high school are listed in the home high school course catalogs.
The Advanced Manufacturing Pathway will help fill industry’s skills gap by giving students unique opportunities to be trained on manufacturing trends. Whether it be computer numerical control (CNC) manufacturing systems, materials processing, or precision measurement, students will be able to engage in hands-on learning with state-of-the-art CNC equipment including mills, lathes, water jets, routers, and plasma cutters. Courses available at: CCIC.

**Prepare for future careers like:**
- CNC Machinist
- Electromechanical Technician
- Production Technician
- Material Handler
- CNC Programmer
- Manufacturing Technician
- Quality Inspector
- Tool & Die Maker

**Prepare for industry certifications:**
- National Institute of Metalworking Skills (NIMS) Job Planning, Benchmark & Layout Credential
- National Institute of Metalworking Skills (NIMS) Measurement, Materials & Safety Credential

**Did you know?**
In 2017, the average manufacturing worker in the U.S. earned $84,832, including pay and benefits.

**Did you know?**
Manufacturers in the United States perform more than 75% of all private-sector research and development in the nation, driving more innovation than any other sector.*

**Did you know?**
Over the next decade, 2 million of the nearly 3.5 million jobs in manufacturing are expected to go unfilled because of the lack of skilled workers.*

**Our Partners**

* National Association of Manufacturers (http://www.nam.org)
The Arts and Design Pathway involves designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, photography, graphic design, and entertainment services. Courses available at: Cherry Creek, Eaglecrest, Grandview and Smoky Hill.

**Prepare for future careers like:**
- Fashion Designer
- Interior Designer
- Graphic Designer
- Animator
- Artist
- Architect
- Photographer
- Web Designer

**Prepare for industry certifications like:**
- Digital Animation certificate
- Adobe Photoshop certificates

**Did you know?**
In 2018, the median annual wage for art directors in the advertising and public relations industry was $95,130.*

**Did you know?**
Employment of graphic designers in computer systems design and related services is projected to grow 24% from 2018 to 2028.*

**Did you know?**
A fashion designer in the motion picture and video industry had a median annual wage of $79,240 in 2018.*

**Our Partners**

In a collaborative, startup-style learning environment, the Business Services Pathway will give students an opportunity to cultivate an entrepreneurial mindset and develop skills to build and manage their own businesses. Courses available at: Cherokee Trail, Cherry Creek, CCIC, Eaglecrest, Grandview, Overland and Smoky Hill.

### Prepare for future careers like:
- Project Management
- Business Analyst
- Entrepreneur
- Accountant
- Sales Associate
- Marketing Associate
- Social Media Specialist
- Human Resources

### Prepare for industry certifications like:
- Microsoft Office certifications
- Certified Associate Project Manager

### Did you know?
The median salary for human resource specialists in 2017 was $60,350.*

### Did you know?
By 2027, employers will need 87.7 million people in project management related roles. The talent gap could result in a loss of $207.9 billion for the 11 countries analyzed.**

### Our Partners

The Cosmetology Pathway will prepare students to become certified in cosmetology and esthetics. The facility offers industry-standard equipment, such as waxing and facial machines so students can familiarize themselves with how the equipment works in a learning setting. Students in the program learn business management skills as well as all the latest industry techniques so when they graduate, they are prepared for all aspects of the industry. Courses available at: Colorado’s Finest High School of Choice, Englewood School District.

**Prepare for future careers like:**
- Esthetician
- Hairstylist
- Manicurist
- Skincare Specialist
- Cosmetologist
- Nail Technician
- Business Owner
- Massage Therapist

**Prepare for industry certifications like:**
- Colorado Barber/Cosmetology Board state license

**Did you know?**
Personal care and service occupations will result in 1.2 million new jobs from 2018 to 2028.*

**Did you know?**
Employment of manicurists and pedicurists is projected to grow 10% from 2018 to 2028, faster than the average for all occupations.*

**Did you know?**
Skincare specialist positions are projected to increase of 11% due to new services like mini sessions and mobile facials.*

**Our Partners**

The Criminal Justice Pathway is a two-year program designed to emphasize entry level skills in a variety of criminal justice occupations. Students will learn about the agencies and processes involved in the criminal justice system including legislature, courts and corrections. Students will concentrate on forensics, crime scenes, and investigative techniques in the criminal investigation process. Courses available at: Cherokee Trail, Cherry Creek, Grandview, Overland, and Smoky Hill.

<table>
<thead>
<tr>
<th>Prepare for future careers like:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Public Defender</td>
</tr>
<tr>
<td>• Corrections Officer</td>
</tr>
<tr>
<td>• Law Enforcement</td>
</tr>
<tr>
<td>• Detective</td>
</tr>
<tr>
<td>• Crime Scene Investigator</td>
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<tr>
<td>• Court Reporter</td>
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<tr>
<td>• Judge</td>
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<tr>
<td>• Lawyer</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Prepare for industry certifications like:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Associate of Arts: Criminal Justice degree</td>
</tr>
</tbody>
</table>

Did you know?
The median annual wage for lawyers in the Federal government industry in 2018 was $120,910.*

Did you know?
Employment of police and detectives is projected to grow 5% from 2018 to 2028.*

Did you know?
In 2018, the median wage for a forensic science technician was $58,230.*

The Family and Consumer Sciences Pathway motivates students to manage the challenges of living and working in a diverse global society. Our unique focus is on families, work and inter-relationships. This pathway offers a wide variety of student learning in food and nutrition, human development and the family, parenting and early childhood education, and career awareness in related occupations. Courses available at: CCIC, Cherry Creek, Eaglecrest, Grandview, Overland and Smoky Hill.

Prepare for future careers like:

- Executive Chef
- Fashion Designer
- Teacher
- Childcare Provider
- Food Stylist
- Interior Designer
- Nutritionist
- Caterer

Prepare for industry certifications like:

- ServSafe Food Handler and Manager
- ProStart National Certificate of Achievement

Did you know?

Employment of food service managers is projected to grow 11% from 2018 to 2028.*

Did you know?

The median annual wage for high school teachers was $60,320 in 2018.*

Did you know?

In the motion picture industry, the median annual wage for a fashion designer is $79,240.*

Our Partners

The Future Educator Pathway is an innovative program that introduces high school students to the teaching profession. Students explore the learner, the school and the role of the teacher through exciting hands-on activities, guest speakers, field trips, observations, job shadowing and cooperative learning situations. Students have an opportunity to be hired as a para-professional and work in Cherry Creek School District. Courses available at: CCIC.

**Prepare for future careers like:**
- Teacher
- Instructional Coach
- Paraprofessional
- Counselor
- School Administrator
- Professor
- Tutor
- Camp Counselor

**Prepare for industry certifications like:**
- Para-Professional License

**Did you know?**

The median pay for an Instructional Coordinator in 2018 was $64,450.*

**Did you know?**

Employment of high school teachers is projected to grow 4% from 2018 to 2028* due to rising student enrollment.

**Did you know?**

The median annual wage for elementary teachers in 2018 was $58,230.*

**Our Partners**

[University of Colorado Denver]

[Dedicated to Excellence Cherry Creek Schools]

Whether a student’s focus is physical or occupational therapy, behavioral health, nursing, or pharmacy, the Health & Wellness Pathway provides students opportunities to explore various Health professions at the aide/technician level. In these courses, students will meaningfully integrate their knowledge and skills with hands-on labs, authentic clinical settings, and industry-grade equipment. Courses available at: Cherokee Trail, Cherry Creek, CCIC, Overland and Smoky Hill.

**Prepare for future careers like:**
- Physical Therapist
- Registered Nurse
- Counselor
- Psychiatrist
- Pharmacist
- Social Worker
- Athletic Trainer
- Occupational Therapist

**Prepare for industry certifications like:**
- First Aid/CPR/AED
- Certified Nurse Aide
- Behavioral Health Technician
- Pharmacy Technician

**Did you know?**
In May 2017, the average wage for a pharmacy technician was $31,750, while the average wage for a pharmacist was $124,170.*

**Did you know?**
Registered nurses can work with a variety of specific patient groups including addiction, critical care, public health, neonatology, and rehabilitation.*

**Did you know?**
Job opportunities for physical therapists are projected to grow 28% from 2016 to 2026, much faster than the 7% growth projection for all occupations.

**Our Partners**

With a focus on leadership development, students in the Hospitality & Tourism Pathway will be able to develop the skills to manage, market, and operate foodservice establishments, hotels, and resorts. Whether through guest visits, site tours, or apprenticeships, students will have engaging and unique opportunities to advance their culinary skills and deepen their understanding of business operations and world-wide tourism. Courses available at: CCIC.

**Prepare for future careers like:**
- Executive Chef
- Food Stylist
- Marketing Director
- General Manager
- Catering Director
- Executive Housekeeper
- Restaurant Owner
- Pastry Chef

**Prepare for industry certifications like:**
- ProStart National Certificate of Achievement
- ServSafe Food Handler and Manager
- ServSuccess Certified Restaurant Professional

**Did you know?**
In the U.S., lodging and tourism is a Top 10 industry in 48 of the 50 states. The hospitality sector is expected to add 2.1 and 3.3 million jobs by 2021.*

**Did you know?**
Employment for chefs and head cooks is projected to grow 11% from 2018 to 2028.

**CTSO**

**Did you know?**
In Colorado, 10% of all jobs held are in the restaurant industry.

---

From framing to HVAC to drywall, it takes many different kinds of skilled workers to make a new building habitable! The Infrastructure Engineering Pathway gives students a chance to explore several careers in building trades. With opportunities to operate cranes and/or forklifts, pour concrete, and frame buildings, students will get the chance to work with their hands and experience “on the job” training to build structures. Courses available at: CCIC.

<table>
<thead>
<tr>
<th>Prepare for future careers like:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• HVAC Technician</td>
</tr>
<tr>
<td>• Forklift Operator</td>
</tr>
<tr>
<td>• Electrician</td>
</tr>
<tr>
<td>• Carpenter</td>
</tr>
<tr>
<td>• Plumber</td>
</tr>
<tr>
<td>• Roofer</td>
</tr>
<tr>
<td>• Landscaper</td>
</tr>
<tr>
<td>• Drywaller</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prepare for industry certifications like:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Occupational Safety and Health Administration (OSHA) 10-Hour Card</td>
</tr>
<tr>
<td>• Home Builders Institute Pre-Apprenticeship Certificate Training</td>
</tr>
<tr>
<td>• National Center for Construction Education and Research credentials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did you know?</th>
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</thead>
<tbody>
<tr>
<td>The median annual wage for plumbers in 2017 was $52,590.*</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Did you know?</th>
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</thead>
<tbody>
<tr>
<td>Colorado’s construction industry is expected to need 30,000 new employees over the next 7 years.**</td>
</tr>
</tbody>
</table>

Did you know?
Job opportunities for workers in various construction trades are expected to grow 10% between 2016 and 2026, compared to the 7% for all occupations.*

Our Partners

From virtual reality to cybersecurity to robotics, the IT & STEAM Pathway gives students opportunities to use, learn, and create cutting edge technologies to tackle the challenges the future may bring. Through hands-on experiences, students can take ideas from conception to reality, learn to troubleshoot any kind of personal computing device or computer network, or build their own virtual reality environments. Courses available at: Cherokee Trail, Cherry Creek, CCIC, Eaglecrest, Grandview and Overland.

**Prepare for future careers like:**
- Network Administrator
- IT/STEAM Educator
- Mechanical Engineer
- Computer Engineer
- Product Designer
- IT Support Specialist
- Game Designer
- Data Analyst

**Prepare for industry certifications like:**
- SOLIDWORKS certifications
- Unity Certified Associate

**Did you know?**
The median annual wage for engineers in 2018 was $90,060.*

**Did you know?**
Job opportunities for information security analysts is projected to grow 28% from 2016 to 2026, compared to 13% growth for all computer occupations.

**Did you know?**
The median annual wage for industrial designers in 2018 was 66,970.*

The Transportation Pathway will give students a unique opportunity to get hands-on experience learning to inspect, service, and repair automobiles and aircraft. Whether it be diving into the electrical circuits, tire alignments, and suspension repairs for cars or exploring the engine, landing gear, and hydraulic systems on airplanes, students will have a one-of-a-kind opportunity to build invaluable skills with industry-standard tools and equipment. Courses available at: CCIC, Overland, Smoky Hill and Metro State University.

Prepare for future careers like:
• Automotive Technician: local repair shop, dealerships, fleet maintenance, specialty shops
• Aircraft Mechanic: major airlines, flight schools, air ambulance, cargo aircraft, corporate jets

Prepare for industry certifications like:
• Snap-on Certifications
• Automotive Service Excellence: Maintenance & Light Repair, Automobile Service & Technology
• Federal Aviation Administration: Mechanic Certificate with Airframe and Powerplant Ratings

Did you know?
In 2017, the median annual income for aircraft mechanics was $61,020.*

Did you know?
Job opportunities for automotive service technicians and mechanics is projected to grow 7% between 2016 and 2026.*

Did you know?
There will be a shortage of aviation mechanics in the U.S. starting in 2022.**

Our Partners

Alternative Cooperative Education (ACE) is a multi-occupational program that facilitates individualized, developmentally appropriate programming necessary to support CTE students successfully. This includes students identified as Special Populations. ACE CTE Programming is developed through collaboration with educators, business representatives and community stakeholders. The collaboration creates local and relevant work-based and school-based learning experiences.

**Learn about Postsecondary Workforce Readiness skills like:**

<table>
<thead>
<tr>
<th>Career Development</th>
<th>Independent Living</th>
<th>Academic Foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business and Industry</td>
<td>Work-Based Learning</td>
<td>Business and Industry</td>
</tr>
</tbody>
</table>

**ACE Programs Include:**

**Career Development**

This class is designed to help students understand and explore the personal and employability skills that are foundational to successfully transitioning into the workplace. Students will be able to articulate their personal strengths, barriers, interests and career cluster choices. Students will engage in personal development, self-discipline skills, interpersonal communication, leadership, critical thinking, and ethical decision making for the tools necessary to pursue a career path.

**Work-Based Learning: In School and In Community**

This course is designed for students to enhance employability skills by participating in an in-school or community work experience program (paid or unpaid.) A training plan and evaluation will be developed listing job specific technical skills the students will learn during the experience. Students will demonstrate levels of self-awareness, career exploration, and postsecondary option knowledge and employability skills.
Career Connections is a program designed to connect students with career pathways of interest by partnering with businesses in the community. Through experiences including the Career Exploration class, career readiness training, career tours, career shadowing, career days, internships and apprenticeships, students will have the opportunity to explore career pathways and develop career readiness skills.

### Learn about future careers in:
- Hospitality
- Manufacturing
- Sales
- Architecture
- Finance
- Human Resources
- Healthcare
- Marketing
- Marketing
- Architecture
- Human Resources

### Career Connections offers three programs:

#### Career Exploration
Career Exploration is a year-long class designed to help students explore careers and career pathways in context of their personal interests, strengths, and preferences. Key concepts of focus include: Career Awareness, Financial Literacy, Personal Message, Employment Skills, Understanding of Career Pathways and Self-knowledge.

Classes available at: Cherokee Trail, Eaglecrest, Overland, Smoky Hill

#### Executive Internships
The Internship Program will provide an opportunity for selected students to have experiences in a career field that they would like to pursue after graduation. An academic internship is a form of a first-hand learning that integrates knowledge and theory learned in the classroom with practical application and skill development in a professional setting. Internships are unpaid.

#### Apprenticeships
Cherry Creek School District will work collaboratively with CareerWise Colorado and industry partners to create an apprenticeship program unique to individual students’ interests and abilities. CareerWise modern youth apprentice students earn a wage while receiving hands-on work experience where they can apply their high school classroom learning each week. Typically, the apprenticeships are 2-3 years in length. Eligibility depends on student’s maturity, reliability, commitment and graduation status.

### Some of our partners include:

![Partner Logos]
The following pages include course pathway and descriptions for courses offered at the Cherry Creek Innovation Campus, and throughout Cherry Creek School District.

**CORE CLASSES OFFERED AT CCIC**

CCIC core content is integrated within our pathway curriculum and meets district core standards requirements for graduation.

**CP Innovator’s English A** - In this integrative English course, students demonstrate career and college readiness, developing leadership, reading, and writing skills that will make them successful in the post-secondary realm. 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 write compositions and responses in argumentative/persuasive form to further enhance knowledge of career-related issues and inquiry, inviting cultural communication and diversity into their writing and conversations. Finally, students will also conduct short, sustained research as well as complete an APA research paper.

**CP Innovator’s English B** - This course will provide the foundation for employment and prepare students for postsecondary success. It will also use an active learning approach in writing, reading, and communication processes to integrate topics into potential careers. Students will study rhetorical devices and their use in writing and speeches to inform or persuade an audience.

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

**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.

**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.

**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.

**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.

**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.

* All CCIC core classes are NCAA approved.
## MANUFACTURING FUNDAMENTALS

<table>
<thead>
<tr>
<th>GRADES: 10-12</th>
<th>LENGTH: 1 SEMESTER</th>
<th>CREDITS: .5 CTE / .5 MTH B</th>
<th>EST. FEES: $140</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing Fundamentals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th - 12th Grade</td>
<td>An overview of essential principles of manufacturing processes.</td>
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<tr>
<td><strong>CNC Machining</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10th - 12th Grade</td>
<td>Use of SOLIDWORKS software to create 3D products from virtual models.</td>
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<tr>
<td><strong>Manufacturing Fundamentals II</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th - 12th Grade</td>
<td>An in-depth experience utilizing the principles of manufacturing processes.</td>
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<td></td>
</tr>
<tr>
<td><strong>CNC Machining II</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th - 12th Grade</td>
<td>Use of SOLIDWORKS CAM in conjunction with CNC machines.</td>
<td></td>
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</tr>
</tbody>
</table>

**Prerequisites:** N/A

**Concurrent Enrollment:** N/A

**Certifications:** National Institute of Metalworking Skills (NIMS) upon completion of pathway

**Course Description:** This course covers essential principles behind manufacturing processes and provides a working knowledge of a broad range of manufacturing procedures. Manufacturing Fundamentals includes instruction on hand tools, portable electric power tools, and the introduction to various computer-controlled production machines, including water jet cutters, routers, and plasma cutters. Brief experiences with plastic injection molding, vacuum-forming equipment, and composites production are also included. Featured equipment includes HAAS Automation, HyperTherm, Starrett, Plural Additive Manufacturing, Instron, Formech, Dewalt and JET.

*Suggested prerequisites include CAD (Computer Aided Design) or CAD for Fabrication.*
## CNC MACHINING

<table>
<thead>
<tr>
<th>Grades: 10-12</th>
<th>Length: 1 Semester</th>
<th>Credits: 0.5 CTE/ 0.5 MTH B</th>
<th>Est. Fees: $140</th>
</tr>
</thead>
</table>

**Prerequisites:** N/A  
**Concurrent Enrollment:** N/A  
**Certifications:** National Institute of Metalworking Skills (NIMS) upon completion of pathway

**Course Description:** Computer Numeric Control (CNC) Machining provides students opportunities to work with various 3 Axis CNC milling machines and a CNC lathe. Students learn how to utilize SolidWorks 3D modeling software and SolidWorksCAM to transform a virtual model into a physical product. Students also learn how to use a HAAS and Tormach manufacturing equipment, Instron precision testing equipment, and Starrett precision measurement tools. Additional units of study introduce students to industrial grade, multi-material 3D printing, precision measurement, and quality control. Featured equipment includes HAAS AutoMation, HyperTherm, Starrett, Plural Additive Manufacturing, Instron, Formech, Dewalt and JET.

*Suggested prerequisites include CAD (Computer Aided Design) or CAD for Fabrication.*

## MANUFACTURING FUNDAMENTALS II

<table>
<thead>
<tr>
<th>Grades: 11-12</th>
<th>Length: 1 Year</th>
<th>Credits: 1.0 CTE/ 1.0 MTH B</th>
<th>Est. Fees: $110</th>
</tr>
</thead>
</table>

**Prerequisites:** Manufacturing Fundamentals and CNC Machining  
**Concurrent Enrollment:** N/A  
**Certifications:** National Institute of Metalworking Skills (NIMS)

**Course Description:** Fundamentals of Manufacturing II is a full year course that gives students a chance to expand on what was introduced in Fundamentals of Manufacturing I. This course concentrates on mass production and industry-level part-creation using CNC routers, plasma cutters and water jet cutters. Students also have access to injection molding, vacuum forming, composite materials and traditional tooling and hand operations. Students work individually as well as in teams to create real world industry design parts. NIMS certification preparation is an additional focus of the class.

## CNC MACHINING II

<table>
<thead>
<tr>
<th>Grades: 11-12</th>
<th>Length: 1 Year</th>
<th>Credits: 1.0 CTE/ 1.0 MTH B</th>
<th>Est. Fees: $110</th>
</tr>
</thead>
</table>

**Prerequisites:** Manufacturing Fundamentals and CNC Machining  
**Concurrent Enrollment:** N/A  
**Certifications:** National Institute of Metalworking Skills (NIMS)

**Course Description:** This course covers 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 setups and operations not covered in the basic CNC Machining. NIMS certification preparation is an additional focus of the class.
PROJECT MANAGEMENT FOR ENTREPRENEURS I

**GRADES:** 10-12  
**LENGTH:** 1 SEMESTER  
**CREDITS:** .5 CTE/.5 ENG A  
**EST. FEES:** $80

**Prerequisites:** N/A

**Concurrent Enrollment:** Arapahoe Community College (ENP 105, MAN 241)

**Certifications:** Certified Associate Project Management (CAPM) upon completion of PM4EI and PM4EII (may be earned in grade 12 only)

**Course Description:** By definition, project management is a temporary endeavor undertaken to create a unique product, service, or result. Project Management for Entrepreneurs I explores the fundamentals of project management with an entrepreneurial slant. Business and marketing concepts, including organizational communication, human resources management, entrepreneurship, accounting, finance, and leadership are explored. The course investigates the concepts and applicability of project management within organizations by examining the unique nature of projects, the need for integrated decision-making, and the stages of the project life cycle. The creation of a unique product, service, or idea that solves a problem in your community is required. This process will include collaboration on a sales pitch and business plan adopting the Business Canvas Model.

_Suggested Prerequisites include Introductory Business and/or Marketing Course._

---

PROJECT MANAGEMENT FOR ENTREPRENEURS II

**GRADES:** 10-12  
**LENGTH:** 1 SEMESTER  
**CREDITS:** .5 CTE/.5 ENG B  
**EST. FEES:** $80

**Prerequisites:** Successful Completion of Project Management for Entrepreneurs I

**Concurrent Enrollment:** Arapahoe Community College (MAR 106, ENP 205)

**Certifications:** Certified Associate Project Management (CAPM) upon completion of PM4EI and PM4EII (may be earned in grade 12 only)

**Course Description:** Project management is a rapidly growing profession. Between now and the year 2020, 1.57 million new project management jobs are projected to be created each year. 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

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 SEMESTER</th>
<th>CREDITS: .5 CTE/.5 ENG B</th>
<th>EST. FEES: $80</th>
</tr>
</thead>
</table>

**Prerequisites:** Project Management for Entrepreneurs I & II  
**Concurrent Enrollment:** Arapahoe Community College (MAR 160, MAN 243)  
**Certifications:** Certified Associate Project Management (CAPM) upon completion of PM4EI, PM4EII, & PM4EIII (may be earned in grade 12 only)  
**Course Description:** This course enables students to understand how project management skills are necessary to build customer relations and service practice. Enrolled students learn how to problem solve and understand the importance of communicating with customers. Specific emphasis is given to managing customer expectations by building positive customer rapport and creating outcomes related to industry. In addition, this course examines Customer Relationship Management (CRM) and its application in marketing, sales, and service industry.

### CTE CAPSTONE

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 SEMESTER</th>
<th>CREDITS: .5 CTE/.5 ENG B</th>
<th>EST. FEES: $100</th>
</tr>
</thead>
</table>

**Prerequisites:** Any CCIC student completing a pathway at the CCIC is eligible to take the CTE Capstone course.  
*A teacher recommendation may be required.*  
**Concurrent Enrollment:** Arapahoe Community College (MAN 224, MAN 128)  
**Certifications:** Certified Associate Project Management (CAPM) upon completion of PM4EI and PM4EII (may be earned in grade 12 only)  
**Course Description:** While working in teams, students who have completed any CCIC pathway will solve real world problems faced by our business partners who will act as project sponsors. The teams will then initiate, plan, execute, monitor and control, and close the project by presenting the sponsor with the deliverable and/or solution. All team members must be willing to improve their skills in collaboration, leadership, time management, teamwork, commitment, and perseverance.
EDHD 1030 EARLY FIELD EXPERIENCE AND SEMINAR

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 SEMESTER</th>
<th>CREDITS: .5 CTE</th>
<th>EST FEES: N/A</th>
</tr>
</thead>
</table>

Prerequisites: N/A

Concurrent Enrollment: University of Colorado at Denver, EDHD 1030

Certifications: N/A

Course Descriptions: Working within diverse community contexts to support children’s learning requires the competencies explored in this course. The experiences of seminar, paired with practice-based mentoring in a local school or community setting, will help each student develop theoretical grounding as a community based educator.

CLDE 1000 LANGUAGE, POWER & IDENTITY

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 SEMESTER</th>
<th>CREDITS: .5 CTE</th>
<th>EST FEES: N/A</th>
</tr>
</thead>
</table>

Prerequisites: N/A

Concurrent Enrollment: University of Colorado at Denver, CLDE 1000

Certifications: N/A

Course Description: 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.
**INTRODUCTION TO HEALTH & WELLNESS**

**INTRODUCTION TO HEALTH & WELLNESS**

**GRADES: 10-12** | **LENGTH: 1 SEMESTER** | **CREDITS: .5 CTE/ .5 LIFE SCI** | **EST. FEES: $85**
---|---|---|---

**Prerequisites:** N/A

**Concurrent Enrollment:** Arapahoe Community College (HPR 123, HPR 124, Medical Terminology)

**Certifications:** American Red Cross CPR/FAS/AED

**Course Description:** An exploration of careers in healthcare, along with necessary leadership and employability skills. Students will learn basic human anatomy, physiology, medical terminology, Maslow’s Hierarchy of Needs, CPR/First Aid, and Safety/AED certification.

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**CERTIFIED NURSE AIDE**

**GRADES: 11-12** | **LENGTH: 1 SEMESTER** | **CREDITS: .5 CTE/ .5 LIFE SCI** | **EST. FEES: $165**
---|---|---|---

**Prerequisites:** N/A

**Concurrent Enrollment:** N/A

**Certifications:** Certified Nurse Aide

**Course Description:** Students learn effective skills to interact competently with clients, including sensitivity to clients’ emotional, social and mental health needs, as well as appropriate documentation of clients’ health assessment, physical condition, and overall well-being. Skills must meet requirements of the Colorado State Board of Nursing. Students will be required to pass a background check and drug screening.

*Suggested prerequisite: Introduction to Health & Wellness.*
## Behavior Health Technician

<table>
<thead>
<tr>
<th>Grades: 11-12</th>
<th>Length: 1 Year</th>
<th>Credits: 1.0 CTE/1.0 ENG</th>
<th>Est. Fees: $98</th>
</tr>
</thead>
</table>

**Prerequisites:** N/A  
**Concurrent Enrollment:** Pueblo Community College (PTE 110, PTE 120)  
**Certifications:** Behavioral Health Technician certificate of completion upon completion of course  
**Course Description:** Explores basic principles of behavioral health and wellness care in a behavioral healthcare setting. This course develops interpersonal and technical skills while working with clients in psychiatric care settings.  
*Suggested prerequisite: Introduction to Health & Wellness*

## Introduction to Physical and Occupational Therapy

<table>
<thead>
<tr>
<th>Grades: 11-12</th>
<th>Length: 1 Semester</th>
<th>Credits: .5 CTE/.5 LIFE SCI</th>
<th>Est. Fees: $70</th>
</tr>
</thead>
</table>

**Prerequisites:** N/A  
**Concurrent Enrollment:** Arapahoe Community College (PTA 115)  
**Certifications:** N/A  
**Course Description:** Physical and Occupational Therapists help people who are injured, ill, or disabled regain skills needed for the activities of daily life. Physical and Occupational Therapy Assistants set up treatment plans and work under the Physical or Occupational Therapist. Students learn how to prepare materials and treatment rooms, assemble equipment, follow HIPAA guidelines, communicate in the workplace, and perform clerical tasks necessary for physical and occupational therapy aides.  
*Suggested prerequisite: Introduction to Health & Wellness*

## Pharmacy Technician

<table>
<thead>
<tr>
<th>Grades: 12</th>
<th>Length: 1 Year</th>
<th>Credits: 1.0 CTE/1.0 LIFE SCI</th>
<th>Est. Fees: $154</th>
</tr>
</thead>
</table>

**Prerequisites:** N/A  
**Concurrent Enrollment:** N/A  
**Certifications:** Pharmacy Technician  
**Course Description:** This course introduces students to the role and functions of a Pharmacy Technician. The content and skills covered are ethical conduct, communication skills, patient care, proper medication handling, medication ordering, patient confidentiality, regulatory compliance, basic anatomy, physiology, and medical terminology. Students will be required to pass a background check and drug screening.  
*Suggested prerequisite: Introduction to Health & Wellness*
# Lodging & Resort Management/ProStart Pathways

## ProStart I/ProStart II
10th-12th Grade  
Length: 1 year  
Food safety and sanitation, commercial equipment, and cooking methods for soups, sauces, stocks and more.  
Menu design, business operations, and cooking methods for meats, pasta, desserts, and more.

*ProStart prerequisite: If you are a Grandview or Smoky Hill student, one year of ProStart at your home school is required.

## ProStart Youth Apprenticeship
11th-12th Grade  
Length: 1 year  
CCICafé business operations, food production principles, marketing, team building, and communication.

## Lodging & Resort Management
11th-12th Grade  
Length: 1 year  
Careers in hospitality, guest experience cycle, resort operations, sales, marketing, banquet/event management, team building and communication.

## LODGING & RESORT MANAGEMENT

<table>
<thead>
<tr>
<th>Grades: 11-12</th>
<th>Length: 1 Year</th>
<th>Credits: 1.0 CTE / 1.0 ENG B</th>
<th>Est. Fees: $165</th>
</tr>
</thead>
</table>

**Prerequisites:** N/A  
**Dual Enrollment:** Metro State University of Denver (HLDR 1000 & HLDR 1500), $50 additional fee per credit, 6 credits  
**Certifications:** GOLD Certified Guest Service Professional, ServSafe Food Handler, Workforce Readiness Certificate, and CHTMP (Certified Hospitality & Tourism Management Professional). Includes a 100 hour internship.  
**Course Topics:** Careers in hospitality, resort operations, sales, marketing, soft skills, communication, guest experience cycle, food and beverage services, hospitality leadership skills, communication, banquets and catered events, managing business operations, safety and security, sales, marketing, and human resources.

*Suggested Prerequisites: Intro to Business, Marketing, or Leadership*
# PROSTART I / PROSTART II

<table>
<thead>
<tr>
<th>GRADES: 10-12</th>
<th>LENGTH: 1 YEAR</th>
<th>CREDITS: 2.0 CTE</th>
<th>EST. FEES: $175</th>
</tr>
</thead>
</table>

**Prerequisites:** N/A

*GHS/SHHS students only - one year of ProStart from home school required

**Dual Enrollment:** ProStart I - Metro State University of Denver (RST 1200); ProStart II - Metro State University of Denver (RST 1550), $50 additional fee per Metro State University credit, 6 credits

**Certifications:** ServSafe Food Handler, Workforce Readiness Certificate, Gold Certified Guest Service Professional, ProStart National Certificate of Achievement

**Course Topics:** Careers in the foodservice industry, food safety & sanitation, commercial equipment, baking, cooking methods, marketing and management fundamentals, cost control, nutrition, meats, pasta, desserts, and sustainability in the industry. Students will also have the chance to work in the CCICafé alongside the ProStart Youth Apprenticeship students.

*Suggested Prerequisites: Foods & Nutrition or Gourmet Foods*

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# PROSTART YOUTH APPRENTICESHIP

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 YEAR</th>
<th>CREDITS: 1.0 CTE/1.0 ENG</th>
<th>EST. FEES: $175</th>
</tr>
</thead>
</table>

**Prerequisites:** ProStart 1 and/or ProStart 2

**Certifications:** ServSafe Manager, Workforce Readiness Certificate, Gold Certified Guest Service Professional, ProStart National Certificate of Achievement, ServSuccess Certified Restaurant Professional

**Course Topics:** Expansion of topics learned in ProStart I/ProStart II with a focus on food production, food safety and sanitation, commercial equipment, baking, cooking methods, cost control, and more. Hours are earned through operating the CCICafé business on campus as well as jobs in the industry.

*Suggested Prerequisites: Foods & Nutrition/Gourmet Foods/ Catering, Intro to Business/Marketing*
Construction I

Grades: 10-12  |  Length: 1 Year  |  Credits: 1.0 CTE/1.0 MTH  |  EST FEES: $90

Prerequisites: Algebra I

Concurrent Enrollment: N/A

Certifications: OSHA-10 Construction, HBI PACT (Pre Apprenticeship Certificate Training), NCCER (National Center for Construction Education and Research)

Course Topics: Safety, construction math, hand and power tools, blueprints/drafting, electrical wiring, masonry, plumbing, carpentry, HVAC, drywall, foundations, footings, floors, roofing, stairs, windows, doors, and employability.

Construction II

Grades: 11-12  |  Length: 1 Year  |  Credits: 1.0 CTE/1.0 MTH  |  EST FEES: $90

Prerequisites: Algebra I, Construction I

Concurrent Enrollment: N/A

Certifications: National Center for Construction Education and Research (NCCER) Carpentry, Electrical, Plumbing Home Builders Institute Pre Apprenticeship Construction Training (PACT) Carpentry, Electrical, Plumbing

Course Description: Students will have more complicated practical experience with Carpentry, Electrical and Plumbing. Working in conjunction with the Associated General Contractors of Denver, students focus on various specifics of modular home building. The home’s plumbing will include wastewater, domestic supply and fixture installation while the electrical aspects will focus on all facets of residential wiring, including rough wiring, installation of electrical fixtures and finish wiring. Carpentry for this year will include a more comprehensive understanding of framing, drywall, exterior siding, roofing, insulation, windows, doors, trim and cabinet installation.
**IT PATHWAY**

**INTRODUCTION TO PROGRAMMING**

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** 1.0 CTE  
**Estimated Fees:** $30

*Prerequisites:* Algebra I (B or better)

*Concurrent Enrollment:* N/A

*Certifications:* N/A

*Course Topics:* Variables, operators, conditionals, iteration, arrays, classes & objects, inheritance, algorithms.

*CCHS, CTHS, EHS, GHS, OHS students interested in IT/STEAM pathway must take an introductory programming course at home high school.*

**DATA SCIENCE I: FOUNDATIONS**

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** .5 CTE/.5 MTH C  
**Estimated Fees:** $30

*Prerequisites:* One of the following: Introduction to Programming, Introduction to Computer Science, AP Computer Science Principles, or AP Computer Science A

*Concurrent Enrollment:* N/A

*Certifications:* N/A

*Course Topics:* Collecting, cleaning, manipulating, and visualizing data with Python, R, and their appropriate libraries; data analysis tools, statistics, and appropriate knowledge of business (or related) operations for decision making with data.
### DATA SCIENCE II: MACHINE LEARNING

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** .5 CTE/.5 MTH C  
**Est. Fees:** $30

**Prerequisites:** Data Science I: Foundations  
**Concurrent Enrollment:** N/A  
**Certifications:** N/A  
**Course Topics:** This course provides a broad introduction to machine learning, data mining, and statistical pattern recognition. Topics include supervised learning, unsupervised learning, and best practices in machine learning.

### CYBERSECURITY I: COMPUTER SYSTEMS

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** 1.0 CTE  
**Est. Fees:** $50

**Prerequisites:** One of the following: Introduction to Programming, Introduction to Computer Science, AP Computer Science Principles, or AP Computer Science A  
**Concurrent Enrollment:** N/A  
**Certifications:** CompTIA A+, TestOut PC Pro  
**Course Topics:** Computer hardware (RAM, CPU, peripherals, etc.), operating systems (Windows, MacOS, Linux), software applications, computer networks and their security implications.

### CYBERSECURITY II: NETWORKS & SECURITY

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** .5 CTE/.5 MTH D  
**Est. Fees:** $50

**Prerequisites:** Cybersecurity I: Computer Systems  
**Concurrent Enrollment:** N/A  
**Certifications:** CompTIA Network+, TestOut Network Pro, CompTIA Security+, Testout Security Pro  
**Course Topics:** Design, implement, and troubleshoot issues in wired and wireless networks, security as applied to business operations, and basic cryptography methods.

### CYBERSECURITY III: ETHICAL HACKING

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** 1.0 CTE  
**Est. Fees:** $30

**Prerequisites:** Cybersecurity I: Computer Systems and Cybersecurity II: Networks & Security  
**Concurrent Enrollment:** N/A  
**Certifications:** TBD  
**Course Topics:** In this course, students will learn to evaluate the security posture of target systems by exploiting their weaknesses and vulnerabilities in an ethical, lawful, and legitimate manner. Students will utilize their findings to make recommendations for strengthening the security of these target systems. This course will be based on the industry-recognized Certified Ethical Hacker (Practical) certification and will prepare students for entry-level jobs in penetration testing and cybersecurity.
**STEAM PATHWAY**

*Computer Aided Design I*
10th-12th grade
Learn about creating CAD files to create physical objects.
*SHH, CCH & ENO students only

**Drone Pilot**
10th-12th grade
Learn all concepts and skill required for FAA Part 107 Drone Pilot Certification.

**Product Design I**
10th-12th grade
Bring ideas from initial concept to tangible reality using design thinking and processes.

**Advanced Robotics & Automated Systems**
10th-12th grade
Design and program a robot to navigate land, sea, and space.

**Virtual Reality**
10th-12th grade
Develop virtual reality applications for both consumer and enterprise solutions.

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**COMPUTER AIDED DESIGN I (formally CAD for Fabrication)**

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** .5 CTE/.5 MTH B  
**Est. Fees:** $100

**Prerequisites:** N/A

**Concurrent Enrollment:** N/A

**Certifications:** SOLIDWORKS Certified Associate - CSWA Mechanical Design (if not taken at home high school), SOLIDWORKS Certified Associate - CSWA-AM Additive Manufacturing (if not taken at home high school)

**Course Topics:** This course 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 technical careers such as engineering and product design. Students will demonstrate their new skills through hands on projects and display how various software is used in industry. 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.

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**DRONE PILOT**

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** .5 CTE/.5 MTH B  
**Est. Fees:** $100

**Prerequisites:** N/A

**Concurrent Enrollment:** N/A

**Certifications:** FAA Small UAS Rule (Part 107)

**Course Topics:** Concepts in this course include drone components, drone operation, pilot skills, careers related to drones, and the regulations governing drone operation. At the conclusion of the course, students will be prepared to take the FAA Part 107 Drone Pilot Certification Exam.

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**PRODUCT DESIGN I**

**Grades:** 10-12  
**Length:** 1 Semester  
**Credits:** .5 CTE/.5 PHY SCI  
**Est. Fees:** $100

**Prerequisites:** N/A

**Concurrent Enrollment:** N/A

**Certifications:** Society of Manufacturing Engineers - ADDITIVE MANUFACTURING FUNDAMENTALS, SOLIDWORKS Certified Associate - CSWA Mechanical Design (if not taken at home high school)

**Course Topics:** Students that are interested in careers involving design, engineering and innovation. Student 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.
# IT/STEAM

## STEAM PATHWAY

### PRODUCT DESIGN II

<table>
<thead>
<tr>
<th>GRADES: 10-12</th>
<th>LENGTH: 1 SEMESTER</th>
<th>CREDITS: .5 CTE/.5 PHY SCI</th>
<th>EST. FEES: $100</th>
</tr>
</thead>
</table>

**Prerequisites:** Computer Aided Design or similar Design course  
**Concurrent Enrollment:** N/A  
**Certifications:** SOLIDWORKS Certified Associate - CSWA-AM Additive Manufacturing (if not taken at home high school), SOLIDWORKS Certified Expert - CSWE Mechanical Design (if not taken at home high school), SOLIDWORKS Certified Professional - CSWP Mechanical Design (if not taken at home high school)  
**Course Topics:** 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 places 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.

### ADVANCED ROBOTICS & AUTOMATION SYSTEMS

<table>
<thead>
<tr>
<th>GRADES: 10-12</th>
<th>LENGTH: 1 SEMESTER</th>
<th>CREDITS: .5 CTE/.5 MTH B</th>
<th>EST. FEES: $100</th>
</tr>
</thead>
</table>

**Prerequisites:** Introductory Robotics course or equivalent  
**Concurrent Enrollment:** N/A  
**Certifications:** N/A  
**Course Topics:** Introduces industrial robotics as well as a survey of the technologies and equipment used in manufacturing automation and process control. Includes axis configurations, work envelopes, programming, troubleshooting, and maintenance. Incorporates a survey of automation topics including history, computer and hardwired controls, sensors and transducers, motors and actuators, fluid power, and PLC’s.

### VIRTUAL REALITY

<table>
<thead>
<tr>
<th>GRADES: 10-12</th>
<th>LENGTH: 1 SEMESTER</th>
<th>CREDITS: .5 CTE/.5 MTH B</th>
<th>EST. FEES: $100</th>
</tr>
</thead>
</table>

**Prerequisites:** N/A  
**Concurrent Enrollment:** N/A  
**Certifications:** Unity Certified Associate, Unity Certified User: 3D Artist, Unity Certified User: Programmer  
**Course Topics:** Students learn to develop VR applications in Unity, design Unity assets, create VR environments and animate with C# scripts. Students explore VR hardware and software. Students also identify industries where VR is a disruptive technology.
MAINTENANCE AND LIGHT REPAIR (MLR) I

| GRADES: 10-12 | LENGTH: 1 YEAR | CREDITS: 1.0 CTE/ 1.0 PHY SCI | EST FEES: $95 |

Concurrent Enrollment: Arapahoe Community College (ASE 101, 103 & 122)

Certifications: Snap-on Certifications (Multimeter, Torque, Precision Measurement, Scanner and Diagnostics), ASE Student Automobile Certifications (Brake Systems, Suspension & Steering Systems, Electrical/Electronic Systems, and Engine Performance)

Course Topics: Automobile service and repair, shop safety, engine repair, automatic transmissions and transaxles, manual drivetrain and axles, suspension and steering, brakes, electrical and electronic systems, heating and air conditioning, and engine performance.

MAINTENANCE AND LIGHT REPAIR (MLR) II

| GRADES: 11-12 | LENGTH: 1 YEAR | CREDITS: 1.0 CTE/ 1.0 PHY SCI | EST. FEES: $95 |

Prerequisites: MLR 1

Concurrent Enrollment: Arapahoe Community College (ASE 250, 264)

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)

Course Topics: Advanced concepts in automobile service and repair, shop safety, engine repair, automatic transmissions and transaxles, manual drivetrain and axles, suspension and steering, brakes, electrical and electronic systems, heating and air conditioning, and engine performance.

AUTO SERVICE TECHNOLOGY MLR III HIGH PERFORMANCE

| GRADES: 12 | LENGTH: 1 YEAR | CREDITS: 2.0 CTE | EST. FEES: $95 |

Prerequisites: Maintenance and Light Repair I and II or equivalent coursework

Concurrent Enrollment: N/A

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)

Course Topics: Advanced diagnostic techniques including high performance concepts, Skills USA, apprenticeship preparation.
## TRANSPORTATION

### TWO YEAR ACCELERATED AVIATION MAINTENANCE PATHWAY

#### YEAR 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Length</th>
<th>Credits</th>
<th>Est. Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCELERATED General Aircraft Maintenance I</td>
<td>11-12</td>
<td>1 Year (meets daily)</td>
<td>2.0 CTE/ 1.0 MTH B/ 1.0 PHY SCI</td>
<td>$150</td>
</tr>
</tbody>
</table>

**Prerequisites:** Completion of CCIC Math Assessment

**Concurrent Enrollment:** N/A

**Certifications:** Snap-on Multimeter

**Course Description:** This course is the foundation of the Aviation Maintenance program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Length</th>
<th>Credits</th>
<th>Est. Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCELERATED General Aircraft Maintenance II</td>
<td>11-12</td>
<td>1 Year (meets daily)</td>
<td>3.0 CTE/ 1.0 MTH B</td>
<td>$150</td>
</tr>
</tbody>
</table>

**Prerequisites:** General Aircraft Maintenance I & II, Airframe I

**Concurrent Enrollment:** N/A

**Certifications:**

**Course Topics:** 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. The FAA requires 750 total hours for Airframe Maintenance. This year-long course provides 492 of those hours.

### SUMMER

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Length</th>
<th>Credits</th>
<th>Est. Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airframe I</td>
<td>11th-12th grade</td>
<td>7.5 hrs/day, 20 days</td>
<td>1.0 CTE</td>
<td>$100</td>
</tr>
</tbody>
</table>

**Prerequisites:** General Aircraft Maintenance I & II

**Concurrent Enrollment:** N/A

**Certification:** Snap-on Torque and Snap-on Precision Measurement

**Course Topics:** This course builds on General Aircraft Maintenance I & II. This course will cover wood structures, aircraft coverings, non-metallic structures, and aircraft finishes. The FAA requires 750 total hours for Airframe Maintenance. This summer session is 150 of those hours.

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Length</th>
<th>Credits</th>
<th>Est. Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airframe II</td>
<td>11th-12th grade</td>
<td>1 Year (meets daily)</td>
<td>3.0 CTE</td>
<td>$150</td>
</tr>
</tbody>
</table>

**Prerequisites:** General Aircraft Maintenance I & II, Airframe I

**Concurrent Enrollment:** N/A

**Certifications:**

**Course Topics:** 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. The FAA requires 750 total hours for Airframe Maintenance. This year-long course provides 492 of those hours.
**TWO YEAR ACCELERATED AVIATION MAINTENANCE PATHWAY**

### AIRFRAME IV (SUMMER)

<table>
<thead>
<tr>
<th>GRADES: 12</th>
<th>LENGTH: 7.5 hrs/day, 20 days</th>
<th>CREDITS: 0.5 CTE/ 0.5 PHY SCI</th>
<th>EST. FEES: $100</th>
</tr>
</thead>
</table>

**Prerequisites:** General Aircraft Maintenance I & II, Airframe I, II, & III  
**Concurrent Enrollment:** N/A  
**Certifications:**  
**Course Topics:** This course is the conclusion of Airframe Maintenance and the remaining 750 hours required by the FAA prior to testing. Topics for the class include instrument systems, communication and navigation systems, and inspection processes.

### THREE YEAR AVIATION MAINTENANCE PATHWAY

#### YEAR 1
- **General Aircraft Maintenance I**  
  (Half-Day, Every Other Day, 1Yr)  
  10th-12th grade  
  This class is the foundation of the Aviation Maintenance program.

#### YEAR 2
- **General Aircraft Maintenance II**  
  (Half-Day, Every Other Day, 1Yr)  
  11th-12th grade  
  This course is a continuation of General Aircraft Maintenance I.

#### SUMMER
- **Airframe I**  
  11th-12th grade  
  Introduction to Airframe Studies.

#### YEAR 3
- **ACCELERATED Airframe II**  
  (Half-day, every day, Semester 1)  
  11th-12th grade  
  Continuation of Aircraft structures and systems.

- **ACCELERATED Airframe III**  
  (Half-day, every day, Semester 2)  
  11th-12th grade  
  Continuation of Aircraft structures and systems.

#### SUMMER
- **Airframe IV**  
  12th grade  
  Completion of the FAA required hours for Airframe education and exam preparation.

### GENERAL AIRCRAFT MAINTENANCE I

<table>
<thead>
<tr>
<th>GRADES: 10-12</th>
<th>LENGTH: 1 Year</th>
<th>CREDITS: 1.0 CTE/ 1.0 MTH B</th>
<th>EST. FEES: $75</th>
</tr>
</thead>
</table>

**Prerequisites:** Completion of CCIC Math Assessment  
**Concurrent Enrollment:** N/A  
**Certifications:** Snap-on Multimeter  
**Course Topics:** 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 and required hours for General Aviation Mechanics.

### GENERAL AIRCRAFT MAINTENANCE II

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 Year</th>
<th>CREDITS: 1.0 CTE/ 1.0 MTH B</th>
<th>EST. FEES: $75</th>
</tr>
</thead>
</table>

**Prerequisites:** General Aircraft Maintenance I  
**Concurrent Enrollment:** N/A  
**Certifications:** Snap-on Multimeter  
**Course Topics:** This course builds on the subjects addressed in General Aircraft Maintenance I and completes the 400 hours necessary to begin Airframe. The class prepares students for the General Aircraft Maintenance portion of the FAA Part 147 Aviation Mechanics exam.
THREE YEAR AVIATION MAINTENANCE PATHWAY

AIRFRAME I (SUMMER)

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 7.5 hrs/day, 20 days</th>
<th>CREDITS: 1.0 CTE</th>
<th>EST. FEES: $100</th>
</tr>
</thead>
</table>

Prerequisites: General Aircraft Maintenance I & II

Concurrent Enrollment: N/A

Certification: Snap-on Torque and Snap-on Precision Measurement

Course Topics: This course builds on General Aircraft Maintenance I & II. This course will cover wood structures, aircraft coverings, non-metallic structures, and aircraft finishes. The FAA requires 750 total hours for Airframe Maintenance. This summer session is 150 of those hours.

ACCELERATED AIRFRAME II & III

<table>
<thead>
<tr>
<th>GRADE: 11-12</th>
<th>LENGTH: 1 Year (meets daily)</th>
<th>CREDITS: 3.0 CTE/1.0 MTH B</th>
<th>EST. FEES: $150</th>
</tr>
</thead>
</table>

Prerequisites: General Aircraft Maintenance I & II; Airframe I is recommended

Concurrent Enrollment: N/A

Certifications:

Course Topics: In Airframe II & III, students will continue or start 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. The FAA requires 750 total hours for Airframe Maintenance. This year-long course provides 492 of those hours.

AIRFRAME IV (SUMMER)

<table>
<thead>
<tr>
<th>GRADES: 12</th>
<th>LENGTH: 7.5 hrs/day, 20 days</th>
<th>CREDITS: 0.5 CTE/0.5 PHY SCI</th>
<th>EST. FEES: $100</th>
</tr>
</thead>
</table>

Prerequisites: General Aircraft Maintenance I & II, Airframe I, II, & III

Concurrent Enrollment: N/A

Certifications:

Course Topics: This course is the conclusion of Airframe Maintenance and the remaining 750 hours required by the FAA prior to testing. Topics for the class include instrument systems, communication and navigation systems, and inspection processes.
CTE DISTRICT COURSES

These courses are available to all Cherry Creek School District students, and take place in various locations. Registration process for CTE District course varies. Please see course description for more information.

ARTS & DESIGN

DIGITAL COMMERCIAL PHOTOGRAPHY

| GRADES: 10-12 | LENGTH: 1 YEAR | CREDITS: 1.0 CTE | EST. FEES: $75 |

LOCATION: CHERRY CREEK HIGH SCHOOL

This dynamic, hands-on, project-oriented photography class challenges students to think critically, learn professionalism, and produce critically acclaimed art. Assigned projects prepare students to strengthen their creative eye and see life from a different perspective. Students learn both film and digital photography, use a darkroom and learn the industry standard professional software: Adobe Photoshop and Lightroom. Students will explore career possibilities, develop a resume, and meet photographers, all while preparing for college and industry. The course will include understanding the commercial photography business, composition theory, digital ethics, and competitive events where students produce a portfolio and earn concurrent enrollment credit. If course is not offered at home high school, transportation is the responsibility of the student.

Day/Time: Cherry Creek High School, Monday – Friday, 7th Period

If course is available at home high school, follow home high school registration process. If not, complete the CTE Application.
### CAREER EXPLORATION

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 YEAR</th>
<th>CREDITS: 1.0 CTE</th>
<th>EST. FEES: $25</th>
</tr>
</thead>
</table>

**LOCATION**: Cherokee Trail, Eaglecrest, Overland and Smoky Hill

Career Exploration is a yearlong program designed to connect students with career pathways by partnering with businesses in the community. Through experiences including job readiness training, job tours, job shadowing, career days and internships, students will have the opportunity to explore career pathways and develop work readiness skills. Goals for the program include: placing students in career pathway experiences, preparing students for the workforce, locating entry level job opportunities, exposing students to post high school training in career interest areas, and partnership with Denver metro employers to provide work-ready employees. This course takes place during the regular school day at Cherokee Trail, Eaglecrest, Overland and Smoky Hill high schools. If course is not offered at home high school, transportation is the responsibility of the student.

To register for this course, complete the CTE Application.

### EXECUTIVE INTERNSHIP

<table>
<thead>
<tr>
<th>GRADES: 12</th>
<th>LENGTH: SEE BELOW</th>
<th>CREDITS: 1.0 CTE</th>
<th>EST. FEES: $15</th>
</tr>
</thead>
</table>

**LENGTH**: 100 INTERNSHIP HOURS DURING FALL, SPRING OR SUMMER SEMESTER

The Executive 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 academic 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. This work/learning arrangement is overseen by the Internship Coordinator for CCSD. Within the internship, students can expect to do various online work assignments, attend meetings, and complete projects. Students should be above average academically and/or especially talented in a career area they wish to pursue. Professional success also depends on the level of student’s maturity, responsibility and reliability. Internships are unpaid. Transportation is the responsibility of the student. **This program is selective. Additional application materials, information meeting attendance, and an interview are required.**

To register for an internship, complete the CTE Application. Upon receipt of your confirmation email, you will be directed to the Internship Application.

### CAREERWISE APPRENTICESHIP

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: SEE BELOW</th>
<th>CREDITS: 1.0 CTE</th>
<th>EST. FEES: N/A</th>
</tr>
</thead>
</table>

**LENGTH**: HOURS VARY BY APPRENTICESHIP

Cherry Creek School District will work collaboratively with CareerWise Colorado and industry partner to create an apprenticeship program unique to individual student interests and abilities. In addition to the onsite apprenticeship, students will attend monthly seminars and complete online activities throughout the semester. Eligibility depends on the application and interview process through CareerWise Colorado, in accordance with student’s maturity, reliability, commitment, and graduation status. Transportation is the responsibility of the student. **This program is selective. Additional application materials, information meeting attendance, and an interview are required.**

To register for a CareerWise Apprenticeship, go to [www.careerwisecolorado.org](http://www.careerwisecolorado.org) to complete the application. Once approved through CareerWise, you will be contacted by CCSD Apprenticeship Coordinator to discuss next steps.
## COSMETOLOGY I

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 YEAR</th>
<th>CREDITS: 4.0 CTE</th>
<th>EST. FEES: $650.00</th>
</tr>
</thead>
</table>

**LOCATION:** COLORADO’S FINEST HIGH SCHOOL OF CHOICE

The Cosmetology program is a robust course that will prepare you to provide beauty services such as shampooing, cutting, coloring, styling, facials, manicures and pedicures. This program prepares students to pass the state-licensing exam given by the Colorado Barber/Cosmetology Board. To be considered for this program, you must attend a parent meeting and orientation in February. Transportation is the responsibility of the student. Course begins approximately August 13, 2020.

The $650.00 fee includes: cosmetology kit (used 1st and 2nd year), uniform and consumables.

Mandatory Student/Parent Site Visit and Orientation at Colorado’s Finest High School of Choice (must attend one):
- February 3, 2020 from 4:30 – 5:30pm
- February 26, 2020 from 4:30 – 5:30pm

Anticipated session times:
- Monday – Friday: Morning Session 7:30 – 11:30am
- Monday – Friday: Afternoon Session 12:00 – 4:00pm

To register for this course, complete the CTE Application.

## COSMETOLOGY II

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 YEAR</th>
<th>CREDITS: 4.0 CTE</th>
<th>EST. FEES: $75.00</th>
</tr>
</thead>
</table>

**LOCATION:** COLORADO’S FINEST HIGH SCHOOL OF CHOICE

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. Transportation is the responsibility of the student. Course begins approximately August 13, 2020. Pre-requisite: Cosmetology I

The $75.00 fee includes: consumables.

Anticipated session times:
- Monday – Friday: Morning Session 7:30 – 11:30am
- Monday – Friday: Afternoon Session 12:00 – 4:00pm

To register for this course, complete the CTE Application.
### ESTHETICS

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 YEAR</th>
<th>CREDITS: 5 CTE</th>
<th>EST. FEES: $350.00</th>
</tr>
</thead>
</table>

**LOCATION: COLORADO’S FINEST HIGH SCHOOL OF CHOICE**

Estheticians, also called Esthiologists or skin-care specialists, strive to make their clients to 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. Many are required to sell skin care products; those who run their own shops are often entrepreneurs involved in all phases of business management and marketing.

To be considered for this program, you must attend a parent meeting and orientation in February. Transportation is the responsibility of the student. Course begins approximately August 13, 2020.

The $350.00 fee includes: esthetics kit, uniform and consumables.

Mandatory Student/Parent Site Visit and Orientation at Colorado’s Finest High School of Choice (must attend one):
- February 3, 2020 from 4:30 – 5:30pm
- February 26, 2020 from 4:30 – 5:30pm

Anticipated session times:
- Monday – Friday: Morning Session 7:30 – 11:00am
- Monday – Friday: Afternoon Session 12:00 – 3:30pm

To register for this course, complete the CTE Application.
<table>
<thead>
<tr>
<th>CRIMINAL JUSTICE</th>
</tr>
</thead>
</table>

### INTRODUCTION TO CRIMINAL JUSTICE

**GRADES: 11-12**

**LENGTH: 1 YEAR**

**CREDITS: 1.0 CTE**

**EST. FEES: $20**

**LOCATION: CHEROKEE TRAIL, CHERRY CREEK, GRANDVIEW, OVERLAND AND SMOKY HILL**

This Criminal Justice course concentrates on potential careers in the criminal justice system and law enforcement in general. Students will learn about the agencies and processes involved in the criminal justice system: the legislature, the police, the prosecutor, the public defender, the courts, and corrections. The course includes an analysis of the roles and problems of the criminal justice system in a democratic society, with an emphasis upon inter-component relations and checks and balances. Field trips to local criminal justice and law enforcement agencies support student learning experiences. This course aligns with Colorado Community College Intro to Criminal Justice (CRJ 110). Course offered at: Cherokee Trail, Cherry Creek, Grandview, Overland and Smoky Hill. If course is not offered at home high school, transportation is the responsibility of the student.

If course is available at home high school, follow home high school registration process. If not, complete the CTE Application.

### CRIME SCIENCE

**GRADES: 11-12**

**LENGTH: 1 YEAR**

**CREDITS: 1.0 CTE**

**EST. FEES: $20**

**LOCATION: CHEROKEE TRAIL, GRANDVIEW, OVERLAND AND SMOKY HILL**

This Criminal Justice course will concentrate on forensics, crime scene, investigative techniques, and law enforcement in general. It will also explore how constitutional and procedural law assists the criminal investigation process. The course features basic procedures in crime scene management to include photography and preparing initial reports and sketches, processing evidence, and related criminalistics procedures. It covers interviewing suspects, witnesses, and victims, including the recording of identifications and descriptions. Field trip to local criminal justice agencies will support student learning experiences. This course aligns with Colorado Community College Criminal Investigation (CRJ 127). Course offered at: Cherokee Trail, Grandview, Overland and Smoky Hill. If course is not offered at home high school, transportation is the responsibility of the student.

If course is available at home high school, follow home high school registration process. If not, complete the CTE Application.
# HEALTH AND WELLNESS

## EPIC MEDICAL CAREERS

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: SEMESTER</th>
<th>CREDITS: 0.5 CTE</th>
<th>EST. FEES: $40</th>
</tr>
</thead>
</table>

**LOCATION: CHERRY CREEK HIGH SCHOOL, OVERLAND AND SMOKY HILL**

In the Epic Medical Careers class, students are introduced to career opportunities through a unique series of lectures by medical professionals. Students will hear from professionals from the medical community such as a plastic surgeon, bio-chemical warfare emergency room doctor, a nurse at Denver Health discussing infectious diseases, a genetic counselor, a pediatrician, X-Ray and optical technicians, as well as professionals from the business (medical sales) and the legal (a lawyer who represents doctors) careers related to medicine. Students are presented information about each specialty along with the education and other requirements for the many career options. Students may participate in field trips to see how medical professionals are learning as well as be a part of an emergency room simulation, labor/delivery simulation, and a cadaver lab, to which students will see the human body and internal organs. Course offered at: Cherry Creek, Overland and Smoky Hill. If course is not offered at home high school, transportation is the responsibility of the student.

If course is available at home high school, follow home high school registration process. If not, complete the CTE Application.

## TRANSPORTATION

## AVIATION FUNDAMENTALS

<table>
<thead>
<tr>
<th>GRADES: 11-12</th>
<th>LENGTH: 1 YEAR</th>
<th>CREDITS: 1.0 CTE</th>
<th>EST. FEES: $150</th>
</tr>
</thead>
</table>

**LOCATION: METROPOLITAN STATE UNIVERSITY SOUTH CAMPUS**

Aviation Fundamentals, in partnership with Metropolitan State University Aviation and Aerospace, 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. This college level course is taught by a MSU professor and prepares the student for taking the Federal Aviation Administration Private Pilot Knowledge examination. Students will be enrolled in the 6 credit hour MSU course Aviation Fundamentals (AES 1100). To be considered for this program, you must attend a parent meeting and orientation in February. Transportation is the responsibility of the student.

Additional application materials, program orientation and qualifying scores are required.

Mandatory Student/Parent Open House at MSU South Campus (must attend one):

- February 13, 2020 at 6:00pm
- February 26, 2020 at 6:00pm

Anticipated session times:

- Monday, Wednesday, Friday: 2:00 – 3:30pm

To register for this course, complete the CTE Application.