

COURSE DESCRIPTION GUIDE

2018 – 2019

Frederick High School
Frederick, Colorado



FREDERICK

HIGH SCHOOL

CU SUCCEED PROGRAM

FREDERICK HIGH SCHOOL

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GENERAL INFORMATION

Mission Statement:

The Frederick High School Community creates and embodies a spirit of integrity, collaboration and acceptance. Our relationships foster a commitment to high expectations, rigor and achievement in all pursuits. Building on a foundation of trust, honor and compassion, we learn, lead and succeed.

This Course Description Book:

- Is a collection of all the courses and programs that are offered at Frederick High School.
- Provides descriptions of the courses offered at the Career Development Center and Innovation Center, which are also available to Frederick High School Students.
- Is designed as a guide for students and parents as they select classes for the next school year, as well as their program of study for the student's four years at FHS.
- Provides information about the curriculum and programs at FHS.
- Offers other important information concerning college requirements.

As you begin to select your courses, please keep the following information in mind:

- FHS has an alternating four period/block day. Each block is 90 minutes in length and each class meets every other day. Students are enrolled in up to eight classes per semester.
- A .5 credit is awarded after successful completion of each 18 weeks.
- Freshmen and sophomores should be enrolled in eight blocks, each semester, all year.
- Three years of mathematics, Algebra I and above, are required for graduation.
- **For seniors, please keep in mind that enrollment in at least six blocks first semester is necessary to comply with School Board Policy. Athletes must maintain six classes to be eligible.**
- School Board Policy also stipulates that at least 10 credits must be earned in the Junior and Senior year to earn a St. Vrain diploma.
- Students must complete a minimum of 24.5 credits to graduate from Frederick High school.

Grades, Progress Reports and Report Cards:

The grading scale and point average used to compute grade point averages includes A=4, B=3, C=2, D=1, and F=0. Note that there is weighting in Honors and all Advanced Placement classes. *Please also note that Front Range Community College courses, as well as non - Advanced Placement CU Succeed courses, are not weighted.* Parents can access their student's progress in each class through the Infinite Campus portal. For more information, please contact the school.

Valedictorian and Salutatorian

The Valedictorian will be the student with the highest rank in the graduating class, and will give the Valedictory at graduation. The Salutatorian will be the second highest rank in the graduating class. The rank-in-class will be determined by using all grades and weight adjustments mentioned in the "Grade Point Average" section description. Student ranking will be determined at the end of the third quarter of the senior year. All third quarter grades will be projected to be final semester grades and are calculated into the students' cumulative grade point average, to determine a current rank-in-class. The final rank-in-class will be determined at the end of the semester and will appear on final transcripts. Valedictorians and Salutatorians must maintain full-time academic status their senior year as defined by Board Policy, and twelve or more of their credits must have been taken at Frederick High.

Concurrent Enrollment Options: (College Now!)

Students wishing to take courses at a local college/university for both high school and college credit are strongly encouraged to contact their counselor for information. If a student meets the established guidelines, the school district will pay tuition for successful completion of up to two approved courses for both the fall and/or spring semesters (not summer school). This option is available only to 11th and 12th grade students who have completed a minimum of 11.5 credits toward graduation and are under 20 years of age. These courses are not weighted. Please see section *Concurrent High School Enrollment Program – College Now!*

CU Succeed Courses:

Through a partnership with University of Colorado at Denver, students may enroll in CU Denver courses on the FHS campus. Courses are taught by Frederick High teachers who have received honorarium faculty appointments from the University of Colorado. CU Succeed Gold courses are select introductory courses from CU Denver and have the same content as on-campus courses, have the same quantity and quality of work, and are evaluated by the same standards. Students receive concurrent high school and college credit. The current tuition rate through the University of Colorado is \$77 per credit hour. Non - Advanced Placement CU Succeed courses are not weighted. Advanced Placement CU Succeed courses are weighted as described in the following section.

Advanced Placement (A.P.) Courses:

Frederick High School participates in the College Board's National Advanced Placement (A.P.) program. Currently, eighteen Advanced Placement courses are offered, and on completion of an A.P. Course, a student is prepared to take the A.P. Examination in May. Depending on the student's exam score and specific university policies, students may receive college credit. Students and parents are asked to complete an AP Contract, available in the counseling office and on the school website. Advanced Placement courses are weighted as follows: A=5.0, B=4.0, C=3.0, D=2.0, F=0.

Honors Courses:

Students may apply to enroll in Honors courses at Frederick High school. We encourage students to apply for these challenging and rigorous courses. The Honors application process is available on the school website. Available courses include Integrated Honors English 9 A and B / World Geography/History A and B, English 10 Honors A and B, Biology Honors A and B, Chemistry Honors A and B, United States History Honors A and B, Geometry A and B, and Algebra 2 A and B. Honors courses will be weighted as follows: A=4.5, B=3.5, C=2.5, D=1.5, F=0.

Biomedical Science Program

Frederick High School is now accepting applications from freshmen for the Frederick High School Biomedical Science program, a four year course of study that creates college and career opportunities for students in the rapidly expanding field of biomedical science. The Biomedical Science Academy will prepare students for various careers and courses of study in the medical field. Students explore the roles of biomedical professionals by engaging in real-world cases, working collaboratively to understand and design solutions to the most pressing health challenges of today and the future.

Early Graduation

The Board of Education recognizes the value of a full high school program and emphasizes its dedication to academic excellence. Therefore, the Board shall consider early graduation for students at the end of seven semesters only if they meet the following criteria:

1. Accrual of credits required by the Board for graduation.
2. No grades below a "C".
3. Attainment and/or personal considerations, which in the judgment of the high school principal and the superintendent or designee, are outstanding.
4. Must have obtained 20.5 credits by the end of the 7th semester.

Repeating Courses

It is strongly recommended that if a student fails a core class required for graduation, that he/she repeat it during summer school or eCredit as space is typically not available during the conventional school year.

NCAA Athletic Requirements

A student wanting to enter a NCAA Division I or II institution directly out of high school should make an appointment to see their school counselor, athletic director, or school coach as soon as possible to go over the rules and regulations that are in place. Since the NCAA rules and regulations can change, it is advised that you check with their website for the most up to date information.

	Division I	Division II
English	4 years	3 years
Math (Algebra 1 or higher)	3 years	2 years
Natural/Physical Science	2 years	2 years
Additional English, Math or Natural/Physical Science	1 year	3 years
Social Science	2 years	2 years
Additional Courses (any area above or Foreign Language)	4 years	4 years

There are significant changes with students in the class of 2016. Students are strongly advised to meet with their counselor to discuss classes that are accepted by the NCAA and those that will not meet the NCAA requirements. Please go to www.eligibilitycenter.org for more information.

Registration Guidelines

Course offerings will be based students' requests and other factors. Courses and multiple sections of courses will be offered if sufficient numbers of students enroll. Therefore, please make your selections carefully. You will be selecting classes for the entire school year.

Please follow these steps to ensure your enrollment in the proper classes:

1. Review high school graduation requirements.
2. Review college entrance requirements.
3. Review ICAP plans.
4. Review course offerings.
5. Read the course descriptions.
6. If you are an athlete, it is your responsibility to know and understand the eligibility requirements.
7. Follow the instructions on your registration form.

Collection of student fees

There are many classes that will be charging a class fee for 2018-2019. These class fees are noted in the Course Description Book under the specific classes. If your student is on free/reduced lunch the fees will be adjusted. Students on Free lunch are now required, per district policy, to pay 25% of the class fee. Reduced lunch students are required to pay 50% of the class fee.

ST. VRAIN VALLEY SCHOOL DISTRICT GRADUATION REQUIREMENTS

St. Vrain Valley Schools delivers high-quality, robust educational experiences for all students by providing rigorous and engaging courses and activities for successful postsecondary preparation.

Graduation Requirements for Juniors and Seniors (Class of 2019 and 2020)

Graduates will complete a total of 24.5 credits in grades 9-12 to graduate. Credits must include:

English (4)
Social Studies (3)
Mathematics (3)
Science (3)
Physical Education (2)
Practical Arts (0.5)
Fine Arts (0.5)
Health (0.5)
General Electives (8)

Graduation Requirements for Freshman and Sophomores (Class of 2021 and later)

In 2007, the Colorado Legislature passed a bill requiring the development of state high school guidelines, and last year the Colorado State Board of Education approved the state graduation guidelines. Colorado school districts must begin to implement the revised local high school graduation guidelines to meet or exceed the state guidelines with the graduating Class 2021. New Graduation Requirements will be comprised of three components:

Credits and Coursework

Graduates will need to complete a total of 24.5 credits in grades 9-12 to graduate. Credits must include:

English (4)
Social Studies (3)
*Financial Literacy (0.5)
Mathematics (3)
Science (3)
Physical Education (2)
Practical Arts (0.5)
Fine Arts (0.5)
Health (0.5)
*General Electives (7.5)

* indicates a change in credit requirements

Individual Career and Academic Plan (ICAP)

Graduates will develop and successfully complete an Individual Career and Academic Plan (ICAP) that includes postsecondary college and career interests and goals. The following indicators will assist graduates in exploring successful completion of their ICAP:

Self-Awareness
Career Awareness
Postsecondary Aspirations
Postsecondary Options
Environmental Expectations
Academic Planning
Employability Skills
Financial Literacy

Demonstration of College and Career Readiness

Graduates will demonstrate college or career readiness in both English and Math based on at least ONE measure listed in each concentration:

ACCUPLACER - a computerized test that assesses reading, writing, math and computer skills.

English: 62 on reading comprehension

Math: 61 on elementary algebra

ACT - a national college admissions exam. It measures four subjects - English, reading, math and science.

English: 18

Math: 19

ACT Compass - a computerized test that helps colleges evaluate students' skills and place them in appropriate courses.

English: 79

Math: 63

ACT WorkKeys - an assessment that tests students' job skills in applied reading, writing, math and 21st century skills.

English: Bronze

Math: Bronze

AP Exams - test students' ability to perform at a college level. Districts choose which AP exams will fulfill this menu option.

English: 2

Math: 2

ASVAB - a comprehensive test that helps determine students' eligibility and suitability for careers in the military.

English: 31

Math: 31

Concurrent Enrollment - provides students the opportunity to enroll in postsecondary courses, while simultaneously earning high school and college credit.

English: passing grade of C or better

Math: passing grade of C or better

District Capstone - the culminating exhibition of a student's project or experience that demonstrates academic and intellectual learning. Capstone projects often include a portfolio of a student's best work.

English: Individualized

Math: Individualized

Industry Certificate - a credential recognized by business and industry. Industry certificates measure a student's competency in an occupation, and they validate a knowledge based and skills that show mastery in a particular industry.

English: Individualized

Math: Individualized

International Baccalaureate (IB) - IB exams assess students enrolled in the official IB Diploma Program. Courses are offered only at authorized IB World Schools.

English: 4

Math: 4

SAT - a college entrance exam that is accepted or required at nearly all four-year colleges and universities in the U.S.

English: 430

Math: 460

More information and a downloadable checklist of graduation requirements can be found at <http://svvdsd.org/guide-graduation>.

College Admissions

Students who plan to continue their formal education should keep in mind the following factors upon which college admission is generally based. College information can be found in the counseling office as well as financial aid and scholarship information.

- **Grade Point Average and Class Rank** Your high school record of achievement still serves as the best predictor of academic success in college. Grades are important. Your rank in class is determined from your cumulative grade point average. It is computed at the end of each semester.
- **Quality of Course Selection** Students must complete 4 years of English, 4 years of Mathematics, 3 years of lab based Science, 3 years of Social Studies, 1 year of World Language, and 2 years of Academic Electives (may be chosen from any above area, modern language, computer science, art, music, journalism, or drama) to meet the Colorado Commission of High Education admission standard for any four-year college or university in the state of Colorado. **However, students should consult the catalog of the college or university they are interested in attending to determine the exact requirements.**
- **College Admission Test** Colleges also request tests such as the American College Test (ACT) and the Scholastic Aptitude Test (SAT). The Class of 2019 will be required to take the SAT in April of 2018. All Juniors and Seniors are encouraged to take the ACT or SAT again at a later date to achieve a higher score if needed.
- **College Essay** An increasing number of colleges are requesting a college essay as part of the application process. You should have two prepared to be used upon request.
- **Letters of Recommendation** Many colleges request personal letter(s) of recommendation from counselors, teachers or individuals from the community. Be sure to give the person you are asking to do such letter some information about you and your activities and allow at least two weeks for the letter to be completed.
- **Co-curricular Activities** Participation in activities outside of the classroom are important. This could include volunteer work, student council, clubs, athletics, band/orchestra or choir activities, and national organization memberships. The quality of your involvement is more critical than the quantity.

RECOMMENDED COURSES

College and Career Preparation

9th Grade:

Integrated English 9 or Honors Integrated English 9
Algebra I or Honors Geometry
Biology or Honors Biology
Integrated World History/Geography or Honors Integrated World History/Geography
World Language
Physical Education
Health
Electives of interest

10th Grade:

English 10 or Honors English 10
Geometry or Honors Algebra II
Chemistry, Honors Chemistry, Earth Science or Environmental Science
US History or Honors US history
World Language
Physical Education
Electives of interest

11th Grade:

English 11 or Advanced Placement / CU Succeed English courses
Algebra II, Trigonometry/Pre-Calculus, Finite Math or Statistics
Regular Science (Chemistry, Earth Science, Environmental) or A.P. Science (Chemistry, Biology, Physics, Env. Science)
American Government or A.P. U.S. Government
World Language
Other Advanced Placement courses as available

12th Grade:

English 12 or Advanced Placement / CU Succeed English courses

Trigonometry/Pre-Calculus, A.P. Calculus, A.P. Statistics

Regular Science (Chemistry, Earth Science, Environmental) or A.P. Science (Chemistry, Biology or Physics)

Regular or A.P. Social Studies courses

World Language

Electives of interest

Other Advanced Placement courses as available

Higher Education Admission Requirements

Students planning to attend a four-year college or university in Colorado will need to complete the following classes in order to fulfill the Higher Education Admission Requirements. Meeting the Higher Education Admissions Requirements does not guarantee admission to a four-year public institution. Colleges and universities may have additional requirements.

Academic Area	
English	4 years
Mathematics (Must include Algebra I, Geometry, Algebra II or equivalent)	4 years
Natural/Physical Sciences (two units must be lab-based)	3 years
Social Sciences (at least one unit of U.S. or World History)	3 years
Foreign Language	1 year
Academic Electives*	2 years

*Acceptable Academic Electives include additional courses in English, mathematics, natural/physical sciences and social sciences, foreign languages, art, music, journalism, drama, computer science, Honors, Advanced Placement, International Baccalaureate courses and appropriate CTE courses.

Colleges and universities establish their own entrance requirements; it is their discretion to determine what coursework meets the Higher Education Admission Requirements. Please make sure you research admission requirements for any school you are interested in. Foreign Language requirements vary across the state.



CONCURRENT COLLEGE AND HIGH SCHOOL ENROLLMENT PROGRAM

St. Vrain Valley School District

This program provides an opportunity for a high school junior or senior to earn both high school and college credit for a Front Range Community College course. The District will pay tuition for up to two guaranteed transfer courses per semester. (The courses must be pre-approved and successfully completed.) Designed to enrich the student's educational experience, this program is not intended to duplicate the opportunities available at the high school.

See your counselor for assistance in course selection.

Suggestions for Success in Your First College Course

- Be aware of possible differences between high school and college expectations. Reading and writing assignments may be longer than those typically assigned in high school. Do not plan on extensions of time on due dates-deadlines are seldom negotiable.
- Be sure to work with your high school counselor to assure proper selection of courses, especially as they apply to graduation requirements.
- Admission to college classes is on a space available basis. If you cannot get into the course or section of the course you desire, have an alternate plan or contact the professor for special consideration.
- Attendance in college classes is important and is your responsibility. The college professor will not call your parents when you are absent and will seldom extend deadlines.
- The first class meeting is very important. You will typically be given a syllabus for the course and the professor's expectations-attendance, grading, etc.
- Language and science courses may require lab time in addition to class time.
- Check with the college you plan to attend after high school graduation to assure the transferability of each course.
- College professors vary widely in grading practices. In some classes your grade may consist of only a midterm and a final exam; in other classes, a large number of assignments may be graded.
- Be aware that you are establishing a college transcript with a GPA that follows you to every college you attend in the future.
- Be informed about the college's deadlines for dropping classes. If you drop after the college's deadline, you may receive an F and not be eligible for a tuition refund.

Commonly Asked Questions

1. **How do I qualify?**
A student must be a junior or senior (3rd or 4th year in High School) enrolled at a District high school, under the age of 21, and actively working towards graduation from that high school.
2. **How do I obtain approval?**
Complete the College Now! Enrollment request form available in your counseling office. Please follow the specific instructions on the form. Submit the form to the counseling office on or before the assigned deadline.
You must complete a new request each semester.
3. **Does taking a course on a college campus assure my admission to that college after I graduate from high school?**
Enrollment in a course at a college is not the same as admission. You must follow the freshman admission procedure for each college.
4. **What can I do if my request for high school credit is denied?**
You may file a written appeal with the Board of Education through the Superintendent's Office. The appeal must be filed within ten days. The Board's decision is final.
5. **How do I register at the college I choose?**
You are responsible for contacting the college and following registration procedures required by that institution.
6. **How are the college credits recorded on my high school transcript?**
 - One course of 3 or more semester hours equals at least .5 high school Carnegie units
 - College grades are included in the computation of high school grade point average and, therefore, could affect class rank.
 - College credits are not weighted in computing the grade point average.
 - Please note that it is the student's responsibility to contact the prospective college(s) regarding transferability of individual courses.
7. **Will these courses count towards high school athletic eligibility requirements?**
Students must be enrolled in at least 2.5 credits per semester to be eligible for athletics.

Each 3.0 credit college course taken transfers as .5 high school credit. You should check with your high school athletic director to ensure eligibility.



CU at Frederick High: The CU Succeed Program

Frederick High School has established an exciting partnership with CU Denver to enable our students to complete challenging university course work and earn college credits through the University of Colorado while still in high school. Courses are taught by Frederick High teachers who have received honorarium faculty appointments from the University of Colorado.

CU Succeed Gold courses are select introductory courses from CU Denver and have the same content as on-campus courses, have the same quantity and quality of work, and are evaluated by the same high standards. These courses are taught here at Frederick and students receive concurrent high school and college credit.

CU Gold courses not only give Frederick High students the opportunity to earn college credits and gain exposure to college level coursework, they can significantly reduce time and expense. While tuition on the CU Denver campus is currently \$250 per credit hour (not to mention additional costs in fees and living expenses), the current rate for CU Gold courses is \$77 *per credit hours* (tuition rates set by UCD and are subject to change). We are thrilled by the opportunity to send confident kids off to college having already earned college credits. As you look through this handbook, look for the CU Succeed designation.

Biomedical Science at Frederick High School

Now going into its third year, the Biomedical Science Academy at Frederick High School will help prepare students for careers as biomedical professionals. Leveraging partnerships with local colleges and medical facilities, this four year program of study will help prepare students for careers and education including Pre Med university study, clinical medicine, public health, medical diagnostics and Biomedical Engineering. This program is relevant to students planning to engage at any career level in the field of medicine.

The introductory class, Principles of Biomedical Science, is open to the class of 2020-2021 (the freshman class of 2017-2018). There will be an enrollment cap of 30 students; a lottery system for registration will be used if necessary. An application process exists for this program; please contact the school for detailed information.

Frederick High School College Level Course Offerings

CU SUCCEED COURSES

FHS Title	CU Denver Title(s)	College Credit	Duration	Weighted?
AP Calculus	Calculus 1	4 - CU Denver	Yearlong	Yes
AP Statistics	Introductory Statistics	3 - CU Denver	Yearlong	Yes
AP Literature	Intro to Fiction / Intro to Lit Studies	6 - CU Denver	Yearlong	Yes
AP Chemistry	Gen Chem 1 / Gen Chem 2 / Labs	9 - CU Denver	3 Sem.	Yes
AP Physics	College Physics 1 / Lab	5 - CU Denver	Yearlong	Yes
AP Environmental Science	Introduction Environmental Science	4 - CU Denver	Yearlong	Yes
AP Psychology	Intro to Psych 1 / Intro to Psych 2	6 - CU Denver	Yearlong	Yes
AP Government	Intro Pol Science / Am Pol System	6 - CU Denver	Yearlong	Yes
AP Music Theory	Intro Music Theory	5 - CU Denver	Yearlong	Yes
CU Gold College Algebra	College Algebra	3 - CU Denver	Semester	No
CU Gold Intro Sociology	Introduction to Sociology	3 - CU Denver	Semester	No
CU Gold Social Inequalities	Inequalities in a Social World	3 - CU Denver	Semester	No
CU Gold Literary Studies	Literary Studies	3 - CU Denver	Semester	No

Current CU Succeed Tuition: \$77 per credit hour

ADVANCED PLACEMENT COURSES

FHS Title	College Credit	Duration	Weighted?
AP Biology	College Board Exam dependent	Three Semesters	Yes
AP Lang & Composition	College Board Exam dependent	Yearlong	Yes
AP United States History	College Board Exam dependent	Yearlong	Yes
AP European History	College Board Exam dependent	Yearlong	Yes
AP Spanish	College Board Exam dependent	Yearlong	Yes
AP Studio Art	College Board Exam dependent	Yearlong	Yes

Current College Board fee per exam: \$93

FRONT RANGE COMMUNITY COLLEGE COURSES (ON FHS CAMPUS)

FRCC Title	College Credit	Duration	Weighted?
Introduction to Business	3 – Front Range	Semester	No
Public Speaking	3 – Front Range	Semester	No
Intro to Criminal Justice	3 – Front Range	Semester	No
Personal Finance	3 – Front Range	Semester	No
Intro to Sociology	3 – Front Range	Semester	No

Tuition reimbursed by St. Vrain Valley Schools for grades of C and higher

NOTES:

- “Weighted” equates to an additional 1.0 in GPA calculation (e.g. an “A” is worth 5 points instead of 4).
- College credits granted via College Board Exam vary by course, university, and score.
- All tuition and exam fees are subject to change.
- Three semester courses are offered every day one semester, and every other day the opposite semester.
- All course offerings are contingent upon sufficient requests and enrollment.

Frederick High School Drop/Add Policy

Drops and adds for classes will be considered according to the following guidelines: Students must have parent permission

1. Any student whose schedule reflects an obvious error.
2. A change in a student's academic standing as a result of classes taken over the summer.
3. A lack of prerequisite for a course.

***Drops and adds may be considered to accommodate other reasonable requests to alter schedules. However, the ability to honor such requests will be limited, based on an effort to balance classes and balance teachers' overall assigned student loads to create an optimal learning environment.

***Any request for a schedule change must be accompanied by a form signed by parents. Such forms will be available in the counseling office.

NOTE: In order to maintain continuous athletic eligibility, a student is required to be enrolled in and successfully complete six credit-bearing classes each semester.

DROPPING AND ADDING CLASSES AFTER THE SCHOOL YEAR HAS BEGUN

1. A class may be added or dropped within the first ten (10) consecutive academic days of the semester without penalty. *It is highly recommended that students make all schedule changes before the semester begins.*
2. A student who wishes to drop a class after the first **10 consecutive academic days of the semester, regardless of the accrued grade, the student will have an F placed on their transcript.**
3. Requests for schedule changes in cases involving inappropriate placement of a student in an academic area, emergency situations, and exceptional cases will be considered by administration on an individual basis throughout the semester. Students must complete an appeal process. Please see your counselor for more information.

LANGUAGE ARTS

LA114A-LA114B: INTEGRATED ENGLISH 9A/B

(LA Credit)

36 weeks/2 semesters/1.0 credit

Required

This course is thematically integrated with Integrated World Geography 9, and will emphasize reading comprehension, literature and research proficiencies. Students will read and report on various types of literature. Students will also do a grammar unit covering basic parts of speech. This second semester will build on the writing, oral communication and research proficiencies. Students will write expository and creative narratives and also learn and practice revision and editing skills. Students will learn basic literary and poetry terms and will consider reading and writing in a variety of genres.

LA115-LA115B: INTEGRATED ENGLISH 9 HONORS A/B

(LA Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Application required

This rigorous course is designed for students with high proficiency in English, and is thematically integrated with Integrated World Geography Honors 9. Quantity and quality of work is greater than the general Language Arts 9 class. Emphasis is placed on a more comprehensive study of literature and writing. Students in this course will read and analyze short stories, poetry, drama, nonfiction and the novel. Students will be strongly encouraged to think critically and creatively both in discussion and compositions. Students will be expected to implement and demonstrate more sophisticated writing as they complete various assignments.

LA120A-LA120B: ENGLISH 10 A/B

(LA Credit)

36 weeks/2 semesters/1.0 credit

Required

This course is designed to give students substantial experiences in writing. The required course includes the following genres of literature: novel, poetry, drama and short story. The writing focus includes journaling, descriptive and literary analysis. The research process is reviewed to produce a research paper. Literature, reading, comprehension and research proficiencies will be assessed. The second semester puts more emphasis on research-based writing of expository essays and oral presentations. Literature-based speech activities are designed to improve students' diction, poise and the coherent presentation of ideas. Reading will continue to focus on a variety of genres and assigned novels. Assignments become progressively more difficult for literary analysis and interpretation of fiction and nonfiction works. Proficiencies for literature, writing and oral presentation will be assessed.

LA121A-LA121B: ENGLISH 10 HONORS A/B

(LA Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Application or teacher recommendation

The 10th grade honors English curriculum is a select, weighted course. Students seeking admittance to this program must formally apply. Once admitted, students must demonstrate superior study habits, the ability to work independently, as well as cooperatively with others, and the willingness to participate in class discussions. Fields of study include highly challenging and thought-provoking reading, writing and speaking assignments. Honors students must maintain their academic standing regardless of outside activities. Summer reading and writing projects will be given prior to the beginning of school.

LA130A-LA130B: ENGLISH 11A/B

(LA Credit)

36 weeks/2 semesters/1.0 credit

Required

This two semester course is designed to provide students experiences with a wide range of American literature. In addition to the reading and written analysis of literature, formal research papers will serve to assess student performance. Additionally, students will focus on ACT preparation strategies.

LA140A-LA140B: ENGLISH 12 A/B

(LA Credit)

36 weeks/2 semesters/1.0 credit

This course is designed for students considering either higher education or immediate employment after graduation. Course emphasis is on strengthening communication skills. This is done through conventional English assignments, résumé preparation, business correspondence, employment communication and technical writing. Additionally, students will read and analyze novels, write essays, deliver presentations and prepare projects.

LA202: BEST SELLERS 9-12

(LA Credit)

18 weeks/1 semester/0.5 credit

This course is designed for students who have a desire to read. Its intent is to enhance reading ability and develop interest, no matter what the student's individual reading level may be. The course allows for self-selection of materials in order to promote lifelong reading habits. Students will be expected to complete all reading and writing assignments.

LA216: MASS MEDIA FILM 9-12

(LA Credit)

18 weeks/1 semester/0.5 credit

Requirement: Seniors or Juniors who have passed

English 9 & English 10

Teacher permission for Sophomores

This course is designed for students to explore the techniques and power of various forms of mass communication, including: movies and music. We will also discuss the role of advertising and media manipulation.

LA219: MYTHOLOGY 11-12

(LA Credit)

18 weeks/1 semester/0.5 credit

This course will provide a study of the mythologies of ancient cultures as well as an analysis of how those ancient tales resonate in modern thought, literature and social issues. Assignments will include reading of myths of the Greeks and Romans, reading analysis of representative Greek literature, research projects, discussions and analysis of selected films. Student understanding and learning will be demonstrated through discussion, written assignments, projects and tests.

LA221: SCIENCE FICTION 11-12

(LA Credit)

18 weeks/1 semester/0.5 credit

Requirement: Seniors or Juniors who have passed

English 9 & English 10

Teacher permission for Sophomores

Students will discover the worlds of science fiction through reading short stories and novels, analyzing films, and writing in the sci-fi genre. Students will become familiar with the genres and cultural implications of science fiction.

LA217: MYSTERY LITERATURE/SUSPENSE 10-12

(LA Credit)

18 weeks/1 semester/0.5 credit

This course is designed for students who are interested in detective and suspense fiction. The course will cover novels, short stories, plays and books on tape and film.

LA 207: CREATIVE WRITING 10-12

(LA Credit)

18 weeks/1 semester/0.5 credit

This course is designed for students who wish to develop their writing skills by experimenting with writing fiction. Students will have an opportunity to write short stories, poetry, and drama. The focus will be on effective description, narration, symbolism, characterization, and imagery with emphasis on detailed language and precise vocabulary. Students will be expected to complete all reading and writing assignments in a timely and effective fashion, as well as to share their writing with their classmates

LA224: SHAKESPEARE 10-12

(LA Credit)

18 weeks/1 semester/0.5 credit

This course entails a close examination of a limited number of Shakespeare's major plays, at least one from each of these three areas (tragedy, comedy, history). Additional plays and the sonnets will be examined as time permits. The course emphasizes Shakespeare's knowledge of human nature and his unique poetic and dramatic idiom. The course provides for various kinds of writing experience on a regular basis.

LA905: DEBATE/FORENSICS 9-12*

(LA Credit)

18 weeks/1 semesters/.5 credit

Fee: \$120 (subject to SVVSD requirements and subject to change)

This course is designed for students who want to develop their potential in public speaking. One option for students is oral interpretation, which involves the student choosing selections from quality dramatic or humorous or poetic literature, studying the piece thoroughly for author's intent, then using his/her imagination to make the literature come to life through the use of voice and body. Another option is drama, in which student actors study characterization and performance technique and present a scene of their choice. Additional options for students in Forensics include the study of debate, extemporaneous speaking, student congress and original oratory. These units emphasize critical thinking skills, research writing and persuasive speaking.

*Participation in this class requires a commitment to the extracurricular forensics team. This team has regularly weekly practices, competes at Saturday tournaments and requires an activity fee of \$120. Forensics is governed by CHSAA rules and students may letter in forensics.

LA500A-LA500B: A.P. ENGLISH LANGUAGE AND COMPOSITION A/B 11-12

(LA Credit)

36 weeks/2 semesters/1.0 credit

Fee: \$10.00 class fee

Fee: Current A.P. College Board exam fee

Completion of Honors English is recommended

This course engages students in becoming skilled readers of a wide variety of prose and image based selections. These pieces, representing an assortment of periods, disciplines and rhetorical context, furnish students multiple opportunities to work with the rhetorical situation, examining the authors' purposes as well as the audiences and the subjects in the text. Through close reading and frequent writing, students develop their ability to work with language and text with a greater awareness of purpose and strategy, while strengthening their own composing abilities. Course readings feature visual media, expository, analytical, personal and argumentative texts, from a variety of authors and historical contexts. Students write in a variety of modes for a variety of audiences developing ability to analyze and articulate how the resources of language operate in any given text. Performance expectations are appropriately high and the workload is challenging.

LA510A-LA510B: A.P. ENGLISH LITERATURE AND COMPOSITION A/B 12**A CU Succeed Course!**

(LA Credit)

36 weeks/2 semesters/1.0 credit

Fee: \$10.00 class fee

Fee: Current A.P. College Board exam fee and possible materials fee to be determined

Completion of Honors English or A.P. English Language and Composition is recommended

A.P. Literature and Composition engages students in the careful reading and critical analysis of literature. The approach to close reading involves the experience of, the interpretation of, and the evaluation of literature. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. The goal of writing assignments is to increase students' ability to explain clearly, cogently, even elegantly, what they understand about literary works and why they interpret them as they do. Since reading and writing stimulate and support one another, they are taught together in order to underscore both their common and their distinctive elements. Please understand that the universal value of literary art that probes difficult and harsh life experiences may occasionally require study of controversial material. Students are expected to have a maturity level appropriate for full participation in a college-level course.

PS378: CU GOLD LITERARY STUDIES 11-12**A CU Succeed Course!**

(LA Credit)

18 weeks/1 semester/0.5 credit

This is a college-level freshman course worth three semester hours of credit at the University of Colorado at Denver. In this course, students will develop a sense of literary techniques and issues so they can bring an improved critical sensibility to their reading and writing. During this course, students will read and analyze a variety of short stories, novels, plays and poems representing a wide range of literary periods. The assigned readings will introduce class members to the works of famous authors as well as to major themes, elements and techniques of fiction. This course emphasizes critical thinking, reading and writing skills.

MA107A-MA107B: PRE-ALGEBRA A/B

(Elective credit only)

36 weeks/2 semesters/1.0 credit

Prerequisite: 7th Grade Math/8th Grade Math

Teacher recommendation

Students in this course will be able to use and apply the fundamental concepts for high school mathematics. These fundamentals include: constructing an understanding of number, operation and quantitative reasoning; patterns; relationships and algebraic methods; geometry; measurements; probability and statistics. **This course does not fulfill high school math graduation requirements and is taken for elective credit only.**

MA110A-MA110B: ALGEBRA I A/B

(Math Credit)

Prerequisite: 8th Grade Math or Pre-Algebra or

Teacher Recommendation

Algebra I focuses on four critical areas: (1) using units and relationships between quantities; (2) reasoning with equations and expressions; (3) analyzing and using linear, exponential, and quadratic functions; and (4) interpreting and displaying data using descriptive statistics. These concepts and associated skills are aligned with the Colorado Academic Standards for mathematics, incorporating 21st century skills and postsecondary and workforce readiness competencies.

MA 113A-MA113B: ACCELERATED ALGEBRA 1 A/B

(Math Credit)

Prerequisite: 8th Grade Math or Pre-Algebra or

Teacher Recommendation

Accelerated Algebra 1 focuses on four critical areas in greater depth: (1) using units and relationships between quantities; (2) reasoning with equations and expressions; (3) analyzing and using linear, exponential, and quadratic functions; and (4) interpreting and displaying data using descriptive statistics. Students also have the opportunity to study absolute value inequalities, parallel and perpendicular lines, matrices to solve systems of equations, combinations and permutations, and rational expressions. Accelerated Algebra 1 is intended for students who took Algebra 1 in middle school and need further concept reinforcement.

MA115A-MA115B: GEOMETRY A/B

(Math Credit)

36 weeks/2 semesters/1.0 credit

Required: Scientific Calculator

Prerequisite: Algebra I or equivalent and Teacher Recommendation
Geometry focuses on four critical areas: (1) exploring congruence, similarity, and right-triangle relationships; (2) developing proof using constructions and coordinate geometry; (3) using area and volume to model and solve problems; and (4) applying probability to explore events of chance. These concepts and associated skills are aligned with the Colorado Academic Standards for mathematics, incorporating 21st century skills and postsecondary and workforce readiness competencies.

MA 116A-MA116B: HONORS GEOMETRY A/B

(Math Credit)

36 weeks/2 semesters/1.0 credit

Required: Scientific Calculator

1.0 Weighted Credit for 9th/10th Grade Only

Honors Geometry focuses on four critical areas in greater depth: (1) exploring congruence, similarity, and right-triangle relationships; (2) developing proof using constructions and coordinate geometry; (3) using area and volume to model and solve problems; and (4) applying probability to explore events of chance. Students also have the opportunity to study advanced geometric constructions, proving advanced properties of triangles and quadrilaterals, the Law of Sines and the Law of Cosines, and area and volume relationships among similar figures.

MA120A-MA120B: ALGEBRA 2 A/B

(Math Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Algebra I & Geometry

Required: Scientific Calculator;

Suggested: Graphing Calculator

Algebra 2 focuses on three critical areas: (1) analyzing and using polynomial, rational, radical, exponential, logarithmic, and trigonometric functions; (2) modeling sequences and series with recursive and explicit functions; and (3) making statistical inferences from data. These concepts and associated skills are aligned with the Colorado Academic Standards for mathematics, incorporating 21st century skills and postsecondary and workforce readiness competencies. Students in need of additional support are eligible to take this course as a two-year program. See your counselor or current math teacher for details.

MA121A-MA121B: HONORS ALGEBRA 2 A/B

(Math Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Algebra I & Geometry

Required: Scientific Calculator;

Suggested: Graphing Calculator

1.0 Weighted Credit for 9th/10th Grade Only

Honors Algebra 2 focuses on three critical areas in greater depth: (1) analyzing and using polynomial, rational, radical, exponential, logarithmic, and trigonometric functions; (2) modeling sequences and series with recursive and explicit functions; and (3) making statistical inferences from data. Students also have the opportunity to study matrices to solve multivariable systems of equations, the Fundamental Theorem of Algebra, the binomial theorem, rational and radical functions, properties of logarithms, and conic sections.

MA170: FINITE MATH 11-12

(Math Credit)

18 WEEKS/1 SEMESTER/0.5 CREDIT

Prerequisite: Algebra II

Finite Math focuses on three critical areas: (1) sequences and series (extension from Algebra 2); (2) operations with matrices and determinants; and (3) operations with vectors. These concepts and associated skills exceed the Colorado Academic Standards for mathematics, incorporating 21st century skills and postsecondary and workforce readiness competencies.

MA127: TRIGONOMETRY 11-12

(Math Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Algebra II

Required: Scientific Calculator;

Suggested: Graphing Calculator

Trigonometry focuses on two critical areas: (1) trigonometric functions and (2) applications of trigonometry. These concepts and associated skills exceed the Colorado Academic Standards for mathematics, incorporating 21st century skills and postsecondary and workforce readiness competencies.

MA132: PRE-CALCULUS 11-12

(Math Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Algebra II

Required: Scientific Calculator,

Suggested: Graphing Calculator

Pre-calculus focuses on four critical areas: (1) the complex number system; (2) arithmetic with polynomials and rational expressions; (3) operations with functions; and (4) conic sections. These concepts and associated skills exceed the Colorado Academic Standards for mathematics, incorporating 21st century skills and postsecondary and workforce readiness competencies.

PS 305: CU G MATH COLLEGE ALGEBRA**A CU Succeed Course!**

(Math Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Algebra II

Required: Scientific Calculator,

Suggested: Graphing Calculator

Covers simplifying algebraic expressions, factoring, linear and quadratic equations, inequalities, exponentials, logarithms, functions, graphs and systems of equations.

MA520A-M520B A.P. STATISTICS A/B 11-12**A CU Succeed Course!**

(Math Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Algebra 2

Required: Graphing Calculator

Advanced Placement Statistics acquaints students with the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will frequently work on projects involving the hands-on gathering and analysis of real world data. Ideas and computations presented in this course have immediate links and connections with actual events. Computers and calculators will allow students to focus deeply on the concepts involved in statistics. This course is recommended for students who plan to major in college in the areas of science, mathematics, engineering, psychology, sociology, health science and business. This course prepares students for the Advanced Placement Examination in Statistics.

MA500A-MA500B: A.P. CALCULUS A/B 11-12**A CU Succeed Course!**

(Math Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Trigonometry/Pre-Calculus

Required: Scientific Calculator

Highly Recommended: Graphing Calculator

This course is designed for college bound students. Topics include limits, differentiation and integration. Applications are a major focus of this course. Functions studied are: algebraic, rational, trigonometric, exponential, and hyperbolic and inverses.

MA510A-MA510B: A.P. CALCULUS B/C 11-12**A CU Succeed Course!**

(Math Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: A.P. Calculus A/B

Required: Scientific Calculator

Highly Recommended: Graphing Calculator

AP Calculus is designed for students intending to study mathematics, engineering, or the hard sciences in college. Its intent is to prepare students for college level math classes. The course includes instantaneous rate of change, velocity and acceleration for polynomial, rational, algebraic, trigonometric, anti-differentials, methods of integration, and applications. Students will be expected to complete all daily assignments and perform satisfactorily on examinations. Emphasis is on preparation for the AP Exam.

SCIENCE

SC120A-SC120B: BIOLOGY A/B9

(Science Credit)

36 weeks/2 semesters/1.0 credit – Required

Fee: \$10

Biology is a lab based course consisting of the following topics:

1-Introduction to Nature of Science and Ecology; 2- Populations and Human Impact; 3 – Biochemistry; 4 – Membrane Structure and Function; 5 – Photosynthesis and Cellular Respiration; 6 0 DNA and Protein Synthesis; 7 – Cell Division; 8 – Genetic Disorders and Genetic Engineering; 9 – Evolution; 10 – Body Systems: Homeostasis and Disease. These concepts and associated skills are aligned with the Colorado Academic Standards for Life Science, incorporating 21st Century skills and post-secondary and workforce readiness competencies.

SC121A-SC121B: BIOLOGY HONORS A/B 9

(Science Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Application required

Fee: \$10

The Honors Biology class is an academically rigorous laboratory science class designed for students who excel in science and are college bound. This course will require greater depth of understanding in comparative anatomy, with dissection mandatory, genetic, genetic manipulation and genetic calculations, evolutionary theory and man's role in the environment. In addition, students will design, conduct, evaluate and communicate about scientific investigations. Students will also be provided with opportunities for exploratory, open ended scientific investigations. Other areas of focus may be added due to current scientific research, or changes in standards provided by the district or state standards. Success in Honors biology will require work outside the classroom.

CTE9520A-CTE9520B: PRINCIPLES OF BIOMEDICAL SCIENCE

FHS Biomedical: Year One

(Elective Credit)

36 weeks/2 semesters/1.0 credit

Fee \$20

In the introductory course, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. Students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. This course is taken in tandem with the student's Biology course.

CTE9522A-CTE9522B: HUMAN BODY SYSTEMS

FHS Biomedical: Year Two

(Elective Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Project Lead the Way: Year One

Fee-\$20

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

CTE 9523A-CTE9523B: MEDICAL INTERVENTIONS

FHS Biomedical: Year Three

(Elective Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Project Lead the Way: Year One

Fee-\$20

Students delve into activities like designing a prosthetic arm as they follow the life of a fictitious family and investigate how to prevent, diagnose, and treat disease.

SC105A-SC105B: EARTH SYSTEMS SCIENCE A/B 10-12

(Science Credit)

36 weeks/2 semesters/1.0 credit

Fee: \$10

Earth Systems Science explores the interactions of the various "spheres" of Earth (atmosphere, hydrosphere, geosphere, and exosphere) as a dynamic, evolving system. This course illustrates the relevance and impact of science in society, while engaging students in the mastery of the basic concepts of scientific thinking.

SC130A-SC130B: CHEMISTRY A/B 10-12

(Science Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Algebra I

Fee: \$10

This course is designed to provide students with a strong foundation in understanding matter and energy and their relationship. Examples of specific area of study include atomic structure, chemical bonding, elements and compounds, chemical reactions, acid-base chemistry and organic chemistry. A major portion of class time is devoted to laboratory work used to explore chemical properties and processes. The practical application of chemical principles to everyday life is woven throughout the course. This course is very important for students going on to college or considering a technical career. Chemistry provides a vital foundation of knowledge important in order to understand any branch of science dealing with matter, both inorganic and organic.

SC131A-SC131B: CHEMISTRY HONORS A/B 10

(Science Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Algebra I

Fee: \$10

Pre-algebra and teacher permission may substitute for Algebra I. Chemistry Honors is designed for students interested in a science related career and is strongly recommended for all college-bound students. Facts and data that are gathered through chemical investigations are arranged and organized into meaningful patterns which lead to an understanding of the chemical nature of the world. Quantitative relationships are emphasized. Some of the topics covered in the class include: atomic structure, periodic law, chemical bonding, types of reactions and basic organic nomenclatures.

SC140A-SC140B: PHYSICS A/B 11-12

(Science Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Algebra I and Geometry

Fee \$10

This course is designed for the college-bound junior or senior who has an interest in science. Its intent is to give students an opportunity to develop and appreciate an understanding of how the universe functions. Concepts of motion, force, momentum, and energy are developed and explored as well as heat, sound and light. Regular classroom activities will include laboratory investigations as an integral part of this concept development and exploration.

SC220A-SC220B: ENVIRONMENTAL SCIENCE A/B 11-12

(Science Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Biology

Fee \$10

This course is designed to investigate the concepts of environmental systems, populations, natural resources and environmental hazards. Students will examine the basic laws that govern energy/resources and their uses. The roles of various interests in the energy/resource/environmental systems will also be examined. Students will perform inquiry-based investigations in this course.

**SC240A-SC240B: ANATOMY AND PHYSIOLOGY
A/B 11-12**

(Science Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Biology

Fee \$10

This academically rigorous laboratory science course will build on concepts learned in biology and chemistry. It will focus specifically on human anatomy and physiology. Emphasis will also be placed on healthcare and veterinary careers. Through lecture, labs, and activities, students will learn how the structures (anatomy) of the human body fit their function (physiology) to maintain homeostasis of the organism and continue the species. All twelve human body systems will be included, as well as the types of tissue and cell chemistry.

**SC520A-SC520B-SC520C: A.P. CHEMISTRY
A/B/C 11-12****A CU Succeed Course!**

(Science Credit)

36 weeks/3 semesters/1.5 credit

Prerequisite: Chemistry and Algebra II

Fee \$10

This course is the equivalent of a first-year college chemistry course. Students will attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course contributes to the development of abilities to think clearly and to express ideas, orally and in writing, with clarity and logic. It stresses principles and concepts and their relationships to the descriptive chemistry stoichiometry, structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics and the concepts of thermodynamics will be studied. Credit may be earned at many colleges by successfully completing the A.P. exam, enabling students to fulfill a college science requirement and, if desired, continue into upper level college science courses.

SC510A-SC510B-SC510C: AP BIOLOGY A/B/C 11-12

(Science Credit)

36 weeks/3 semesters/1.5 credit

Prerequisites: Biology A and B, Chemistry A and B

Fee: \$10

This rigorous course provides students with a fundamental understanding of the eight major areas of study in biology. A.P. Biology is taught at the college level and therefore in much greater depth than Biology 1 and 2. Any student interested in a career in health sciences should take this course (college majors such as pre-med, pre-vet, physical therapy, etc.). 1st semester includes: chemistry of biology, cell structure and function energy transformation in biological systems and genetics. 2nd semester topics include: evolution, animal structure and function, plant structure and function, and ecology. Instruction includes analysis, synthesis and evaluation of information that is obtained from college texts, peer-reviewed research and laboratory work. The lab portion of the course is very extensive, and includes sophisticated equipment. Individual study and extended laboratory work are encouraged if not essential for success. Students are encouraged to take the National Advanced Placement Examination at the end of the school year.

SC532A-SC532B: A.P. PHYSICS A/B 11-12**A CU Succeed Course!**

(Science Credit)

36 weeks/2semesters/1.0 credits

Prerequisite: Algebra 2, Co-requisite Trigonometry/Pre-Calculus

Fee: \$10

AP Physics corresponds to a college level non-calculus basic survey course that includes topics in mechanics, electricity and magnetism, fluid mechanics, thermal physics, waves and optics, and atomic and nuclear physics. The primary goal is to provide the student with the comprehensive overview of physics while using classroom lab work to reinforce the understanding of science and its methods.

**SC500A-SC500B: A.P. ENVIRONMENTAL SCIENCE
A/B 11-12****A CU Succeed Course!**

(Science Credit)

36 weeks/2semesters/1.0 credits

Prerequisite: Biology, Algebra I

Fee: \$10

This course will provide students with the scientific concepts and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The preceding themes provide the foundation for this course. This course prepares students for the Environmental Science Advanced Placement Examination.

SOCIAL STUDIES

SS110A-SS110B: WORLD GEOGRAPHY A/B 9

(Social Studies Credit)

36 weeks/2 semesters/1.0 credit – Required

Students will study North America, Latin America, South America, Europe, Russia, the Middle East, Africa, Southeast Asia, the Orient, Australia and New Zealand, and Oceania. They will study nations and their people. This includes geography, environment, culture, history and politics. Students will study these areas through the use of class lectures, group discussions, handouts, programmed materials, maps, individual research and audio visual aids. Each student will be evaluated on daily assignments and tests. Reading, writing, and projects are all required and students should expect two to three hours of homework per week.

SS112A-SS112B: INTEGRATED WORLD GEOGRAPHY 9 A/B

(Social Studies Credit)

36 weeks/2 semesters/1.0 credit

Required

One section of World Geography/History 9A and 9B will be offered as a thematic, interdisciplinary, integrated course with a corresponding section of English 9. Students would take this course in place of SS110A and SS110B. Space is limited, and the 60 available slots will be based on a lottery system.

SS111A-SS111B: WORLD GEOGRAPHY HONORS A/B 9

(Social Studies Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Application Required

This is an accelerated, in-depth study of the world. The course will focus on the physical and cultural geography of the world as well as on significant events throughout world history. Students will be required to keep current on world events and to discuss them in class. Reading materials will include a textbook as well as primary sources. Assessments will be based on the district standards, and students will largely be assessed using the Six Traits format. While district standards will be employed for this course, students will go above, beyond, and in-depth for each area studied.

SS120A-SS120B: UNITED STATES HISTORY A/B 10

(Social Studies Credit)

36 weeks/2 semesters/1.0 credit – Required

This course is designed as a study of the historical growth of the United States. Its intent is to help the students gain an understanding of the major political, economic and social events that have shaped the nation. The course emphasizes twentieth century United States history and the contemporary world. The students will be expected to complete all reading and writing assignments and to participate in a positive manner in classroom activities.

SS121A-SS121B: UNITED STATES HISTORY

HONORS A/B 10

(Social Studies Credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Application Required

This rigorous, accelerated, in-depth survey course will examine the political, social, and economic history of the United States during the twentieth century. Students will engage in historical inquiry and critical thinking by using a variety of instructional methods, including historical essays, simulations, seminar discussions, and project-based learning. While reading materials will include textbooks and other secondary sources, students should also expect to read extensively from primary sources and works of historical literature. Students will practice the craft of historical research, which includes strong thesis development and appropriate citation. This class is designed for the highly motivated, inquisitive social studies student with excellent reading and writing skills.

SS130A-SS130B: UNITED STATES GOVERNMENT/COLORADO GOVERNMENT A/B 11

(Social Studies Credit)

36 weeks/2 semesters/1.0 credit – Required

In the United States Government course, students will examine the way in which government in the U.S. is organized and how the principles of democracy developed. In the course, students will study the political process by learning critical thinking and problem solving skills needed to participate responsibly in the American system of government. Students will examine the impact that many aspects of government have on the lives of citizens. A unit of Colorado government will also be incorporated into the course.

SS220: PSYCHOLOGY 9-12

(Elective Credit)

18 weeks/1 semester/0.5 credit

This course offers students an opportunity to investigate human behavior and mental processes. The basic course addresses topics and issues relevant to the high school students who want to know more about the following areas: History and research Methods, Stress and Health, States of Consciousness (sleep and dreams), intelligence, and Personality Perspectives. Weekly reading assignments from the text and various outside sources are required in addition to completing personal inventories.

SS230: SOCIAL PSYCHOLOGY 10-12

(Elective Credit)

18 weeks/1 semester/0.5 credit

This is an elective course designed for the student interested in exploring psychology. Topics include: Personality, emotions, sleep and dreams, media impact on individual behavior and relationships and general psychological disturbances. Students will use a variety of social studies and communication skills such as role playing, group work, reading and writing. Verbal participation and presentation is required.

SS235 SOCIOLOGY 9-12

(Elective Credit)

18 weeks/1 semester/0.5 credit

This class examines important social issues of our time as they are portrayed on radio, television, film, the internet, newspapers and magazines. Students will learn how to analyze the media's impact on our lives and how to apply that knowledge to sociological issues. Topics include: equality and the sports world; shock radio and politics; crime on TV and in reality; the internet and social changes; and the influence of film on public opinion. Assessments include multi-media presentations, survey interpretations, and tests, writing exercises, group productions and discussion. Textbook units, articles, and personal inventories are the primary materials used in this course.

SS200: CONTEMPORARY GLOBAL ISSUES 9--12

(Elective Credit)

18 weeks/1 semester/0.5 credit

This course is a social studies elective focusing on the area of political science. Students will study domestic issues in America and how our government is impacting and working with them. They will also look at our government's involvement with international issues. Students will use textbooks as well as other current events to explore the world of modern American politics.

SS140: PERSONAL FINANCE LITERACY 9-12

(Elective Credit)

18 weeks/1 semester/0.5 credit

Personal Financial Literacy focuses on four critical areas: (1) designing and analyzing financial plans for short and long-term goals; (2) analyzing spending, saving, and investment options; (3) analyzing the components of credit and debt; and (4) identifying, developing, and evaluating risk-management strategies. The course emphasizes the analytical and evaluation skills to become "financially fit." These concepts and associated skills are aligned with the Colorado Academic Standards for Social Studies, incorporating 21st century skills and postsecondary and workforce readiness competencies.

SS510A-SS510B: A.P. U.S. HISTORY A/B 10-12

(Social Studies Credit)

36 weeks/2 semesters/1.0 credit

Fee: \$10.00

Advanced Placement American History is an intensive study of history designed for above average students. Included in the course are college level reading, research, writing, critical thinking and historiography. This course will prepare students for the Advanced Placement test in United States History. This meets the requirement of one year of United States history.

SS520A-SS520B: A.P. EUROPEAN HISTORY 11-12

(Elective Credit)

36 weeks/2 semesters/1.0 credit

Fee: \$10.00

This course covers European History from 1450, the High Middle ages and the Renaissance, to contemporary events. Using debates, trials, investigative reports and other learning approaches, students examine people and issues – intellectual, artistic, political, social and economic – which shape our world today. This course prepares students for the European History Advanced Placement Examination.

SS505A-SS505B: A.P. U.S. GOVERNMENT & POLITICS A/B 11-12**A CU Succeed Course!**

(Social Studies Credit)

36 weeks/2semesters/1.0 credit

Fee: \$10.00

A.P. U.S. Government and Politics is designed for the student who is capable of doing lower division college work. The A.P. U.S. Government and Politics class will address the following topics: 1-constitutional underpinnings of United States government, 2-political beliefs and behaviors, 3-political parties and interest groups, 4-the three branches of national government, 5-public policy making, and 6-civil liberties and civil rights. This course will prepare students for the Advanced Placement Test in United States Government and Politics and will fulfill the graduation requirement for U.S. Government.

SS525A-SS525B A.P. PSYCHOLOGY 11-12**A CU Succeed Course!**

(Elective Credit)

36 weeks/2 semesters/1.0 credit

Fee: \$10.00

This course is recommended for students who excel in the social sciences, general academics, and are motivated to academic rigor. The purpose of A.P. Psychology is 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 subfields within psychology. Students examine all five domains in psychology: History and Methods of Research; Human Development; Bio psychological; Cognitive; Clinical (Abnormal and Therapies); and Social Domain. Course evaluation is based on class participation, assessments and personal inventories, research, abstracts, and independent work. Additionally, students are expected to read material outside of class, participate in discussions, presentations, and evaluation of experiments. This course prepares students to take the Psychology Advanced Placement Examination.

PS330 CU GOLD SOCIOLOGY 11-12**A CU Succeed Course!**

(Elective Credit)

18 weeks/1 semesters/0.5 credit

A survey course in which the main concepts that define the sociological perspective are presented, and a picture of society is provided by examining major social institutions and forms of social organization within society. GT: Course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer, GT-SS3

PS332 CU GOLD INEQUALITIES IN SOCIAL WORLD**A CU Succeed Course!**

Prerequisite: PS330 CUG Sociology or SS235 Sociology

(Elective Credit)

18 weeks/1 semesters/0.5 credit

Introduces students to critical sociological perspectives on social inequality. Major sociological factors contributing to the production and reproduction of inequality in various social organizations and institutions are analyzed.

ELECTIVE COURSES

WORLD LANGUAGES

WL141A-141B: MANDARIN CHINESE 1A/1B 9 - 12

(Elective Credit)

36 weeks/2 semesters/1.0 credit

This beginning course will introduce students to Chinese and focus on listening, speaking, and reading abilities through classroom activities, conversation, reading, story writing, role playing, singing, calligraphy, games, etc. Students will acquire the knowledge and skills to begin communicating in Mandarin Chinese. Students will also be introduced to Chinese culture through media presentations and discussions.

WL142A-142B: MANDARIN CHINESE 2A/1B 9 - 12

(Elective Credit)

36 weeks/2 semesters/1.0 credit

This course will develop students' proficiency to a more advanced level. They will learn expanded topics through listening, speaking, and reading activities. Students will be expected to express themselves in a narrative form. The Chinese culture will be explored through internet sources.

WL143A-143B: MANDARIN CHINESE 3A/1B 9 - 12

(Elective Credit)

36 weeks/2 semesters/1.0 credit

This course continues students' learning, expanding topics through various classroom activities based on the prior two years. Four skills are emphasized: listening, speaking, reading, and writing. These abilities are integrated to help students develop the Chinese language to a level of fluency. Students will be expected to become independent learners and explore related topics, contexts, conversations, culture, etc. through texts, internet, or other media.

WL144A-144B: MANDARIN CHINESE 4A/1B 9 - 12

(Elective Credit)

36 weeks/2 semesters/1.0 credit

This course aims to further develop the students' proficiency in all skills, including listening, speaking, reading, and writing. Broader and deeper aspects of Chinese culture and modern life will be discussed. Business Chinese and college level materials will prepare students for the outside world.

WL151A-WL151B: SPANISH 1A/1B 9 - 12

(Elective credit)

36 weeks/2 semesters/1.0 credit

Fee: \$15.00

Open an exciting new chapter in your life as you learn to communicate in a whole new way. This course is designed to offer students an introduction to the Spanish language and its many cultures. Its intent is to expose students to the four basic language skills: listening, speaking, reading, and writing and to a culture different from their own. The course includes a presentation of grammar concepts, vocabulary, and culture—with instructional emphasis on conversation. Students will be expected to complete written and oral assignments and to participate in a positive manner in classroom activities. You must pass Spanish 1A to take Spanish 1B.

WL152A-WL152B: SPANISH 2A/2B 9 - 12

(Elective credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Spanish 1 or teacher recommendation

Fee: \$15.00

This course is designed for students who have completed Spanish I and wish to continue their study of Spanish language and cultures. The course includes a review of material covered in the first year and the presentation of additional vocabulary, grammar structures, and cultural aspects. Students will be expected to complete all written and oral assignments and to participate in classroom activities. You must pass Spanish 2A to take Spanish 2B.

WL153A-WL153B: SPANISH 3A/3B 10 - 12

(Elective credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Spanish 2 or teacher recommendation.

Fee: \$15.00

This course is designed for students who have completed Spanish I and II and wish for a more in-depth study of language and culture in Spanish. This course is designed to meet students' needs in a more individualized curriculum that includes regular written and oral assignments, projects, and exams. Students will review level two materials and then learn additional vocabulary, expressions, and culture. Students will be expected to attend daily and complete assignments. You must pass Spanish 3A to take Spanish 3B.

WL154A-WL154B: SPANISH 4A/4B 11 - 12

(Elective credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Spanish 3 or teacher recommendation

Fee: \$15.00

This course is designed for students who have completed Spanish III and wish to continue to develop their ability to speak, understand, read and write Spanish in a cultural context. The course will include an intensive grammar review of levels 1, 2 and 3. Focus will be on communication in Spanish by means of further grammar development, reading and discussion of classic and contemporary texts, viewing and discussion of authentic Spanish video shorts from around the world and much more, all via the Spanish language. Class will be conducted in Spanish. You must pass Spanish 4A to take Spanish 4B.

WL510A-WL510B: A.P. SPANISH A/B 11-12

(Elective credit)

36 weeks/2 semesters/1.0 credit

Fee: \$20.00

Prerequisite: Spanish 4 or Teacher Recommendation

This course provides students interested in the Spanish language with a wide variety of opportunities to develop advanced Spanish language skills. Students are exposed to the literature, history, and culture of the Spanish-speaking world, and emphasis is placed on developing proficiency in self-expression, communication, and critical thinking. Students will read a variety of short works or literary excerpts, listen to recorded stories, participate in discussions, and perform different kinds of writing tasks. This course prepares students to take the Spanish Language Advanced Placement Examination.

BUSINESS

CTE 9051: INTRODUCTION TO BUSINESS

9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Students will learn basic business principles, business economics, personal and business finance, consumer credit and banking, business law, entrepreneurship, management and marketing. This course will provide a broad foundation on which to build as students move into other business courses as well as practical business knowledge that can be applied to students' roles as employees, consumers, and citizens. Participation in either Future Business Leaders of America (FBLA) and/or DECA is required. Students who participate in FBLA and/or DECA learn valuable leadership and social skills.

CTE 9052: PERSONAL FINANCE

10 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Personal Finance focuses on four critical areas: (1) designing and analyzing financial plans for short and long-term goals; (2) analyzing spending, saving, and investment options; (3) analyzing the components of credit and debt; and (4) identifying, developing, and evaluating risk-management strategies. The course emphasizes the analytical and evaluation skills to become "fiscally fit." These concepts and associated skills are aligned with the Colorado Academic Standards for Social Studies, incorporating 21st century skills and postsecondary and workforce readiness competencies.

CTE 9110: PRINCIPLES OF BUSINESS

10 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Introduction to Business

This project-based business course develops student understanding and skills in such areas as business law, economics, financial analysis, human resources management, information management, marketing, operations, and strategic management. Through the use of three projects, students acquire an understanding and appreciation of the business world. They develop a business analysis report, conduct an environmental scan of the local business community, and investigate business activities. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course.

CTE 9015: BUSINESS COMPUTER APPLICATIONS

9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Introduction to Business

This course is designed to prepare students for their education and their careers by exposing each student to formal letter writing, interviewing, Microsoft Office, teamwork, organization, research and general business etiquette. This class teaches students how to be a full participant in the global business world.

CTE 103: INTRODUCTION TO PROGRAMMING

9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Algebra 1

Most people know how to use a computer. This course will help you understand how a computer works. Topics will include: Binary and Hexadecimal number systems (and why the computer uses them), Digital representation of analog information, Computer Hardware, Operating Systems, Software Development and Programming (in various languages), 3D Modeling, Web Design, and the History of Computing. This course will also introduce you to Computational Thinking, a problem-solving process that uses logic and abstraction to take advantage of the processing power of computing devices.

CTE 107: WEB DESIGN

9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Algebra 1, previous or concurrent

Students will learn to create, design and publish information on the World Wide Web. Students will become proficient in webpage design using hand coding, and then learn on a web-authoring software. Using HTML, students will transform ideas into publications read for launching on the Web. Students will design detailed and in-depth, interactive websites using cutting edge technology and learn the dynamic possibilities of industry standard web-authoring tools.

INTERACTIVE MEDIA

CTE 111: BEGINNING DIGITAL PHOTOGRAPHY

9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit/67.5 Contact Hours

Fee: \$20.00

Prerequisite: none

Beginning Digital Photography provides an overview of the elements of design, a basic understanding of rule of 3rd, and introduction into the basics of editing a photo. Students will be able to apply basic editing skills learned in Adobe Photoshop such as typography, image development, layout, scanning images, manipulating photographs, and creating digital artwork to projects that will create basic marketing and advertising projects. Class projects may include: postcards, magazine cover, book/movie illustration, and etc. Students will be assessed on their use of the elements of design, originality, workmanship, and technical proficiency in each project undertaken.

CTE 112: ADVANCED DIGITAL PHOTOGRAPHY

9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Fee: \$40.00

Prerequisite: Beginning Digital Photography

Advanced Digital Photography provides an in-depth understanding of the elements and principles of design, rule of 3rd, and editing a photo. Students will be able to synthesize their editing skills learned in Adobe Photoshop such as typography, image development, layout, scanning images, manipulating photographs, and creating digital artwork to projects that will create comprehensive marketing and advertising plans for companies. Class projects may include: 3D animation, Guerrilla advertisements, book/movie illustration, and etc. Students will be assessed on their use of the elements and principles of design, originality, workmanship, and technical proficiency in each project undertaken. Students will gain an appreciation of photography as a form of art and a critical mode of communication in the workplace.

CTE 110: BEGINNING VIDEO PRODUCTION 9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit/67.5 Contact Hours

Fee: \$20.00

Prerequisite: none

Video production provides an overview of the elements of design, basic understanding of the digital storytelling, and introduction in the production process. Students will be able to synthesize the roles of writer, producer, director and actors to explore the principles and techniques of videotape production including; camera operation, basic script writing, lighting, sound, and basic digital editing. Class projects will examine the pre-production, production, and post-production processes in detail; projects may include montage, interview, commercial, music video, and a pursuit. Students will be assessed on their use of the elements of design, originality, workmanship, and technical proficiency in iMovie, Garageband, and Final Cut Pro in each project undertaken.

CTE 115: ADVANCED VIDEO PRODUCTION 9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit/67.5 Contact Hours

Fee: \$30.00

Prerequisite: Beginning Video Production

Advanced Video Production provides a comprehensive exploration of the elements and principles of design, of the digital storytelling, and of the production process. Students will be able to synthesize the roles of writer, producer, director and actors to explore the principles and techniques of live production including; camera operation, basic script writing, lighting, sound, and basic digital editing. Class projects will examine the pre-production, production, and post-production processes in detail; projects may include producing live commercials, hosting live interviews and producing Warrior TV. Students will be assessed on their use of the elements of design, originality, workmanship, and technical proficiency in iMovie, GarageBand, Audacity, Final Cut Pro and other advanced editing tools in each project undertaken.

CTE 116: BEGINNING GRAPHIC DESIGN 9-12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Fee: \$25.00

Covering the basic theory and concepts of visual communication used to present information and promote a message. Students learn a basic understanding of the elements and principles of design. Skills taught are typography, image development, layout, scanning images, manipulating photographs and creating digital artwork. Students are exposed to graphics programs such as Adobe Illustrator and Adobe Photoshop. Class projects will include: logo design, poster design, brochure design and packaging design.

CTE 117: ADVANCED GRAPHIC DESIGN 9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Fee: \$25.00

Prerequisite: Beginning Graphic Design

Graphic Design takes students to an advanced understanding of theory and concepts of visual communication used to present information or promote a message to a consumer driven market. Students must have an understanding of the elements and principles of design. Students will be able to apply basic skills learned in previous classes such as typography, image development, layout, scanning images, manipulating photographs, and creating digital artwork to projects that will create comprehensive marketing and advertising plans for companies. Students will apply the understanding of Adobe Photoshop to take their digital designs to the next level and learn how to use computer software such as Adobe Illustrator and Adobe Dreamweaver.

CTE 9032: INTRODUCTION TO MULTIMEDIA 9 - 12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit/67.5 Contact Hours

Fee: \$10.00

Prerequisite: none

Introduction to Multimedia provides an overview of theory and concepts of visual communication used to present information or promote a message to a consumer. Students will be able apply an understanding of the elements of design to develop interactive, computer-based media for presentational and instructional use. Students will be able to apply basic skills learned in previous classes such as typography, image development, layout, scanning images, manipulating photographs, and creating digital artwork to projects that will create comprehensive marketing and advertising plans for companies. Students will apply the understanding of Adobe Photoshop, Google Sites, Scratch, and Garageband to create their digital designs. Class projects may include: logos, posters, brochures, billboards, flyers, websites and packaging. Students will be assessed on their use of the elements of design, originality, workmanship, the ability to assess customer needs and technical proficiency in each project undertaken.

ART

A102: 2D DESIGN 9 - 12

(Fine Arts Credit)

18 weeks/1 semester/0.5 credit

Fee: \$15.00

This is a beginning level class focusing on the principles (Harmony, unity, emphasis, movement, rhythm, pattern) and elements (Line, shape, form, value, texture, color, and space). Students will learn to see and think like an artist. Mediums covered may include pencil, watercolor, charcoal, tempera, etc. Students are expected to demonstrate consistent improvement in the application of skills taught, a positive attitude, and good work habits.

A104: 3D DESIGN 9 - 12

(Fine Arts Credit)

18 weeks/1 semester/0.5 credit

Fee: \$15.00

This course serves as an introduction to the area of three dimensional design, and will emphasize basic techniques, as well as the elements and principles of art. Various prominent artist will be discussed. Students will be expected to demonstrate consistent improvement in the application of skills taught, a positive attitude, and good work habits. Students may work in stone, clay, metal, and wire.

A161: 3D DESIGN INTERMEDIATE 9 - 12

(Fine Arts Credit)

18 weeks/1 semester/0.5 credit

Fee: \$15.00

Prerequisite: 3D Design

Intermediate 3D Design is a course intended for personally motivated students who have a desire to pursue individually directed ceramic projects. This course is intended to expand upon the hand-building and finishing techniques learned in 3D Design. Artists will further develop their personal creativity, style, and complexity of ideas through a series of traditional and experimental ceramic works of art. In this course students will experience advanced glazing techniques, finishing techniques, mold making, slip casting, image transfers, and more.

A109: CRAFTS 9 - 12

(Fine Arts Credit)

18 weeks/1 semester/0.5 credit

Fee: \$15.00

This introductory course is designed to give students creative experience in 2D and 3D art while learning the elements and principles of design that makes crafts successful. Class projects may include: batik, decoupage furniture, handmade books, paper Mache masks, painting, polymer clay, printmaking, and weaving. Students are graded on their use of the principles and elements of design, their craftsmanship, and their technical proficiency in each project.

A113F/S: ADVANCED DRAW/PAINT 10 - 12

(Fine Arts Credit)

18 weeks/1 semester/0.5 credit

Fee: \$25.00

Prerequisite: 2D Design

This is a course for the advanced art student who wants to pursue individual interest in intensified studies in drawing and/or painting. Advanced techniques will be presented to give the student the opportunity to improve skills, explore various media combinations, and learn from peer critiques. Students will create original and high quality art. Students will be assessed on the originality, skills, and quality of their artwork.

A114: BEGINNING JEWELRY 10 – 12

(Metalsmithing)

(Fine Arts Credit)

18 weeks/1 semester/0.5 credit

Fee: \$30.00 (payable by second day of term)

Prerequisite: completed 2 of following: 2D Design/Crafts/3D Design
10th graders must have teacher permission

Students will explore various metalsmithing techniques. Cutting, soldering, polishing techniques, Bezel Stone Setting, PMC & FIMO, Glass Fusion, and beading are just a limited listing of the different techniques explored. Many of the materials and equipment used are potentially dangerous to people with health concerns like breathing disorders or motor skills disorders.

A129F-A129S: ADVANCED STUDIO ART F/S 10 - 12

(Fine Arts Credit)

18 weeks/1 semester/0.5 credit

Fee: \$20.00

Prerequisite: instructor approval required.

This class continues to offer advanced art students an opportunity to work on individual technique and approaches in a structured class setting. Students will be assessed based on the number of finished pieces produced in a specific time and participation in class critiques.

A500A-A500B: A. P. STUDIO ART A/B 11 – 12

(Fine Arts Credit)

36 weeks/2 semesters/1.0 credit

Fee: \$30 plus testing fee

This course is designed to be the equivalent of a general entry-level college art course. Students who take this course should have a high level of motivation, diligence, commitment, and independence. In addition to the portfolio examination, students will be expected to create artwork outside class time, participate in critiques and discussions, complete daily exercises to advance skills, maintain a sketch book, and prepare their work for showings. Students will be encouraged to develop a personal direction or “voice” in their work. To obtain college credit, students will prepare and submit an essay and portfolio that will be concentrates on three sections: Quality, Breadth, and Concentration. This essay and portfolio is due in the spring. Most of the first semester is focused on developing the Breadth section of the portfolio (10-12 pieces), which demonstrates a wide range of work. Second semester will focus on developing the Concentration section of your portfolio (10-12 pieces), focusing on an in-depth individual exploration of the voice of your art. Some class projects will be presented to guide study. Most of the second semester is self-guided. Each course is for one semester. You must sign up for both first and second semester.

A900: ART INDEPENDENT STUDY 10 - 12

(Fine Arts Credit)

18 weeks/1 semester/0.5 credit

Fee: \$20.00

Prerequisite: instructor approval required.

This course provides opportunities for self-motivated student who has successfully completed advanced level courses to explore in depth the media of their preference. Emphasis will be placed on portfolio preparation, and post-secondary options.

MUSIC AND THEATER

MU113F-MU113S: SYMPHONIC BAND F/S 9 - 12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$50.00

Prerequisite: Permission of the instructor

Symphonic Band is open to 9-12 students who play a band instrument. First quarter involves performing parade and field marching music at various school activities. Second through fourth quarters involve performing a wide array of concert band literature at various school activities. Additional playing opportunities exist for students in district and state-wide performing groups. Students do have the opportunity to letter in band. In order for students who are enrolled in a music class to progress musically, it is highly recommended that they continually participate in a music performing group.

MU107A-MU107B: ADVANCED JAZZ BAND

A/B 10 - 12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$20.00

Prerequisite: Audition/concurrently enrolled in Symphonic Band
Jazz Band is composed of students that are concurrently enrolled in the Symphonic Band. These students perform a wide array of jazz, rock, swing, Latin, and ballad styles of music. The instrumentation of this group is structured and limited to that of a contemporary jazz band setting. In order for students who are enrolled in a music class to progress musically, it is highly recommended that they continually participate in a music performing group.

MU105A-MU105B: JAZZ BAND A/B 9 - 12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$20.00

Prerequisite: Concurrently enrolled in Symphonic Band
Stage Band is composed of students that are concurrently enrolled in Symphonic Band. These students perform a wide array of jazz, rock, swing, Latin, and ballad styles of music. The instrumentation of this group is open to any band instrument. In order for students who are enrolled in a music class to progress musically, it is highly recommended that they continually participate in a music performing group.

MU103F: COLOR GUARD (Fall only) 9 - 12

(Fine art credit)

18 weeks/1 semester/0.5 credit

Fee: \$50

Prerequisite: Permission of the instructor/Audition

Students enrolled in Color Guard perform choreographed flag routines along with the music of the marching band. This group is responsible for adding color and visual interest to the marching band performances during first quarter. The second, third, and fourth quarters are dedicated to music in a winter guard setting.

MU109F-MU109S: PERCUSSION ENSEMBLE F/S 9 - 12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$50.00

Prerequisite: Permission of the instructor

Students enrolled in Percussion Ensemble will learn music and technique specific to percussion instruments. Students may be asked to perform music along with the marching band and concert band.

MU130A-MU130B: ORCHESTRA A/B 9 - 12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$20.00

Prerequisite: Permission of the instructor

Orchestra is open to 9th - 12th grade students who play a string instrument. Students will perform a wide array of orchestra literature at various school activities. Additional playing opportunities exist for students in district and state-wide performing groups. Students do have the opportunity to letter in orchestra. In order for students who are enrolled in a music class to progress musically, it is highly recommended that they continually participate in a music performing group.

MU164A-MU164B: SELECT CHOIR A/B 10-12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Prerequisite: Audition /Teacher Recommendation

Fee: \$20.00

Concurrent enrollment in Concert Choir or Women's Ensemble highly suggested

Varsity Blue is a jazz/show choir whose focus will be on Vocal Jazz, Broadway, and Pop music. They will use dance, movement, and choreography in all performances. The yearlong class is by audition only and is limited to twenty members. It is possible to earn a letter by taking this course. There will also be an activity fee at the beginning of each year for uniforms. Price may vary per year based on availability and company prices.

MU156A-MU156B: CONCERT CHOIR A/B 9-12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$20.00

Prerequisite: Audition /Teacher Recommendation

This ensemble will focus on Chamber, Classic, and Large Group Pieces. Enrollment is capped at fifty students and will be filled based on auditions. This is a yearlong ensemble, and it's possible to earn a letter by taking this course. There will also be an activity fee at the beginning of each year for uniforms. Price may vary per year based on availability and company prices.

MU167A-MU167B: WOMEN'S ENSEMBLE A/B 9-12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$20.00

Prerequisite: Audition /Teacher Recommendation

This auditioned choir is for women only and will focus on a variety of music written for four to six parts of women's voices. Enrollment for this yearlong class will be based on audition and capped at 60 students. It's possible to earn a letter by taking this course. There will also be an activity fee at the beginning of each year for uniforms. Price may vary per year based on availability and company prices.

MU 159A-MU159B: MEN'S CHOIR A/B 10 - 12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$20.00

Prerequisite: Audition /Teacher Recommendation

The cap for this class is 40. Students will study a variety of music such as doo wop, Contemporary, classical and popular. Students may letter in this group and will have a uniform fee at the beginning of the year, based on uniform and company costs.

MU161: MIXED CHOIR 9 - 12

(Fine art credit)

18 weeks/1 semesters/1.0 credits

Fee: \$20.00

This ensemble is open to all students and will serve as a place for anyone who wants a chance to sing and perform. We will focus on a wide variety of music and work on helping any level of student to improve and enjoy choral singing. There is no cap on enrollment. This class is a semester long ensemble.

MU50A-MU150B: A CAPELLA / JAZZ CHOIR**A/B 10 - 12**

(Fine art credit)

36 weeks/2 semesters/1.0 credits

Fee: \$20.00

FHS Jazz Choir is a jazz choir consisting of FHS's strongest vocalists. This ensemble focuses on more contemporary music, including (but not limited to) jazz and contemporary a cappella. They perform in a minimum of four concerts a year, as well as additional community and school functions. Membership is audition-based and a year-long commitment.

MU210: HISTORY OF ROCK AND ROLL 9 - 12

(Fine art credit)

18 weeks/1 semester/0.5 credit

Students will explore the history of Rock and Roll from the 1950's to present day. Work for the course will focus on a variety of projects dealing with the history of popular music. No previous music classes are required.

MU212: MUSIC AROUND THE WORLD 9 - 12

(Fine art credit)

18 weeks/1 semester/0.5 credit

Students will explore music as an art form in different cultural contexts in various global societies. Work for the course will focus on a variety of projects dealing with a wide range of music themes and genres. No previous music classes are required.

MU225: MUSIC THEORY 9 - 12

(Fine art credit)

18 weeks/1 semester/0.5 credit

Fee: Cost of Book

Students will learn basic concepts of music theory and music history. Projects will include writing musical compositions and a variety of projects on music history. Students will learn to use computer music notation programs. No previous music classes are required.

MU200: GUITAR 1 9-12

(Fine art credit)

18 weeks/1 semester/0.5 credit

Fee: Cost of Book

Guitar students will learn basic guitar skills and methods. Students will learn chord charts, identify parts of the guitar, and play various strum patterns. Students will also learn fundamentals of music theory such as rhythm, melody, and notation. Students will need to provide their own guitar and will need to purchase the required method book, "Hands on Training, First Year Guitar."

MU205: GUITAR 2 9-12

(Fine art credit)

18 weeks/1 semester/0.5 credit

Fee: Cost of Book

Prerequisite: Guitar or Teacher Recommendation

This class will continue to build on the skills learned in Guitar 1, with an emphasis in basic theory and music reading skills. The class will also help students to learn the basics of songwriting utilizing guitar skills learned from Guitar 1 and this course. Students will need to provide their own guitars, either electric or acoustic. No bass guitars will be permitted!

MU 500A- 500B: A. P. MUSIC THEORY A/B**A CU Succeed Course!**

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: Cost of Book

Prerequisite: Music theory or permission of the instructor.

A. P. Music Theory course is roughly the equivalent of a college freshman year theory course. The requirements of this course are based on the most recent A. P. Course Description of the College Board. This course will give students a foundation in music notation, intervals, scales, chords, rhythms/meter, phrase structure, form, and the terms used to describe these elements of music related to the major/minor tonal system. With this foundation, the course progression includes more complicated tasks such as the following: dictation of the melodic and harmonic materials, sight singing, the analysis of repertoire, including the study of the rhythmic and melodic interaction between voices; harmonic analysis of functional tonal passages, and modulation to closely related keys. Creative activities include the realization of a figured bass and a Roman numeral progression, as well as composition of traditional four-part chorale passages. The material is covered very rapidly so that it can all be fit into the course.

MU135: HAND BELL ENSEMBLE F/S 9 - 12

(Fine art credit)

36 weeks/2 semesters/1.0 credit

Fee: \$20.00

Hand bell ensemble is open to any interested 9-12 students. The class will focus on learning proper playing techniques of hand bells. Students will perform traditional hand bell literature. Students will learn to read music notation and will be expected to attend all performances. Use MU900: Music Independent Study and tell your counselor to request this course.

MU215 MUSIC TECHNOLOGY 10-12

(Practical Art)

18 weeks / 1 semester / 0.5 credit

Fee: \$20

In this course, students will gain experience working with creating, augmenting, editing, and publishing live and sequenced audio, using computer applications such as Garage Band, ProTools, Sibelius Notation Software, YouTube, and iTunes.

Students will also become familiar with music technology equipment such as MIDI keyboards, microphones, mixers, and other tools used in recording studios. The majority of the class will be project based.

MU206: BEGINNING PIANO/ KEYBOARDING 9-12

(Fine art credit)

18 weeks / 1 semester / 0.5credit

Fee: \$20

This course is designed for the student who wishes to acquire basic piano keyboard skills. The course will introduce and reinforce the concepts of keyboard playing and beginning music sight-reading, theory and technique.

MU220: MUSICAL THEATER 9-12

(Fine art credit)

18 weeks / 1 semester / 0.5credit

Fee: \$30

Students in this course will receive advanced training for musical production. Students will master skills in acting, vocal performance, dance, technical theatre, and instrumental technique. The culmination of this training will be displayed in the FHS Fall musical. *It's an expectation that students who wish to be a part of the FHS musical as a performer or pit member enroll in this class.* Students in this class will be required to participate in after school rehearsals and performances throughout the fall semester.

LA400: DRAMA 1 9-12

(Fine arts credit)

18 weeks/1 semesters/0.5 credit

This is an introductory course for students wishing to learn more about the craft of acting. The main focus of this class is to develop poise, concentration, and teamwork in both ensemble and individual assignments. Students will learn basic stage movement and terminology as well as a brief overview of theatre history. Beginning acting exercises, play reading and analysis, monologue and scene work round out the curriculum.

LA401: DRAMA 2 9-12

(Fine arts credit)

18 weeks/1 semesters/0.5 credit

Prerequisite: Drama 1 or Teacher Recommendation

Students in this course will refine and practice the skills they learned in Drama 1. In addition, they will study the next-level of theatre history, appreciation, and acting skill. Specifically, students will be learning various acting theories, advanced character development, emotional connection, and other advanced acting techniques and practices. They will be mastering these skills through rigorous scene work and ultimately preparing for and performing a class play.

LA402: DRAMA ADVANCED 10-12

(Fine arts credit)

18 weeks/1 semesters/0.5 credit

Prerequisite: Audition

Fee: \$25

Students in this course will receive advanced training for play production. Students will be expected to participate in the school productions and to attend after-school rehearsals. Emphasis will be on advanced acting technique, acting theories, college-readiness, audition prep, and play analysis. Continued study of voice, diction, and dialects as well as the exploration of a variety of acting styles will challenge students. Any student who wishes to be a part of either of the FHS spring plays must audition in December and be placed in this class.

LA405: STAGE TECHNICIAN BEGINNER 9-12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Fee: \$20

This course is designed to expose students to the more technical aspects of theatrical production, including simple instruction in set design and construction, sound and light theory and design, as well as beginning stage management skills. Students will also explore additional specific theatrical areas as costuming and make-up design and application.

LA406: STAGE TECHNICIAN INTERMEDIATE 10-12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Teacher Recommendation

Fee: \$20

This course is designed to train students to the more technical aspects of theatrical production, including advanced set construction and design, lighting design and operation, sound design and operation, and technical skill for play production. This class will be in charge of setting up the technical events for the school.

LA407: STAGE TECHNICIAN ADVANCED 10-12

(Practical Art Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Teacher Recommendation

Fee: \$20

This course is designed to train students to the more technical aspects of technical Theatre. They will focus on digital design work, as well as practical implementation of their designs on the stage. They will design and build in the areas of set, props, lighting, sound, costumes, make-up, and marketing. This class will be in charge of setting up the technical events for the school.

HEALTH AND PHYSICAL EDUCATION

PE WAIVER

St. Vrain Valley School District provides the opportunity for a student to waive up to 1.0 physical education credit when specific criteria are met. Students who maintain full-time status (defined as a daily course schedule with 7 / 8 classes per semester) during all four years of high school and meet all graduation requirements may request waiver of an initial .5 physical education credit by successfully completing the following criteria:

- Two (2) SVVSD athletic programs at the varsity or junior varsity level (two different sports; same sport two seasons); or
- 72 hours during one semester of an appropriate, pre-approved, structured, and supervised activity outside of the school district.

Students with an advanced course schedule including enrollment in multiple academically rigorous courses, may also request an initial .5 physical education credit waiver when combined with one of the above criteria.

Students may waive an additional .5 physical education credit for a total of one (1) physical education credit in this same manner.

The activities to waive physical education credit may be met during any of a student's four years of high school. A student may not waive physical education credit if they have failed any courses and/or are in the process of credit recovery to meet graduation standards.

Whether or not a student has received a physical education waiver, they are still required to successfully complete 24.5 credits in order to earn their high school diploma.

The physical education waiver application may be acquired in the counseling office. Students must submit a written request for a waiver to their counselor beginning in January of their junior year. Additional information on applying for and receiving approval of a physical education credit waiver can be found in District policy, IKF-R, Graduation Requirements-Physical Education Waiver.

H100: HEALTH 9 - 10

(Health Credit)

18 weeks/1 semester/0.5 credit

Required

When you're working towards independence, your decisions now will affect your future. Take Health and learn strategies that may help you better control what happens to you. This course is designed for students to discuss their ideas and opinions about issues related to teens. Some of the topics covered are: reproduction, abstinence, birth control, sexually transmitted diseases, destructive behaviors, communication skills, dating, family and friend relationships and problem solving.

PE 100: HIGH SCHOOL CORE PE 9

(PE Credit)

18 weeks/1 semester/0.5 credit

This foundational course for freshmen is required as a prerequisite prior to enrolling in other Physical Education courses. In High School, instructional time should focus on six critical areas: (1) Participating at a competent level in a variety of lifelong physical activities and understanding the cognitive impact of movement, (2) Applying rules, principles, problem-solving skills and concepts to traditional and nontraditional movement settings, (3) Establishing goals based on fitness assessment data as well as developing, implementing, achieving, and monitoring individual health and fitness plans, (4) Participating regularly in health-enhancing physical

activities, (5) Demonstrating responsible behavior and respect for others as well as collaboration, cooperation, and leadership skills, (6) Understanding the risks and safety factors that may affect participation in physical activity and demonstrating knowledge of safety and emergency response procedures. Activities may include but are not limited to: resistance training, plyometrics, interval training, circuit training, Zumba, yoga, basketball, soccer, flag football, speedball, softball, ultimate frisbee, rugby, lacrosse tennis, badminton, speedminton, volleyball, golf, and disc golf. These concepts and associated skills are aligned with the Colorado Academic Standards for Physical Education, incorporating 21st century skills and postsecondary and workforce readiness competencies.

PE160: FITNESS I: 9 - 12

(PE Credit)

18 weeks/1 semester/0.5 credit

This class is designed to give students the opportunity to improve personal fitness and participate in team and dual sports. Students will learn the basic principles and skills for the following possible activities: softball, soccer, basketball, volleyball, flag football, ultimate Frisbee, disc golf, badminton, speedminton, fitness/conditioning and weight training. Emphasis will be placed on participation.

PE161 FITNESS II: 9 - 12

(PE Credit)

18 weeks/1 semester/0.5 credit

Fee: \$10

This course is designed for the intermediate-advanced Physical Education student. The course will be split with intense agility, speed, power activities, and classroom work. Students will learn in and out of season nutrition, basic anatomy, athletic taping, and CPR.

PE 150: GIRLS FITNESS 1 9-12

(PE Credit)

18 weeks/1 semester/0.5 credit

Females Only

This course is designed for an intermediate-level student interested in aerobic fitness activities. Topics may include, but are not limited to: personal goal setting and reflection, nutrition, myths and misconceptions, body image, muscle groups. Activities may include, but are not limited to: Tae Bo, step aerobics, kick-boxing, Pilates, circuit training, weight training, jump rope, plyometric, and games which require cardiovascular fitness/strength.

PE 114F-PE114S: NET AND TARGET 9-12

(PE Credit)

18 weeks/1 semester/0.5 credit

Instructional time should focus on six critical areas: (1) Participating at a competent level in a variety of lifelong physical activities and understanding the cognitive impact of movement, (2) Applying rules, principles, problem-solving skills and concepts to traditional and nontraditional movement settings, (3) Establishing goals based on fitness assessment data as well as developing, implementing, achieving, and monitoring individual health and fitness plans, (4) Participating regularly in health-enhancing physical activities, (5) Demonstrating responsible behavior and respect for others as well as collaboration, cooperation, and leadership skills, (6) Understanding the risks and safety factors that may affect participation in physical activity. Activities may include but are not limited to: tennis, badminton, speedminton, volleyball, golf, and disc golf. These concepts and associated skills are aligned with the Colorado Academic Standards for Physical Education, incorporating 21st century skills and postsecondary and workforce readiness competencies.

PE113F-PE113S: INVASION & FIELD F/S 9 - 12

(PE Credit)

18 weeks/1 semester/0.5 credit

In High School instructional time should focus on four critical areas: (1) *Participating at a competent level in a variety of lifelong physical activities and understanding the cognitive impact of movement*, (2) *Participating regularly in health-enhancing physical activities*, (3) *Demonstrating responsible behavior and respect for others as well as collaboration, cooperation, and leadership skills*, (4) *Understanding the risks and safety factors that may affect participation in physical activity and demonstrating knowledge of safety and emergency response procedures*. Activities may include but are not limited to: basketball, soccer, flag football, speedball, softball, ultimate Frisbee, rugby, and lacrosse. These concepts and associated skills are aligned with the Colorado Academic Standards for Physical Education, incorporating 21st century skills and postsecondary and workforce readiness competencies.

PE141: GAME ON 9 - 12

(PE Credit)

18 weeks/1 semester/0.5 credit

Instructional time should focus on four critical areas: (1) Participating at a competent level in a variety of lifelong physical activities and understanding the cognitive impact of movement, (2) Applying rules, principles, problem-solving skills and concepts to traditional and nontraditional movement settings, (3) Demonstrating responsible behavior and respect for others as well as collaboration, cooperation, and leadership skills, (4) Understanding the risks and safety factors that may affect participation in physical activity. Activities may include but are not limited to: tennis, badminton, speedminton, volleyball, golf, disc golf, basketball, soccer, flag football, speedball, softball, ultimate Frisbee, rugby, and lacrosse. These concepts and associated skills are aligned with the Colorado Academic Standards for Physical Education, incorporating 21st century skills and postsecondary and workforce readiness competencies:

PE108F/PE108S: IRON WORKS I F/S 9 - 12

(PE Credit)

18 weeks/1 semester/0.5 credit

Fee: \$5.00

This is an introductory-level course designed to familiarize students with weight room procedures, safety precautions, and various lifting techniques. This course may include, but are not limited to: strength training/muscular endurance through the use of free- and machine-weights, plyometric, speed training, agility development and fitness activities.

PE109F-PE109S: IRON WORKS II F/S 9 - 12

(PE Credit)

18 weeks/1 semester/0.5 credit

Prerequisite: Ironworks I or Instructor Approval.

Fee: \$5.00

This is an intermediate-level course designed to familiarize students with more advanced weight lifting techniques. It will include emphasis on weightlifting, flexibility, running technique, agility, and speed training. This level course is strenuous; therefore, students must have a strong desire to increase overall body fitness and composition.

PE 132F-PE132S: DANCE 1 F/S 9 - 12

(PE Credit)

18 weeks/1 semester/0.5 credit

Fee: \$10

The focus is on experiencing physical fitness through a wide range of fundamental dance skills including, but not limited to Hip-Hop, Funk, Jazz-Aerobic, Kickboxing, Salsa and other various styles of dance and fitness. Using these techniques, the student will improve their strength, cardiovascular endurance and flexibility enhancing their over-all knowledge of body awareness and health. Advanced classes, level II, will learn dance and fitness fundamentals /advanced technique, Choreography & Performance, Dance Kinesiology, Dance & Fitness History & Vocabulary, Lyrical, Ballet, Latin, dance and fitness fundamentals / advanced technique, Choreography & Performance, Dance Kinesiology, Dance & Fitness History & Vocabulary.

ADDITIONAL ELECTIVES

(Teachers aides are not determined until the beginning of each semester. When registering for an Assistant position in Infinite Campus please list as an alternate.)

MS123: ASSISTANT MEDIA 10 - 12

(General elective credit only)

Permission of Librarian Required

Students will learn to assist teachers and fellow students in locating information and specific items in the library collection. Enrollees will assist with circulation of resources and with maintaining organization within the collection. They may also learn some media production and equipment operation skills.

MS122: ASSISTANT COUNSELING 10 - 12

(General elective credit only)

Permission of Counseling Office Staff Required

Students will assist the counseling office with daily tasks.

MS162A-MS162B: STUDENT COUNCIL A/B 9 - 12

(General elective credit only)

18 weeks/1 semester/0.5 credit

Prerequisite: Student Council Officer or Teacher Recommendation
Student Council is a class designed to train student leaders and to provide time to plan and carry out student activities. Topics covered in the class include: Goal Setting, Time Management, Publicity, Evaluation, Communication, and Leadership Styles. Students also get practical experience in planning a wide variety of activities. Students will also be required to complete 10 hours per semester of community service. Evaluation is based on participation, committee work, project completion, assignments, and community service.

MS205: STUDENT POLICE ACADEMY 10 - 12

(General elective credit only)

18 weeks/1 semester/0.5 credit

This course has been designed to better acquaint students with the operation of the Frederick Police Department and other facets of modern law enforcement. Representatives from the police department and other professionals within the criminal justice present topics similar to those covered in the Colorado Law Enforcement Training Academy. These include patrol and investigations, search and seizure, vice and narcotics, gangs, emergency driving, K-9, S.W.A.T., and the F.B.I. The students will have a better understanding of the law enforcement role in the criminal justice system and law enforcement as a career field.

LA429A-LA429B: YEARBOOK A/B 10-12

(General elective credit only)

36 weeks/2 semesters/1.0 credit

Prerequisite-Teacher Permission

The primary goal of Yearbook is production of the school yearbook. The staff is made up of students who work hard, who have good attendance and who are highly motivated to plan, produce and finance the yearbook. Evaluation is based on the ability of the staff to produce quality work on a deadline. To be considered for yearbook, students must get two recommendations from teachers extolling the students' work ethic and attendance. Students will also participate in fund raising activities and book sales to pay for the production of the yearbook.



The Innovation Center offers advanced STEM coursework, often leading to industry certifications, to high school students throughout St. Vrain Valley Schools. Students take classes in Robotics, Information Technology, Video Production, Unmanned Aerial Systems, Entrepreneurship and other programs. The IC also provides students with links to business and employment opportunities surrounding these fields. **In Fall 2018 the IC will host its programs inside its brand new, cutting edge, 50,000 square foot facility on Quail Road in Longmont.**

Topics: [Apple Certifications](#), [IT Fundamentals](#), [Robotics](#), [AR/VR](#), [Entrepreneurial](#), [Cyber Security](#), [Video Production](#), [Drone Flight Training](#), [Drone Design & Building](#), [Self-Directed STEM Projects](#)



exterior view - main entry facing northwest
St Vrain Valley School District Innovation Center

Apple Certified Mac & iOS Technician: CTE83110 - One Semester Elective - 0.5 Credit - Open to all 11-12th graders (and exceptional 9th & 10th graders with prior Apple product knowledge) - Fall & Spring (Students who pass the class will pay for their own certification test - \$60)

Instruction - Thom Ingram - ingram_thom@svvsd.org

ACMiT is designed for students who have experience with computers, MacOS and iOS. It offers the chance to gain knowledge and skills specific to Apple hardware and software. Those who succeed in this class will be ready to take the Service Fundamentals, ACMT & ACiT certification tests. Students passing these official Apple certifications will be eligible to work on the Innovation Center Tech Team. Graduating certified students will work with Apple representatives to find placement in tech jobs at Apple and on college campuses.

CompTIA: IT Fundamentals: CTE83120 - One Semester Elective - 0.5 Credit - Open to all 9-12th graders, Fall & Spring

(Students who pass the class will pay for their own certification test - \$90)

Instruction - Thom Ingram - ingram_thom@svvdsd.org

IT Fundamentals introduces students to the Information Technology field; including computer hardware & software support, customer service, networking, security, and computer design. Student learn within operating systems such as Windows, Linux, Apple and Android. Students who succeed in this class will be ready to take the CompTIA IT Fundamentals certification.

Creative Engineering 1a: Robotics: CTE83100A - One Semester Elective - 0.5 Credit - Open to all 9-12th graders (Course Fee: \$20) - Fall 2018

Instructor - Axel Reitzig - reitzig_axel@svvdsd.org

Learn what it takes to be a technology entrepreneur by working with a team to design, build, test and market an original robot for the 2018 BEST Robotics Competition. This class is not only for techies; it's also for those of you interested in business, marketing and entrepreneurship. Participating on this team will require some meetings during Summer 2018 as well as weekend meetings (about 4-6 hours a weekend) during the season (early September to mid-October). The Innovation Center Robotics team has won awards every year the past three years. Come and join us for another successful season.

Questions? Email Mr. Reitzig at reitzig_axel@svvdsd.org

Creative Engineering 1b: Robotics: CTE83100B - One Semester Elective - 0.5 Credit - Open to all 9-12th graders (Course Fee: \$20) - Spring 2019

Instructor - Axel Reitzig - reitzig_axel@svvdsd.org

No Prerequisite - Section A is not required to sign up for Section B

Embodied cognition is the joining of artificial intelligence with robotics. This class will explore this new and growing field by using IBM's Watson with NAO humanoid robots, Raspberry Pi and other hardware. We'll work with experts in the field to develop real-world applications for these technologies. Some experience with programming and/or robotics is helpful, but not required.

Questions? Email Mr. Reitzig at reitzig_axel@svvdsd.org

Developing Augmented & Virtual Environments: CTE 81100 - One Semester Elective - 0.5 Credit - Course Fee \$20 - Fall & Spring

Open to all 9-12 graders

Instruction - Thom Ingram - ingram_thom@svvdsd.org

This course allows students to develop for augmented and virtual reality. The curriculum is designed by Google and HTC, and uses both Unity and Unreal software to design these environments.

The mixed reality field is currently touted as the next computing platform by companies including Sony, Microsoft, Facebook, Google and HTC, as well as several startups located both here in Boulder County, across the country, and the world. Being able to develop VR and AR environments gives each student a cutting edge knowledge-base in an industry that is in need of talented staff. The average starting salary for a developer in this field is \$75,000 a year. Learning in this field allows students to build technical literacy and express creativity in an immersive engaging computer aided design field.

Ice House Entrepreneurial Program: CTE80100 - One Semester Elective - 0.5 Credit - Open to all 11-12th graders

Instructor - Jeffrey Lund - lund_jeffrey@svvdsd.org

Concurrent enrollment with FRCC as **BUS102 Entrepreneurial Operations**

The Ice House Entrepreneurial Student Success Program inspires and engages students with the perseverance and determination of an entrepreneurial mindset needed to succeed academically, in business and in life. This program expands upon "Who Owns the Ice House?" and 'Eight Life Lessons from an Unlikely Entrepreneur' by encompassing student success concepts in the context of an entrepreneurial mindset. The program provides for experiential learning beyond the classroom, making connections, understanding business concepts, and building relationships that can support students throughout college and beyond.

Intro to Cyber Security: CTE80120 - One Semester Elective - 0.5 Credit - Open to all 11-12th graders
(Students who succeed in the class will pay for their own certification test - \$130) - **THIS COURSE WILL ALSO BE TAUGHT AT SILVER CREEK HIGH SCHOOL**

This course, designed by a student at Silver Creek High School, teaches basic security needs for personal and small businesses technology. Intro to Cyber Security is designed to teach students to evaluate and understanding security needs, including: cyber threats, network security, intrusion detection, cryptography, artificial intelligence, and recovery. It incorporates a mix of simulations and other online learning tools. Students will walk away from this course with an understanding on how to defend online databases and keep information secure. Students who do well in this class will be given the opportunity to become Microsoft Security Fundamentals certified.

TriCaster Certification Program: CTE 82100 - One Semester Elective - 0.5 Credit - Open to all 11-12th graders - Fall & Spring
(Students who pass the class will pay for their own certification test - \$150)
Instructor - Jeffrey Lund - lund_jeffrey@svvdsd.org

Becoming a NewTek TriCaster Certified Operator is one skill that can help students work within the studio and television world. The course focuses on benefits of certification to include: get hired for better jobs, proving knowledge and skill base, differentiate students in the job field, generate customer interest in future business and services, be recognized by industry professionals, able to work on university campuses that utilize film and TV services, and become qualified to teach TriCaster and 3Play Skills to others. Students will engage in operating a TriCaster system within a studio environment.

UAS Flight Concepts and Training: CTE83150 - One Semester Elective - 0.5 Credits
Open to all 9-12 Graders - Fall 2018
Instructor - Jake Marshall - marshall_jacob@svvdsd.org

AVT 155 - Introduces and develops flight control and piloting techniques for common UAS platforms. Students will learn and demonstrate maneuvers, procedures, and best practices for safe UAS operation on fixed wing and rotary wing unmanned aircraft systems. Develops the skills and knowledge required to be a pilot of a UAS in the National Airspace System. Students who are new to aviation will develop functional knowledge in the areas of pilot-in-command responsibilities, aerodynamic principles, aviation meteorology, and the flight environment.

UAV Engineering and Design: CTE83155 - One Semester Elective - 0.5 Credits
Open to 10-12 Graders ideally finishing UAS Flight Concepts and Flight Training - Spring of 2019
Instructor - Jake Marshall - marshall_jacob@svvdsd.org

Utilizing the Design Cycle and fabrication laboratory equipment, students will have the opportunity to engineer and design UAV recreational and commercial fixed wing and multirotor aircraft.

STEM Co-Op: CTE130 - One Semester Elective - 0.5 Credit - Interested students will coordinate with specific IC instructors to complete a project proposal prior to being accepted into the course.

This course is an opportunity for students to create a self-directed project based on previous STEM experiences. Interested students will coordinate with the specific IC instructor in their chosen focus area to complete a project proposal and decide on what block within the day to schedule their co-op. Students will complete 50 contact hours of work during the semester. It is assumed that a student approved for Co-Op has sufficient maturity and motivation to individually pursue and complete a self-initiated study with minimal supervision.

The Career Development Center

1200 S. Sunset, Longmont

303-772-3333

cdc.svvsd.org

Career and Technical Education (CTE) classes like those offered at CDC, set students on a *career pathway* that provide real-world, hands-on experiences in areas of a career or occupational area. Pathways provide students with opportunity to acquire knowledge and skills linked with specific post-secondary programs, eventually culminating in a job after high school, a program certificate and/or a two-year or four-year degree. Thank you for considering the Career Development Center. Here are some things you will want to know about our programs.

- Registration
 - This year all students will register online through RevTrak with the registration window closing January 28th, 2018. You may request enrollment in any class at CDC (making sure you meet all prerequisites) and you will be notified the beginning of February if you are accepted. Attendance, grades, credit completion, ICAP, will all be considered when making a decision, helping to ensure that students are placed in classes they will be successful in.
- Schedules
 - All classes meet every other day for two blocks (some meet everyday)
 - A 1&2; 7:50-10:20 AM or A 3&4; 11:20-2:05 PM
 - B 5&6; 7:50-10:20 AM or B 7&8; 11:20-2:05 PM
- Transportation
 - SVVSD buses run from all home high schools to and from CDC daily. You will need to check on the bus schedule for your block. This is a free service for all students.
- Credit
 - All CDC courses are considered practical arts electives and count towards graduation requirements.
- Concurrent Enrollment (College Credit)
 - Some CDC courses also qualify for concurrent (college) credit through Front Range Community College (FRCC). Benefits of concurrent enrollment include:
 - No tuition cost, with the exception of books and/or supplies, as long as the college class is *passed with a C or better*
 - A jumpstart in a career
 - College Credit and/or certification
 - Concurrent classes include:
 - Maintenance and Light Repair—Automotive Technology
 - Medical Terminology—Health Sciences
 - Visual Communications and/or Digital Video Production—Multimedia
 - Welding I-Welding and Fabrication
 - All students enrolled in these classes will need to complete registration for **both** St. Vrain Schools and Front Range Community College:
 - St Vrain Valley Schools Concurrent Enrollment Program Agreement:
https://drive.google.com/a/svvsd.org/file/d/0B9uX8ZmVGqbTa0J5RDZSTkFIUHZFNkF4dWc1NldfRk9UZkVZ/view?usp=drive_web
 - Front Range Community College - <https://www.frontrange.edu>
 - Apply now
 - Sign up for College Opportunity Fund (COF) Stipend
 - Complete Paperwork
 - Register for classes through CDC
- Classes available to freshmen:
 - Agriscience
 - Introduction To Agriscience, Animal Science, Equine Science, Vet Science
 - Horticulture and Landscape
 - Greenhouse I, Irrigation Technology, Landscape Management
 - Health Sciences
 - Exploration of Healthcare, Medical Terminology
 - Other Programs
 - ProStart I and Engineering Technology I
- Please watch the CDC website for up-to-date information and for additional opportunities not listed in this printing:
cdc.svvsd.org
- Contact Becky Olson, CDC Counselor with any questions: 720-494-3964, or by email at olson_becky@svvsd.org



AGRISCIENCE

Program Requirements:

- Students should be at 9th grade level in reading, writing, math, and science to be successful in all Agriscience program courses.
- All students will develop personal, leadership, and career skills through FFA participation.
- All students will develop and maintain an individual Supervised Agriculture Experience Program and maintain online records through The AET.



Through agricultural education, students are provided opportunities for leadership development, personal growth, and career success. Agricultural education instruction is delivered through three major components: classroom/laboratory instruction (contextual learning), Supervised Agricultural Experience programs (work-based learning), student leadership organizations (National FFA Organization).

Introduction to Agriscience, CTE 9302

Introduction to Agriscience is designed to teach students with an interest in agriculture about the careers and opportunities in the industry and to give students a basic knowledge of all career pathways of agriculture: Animal, Plant, Natural Resources and Environmental Science, Agribusiness, Food Products, and Power, Structure, and Technology. Students will understand the concepts and principles of agriculture in society, form career and education goals, develop personal, leadership, and career skills.

Grades 9-12; 1 Semester (Fall); 1.0 Practical Arts Credit; PreRequisite: N/A

Advanced Agriscience, CTE 9311

Advanced Agriscience is designed to further expose students to all aspects of the agriculture industry. Students will have the opportunity to focus their interests and work independently in order to be best prepared for careers and postsecondary education. Students will analyze the concepts and principles of agriculture in society, revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience - CTE 9302 & instructor approval

**Industry certificates available*

Animal Science, CTE 9324

Animal Science is an advanced science-based course designed to introduce students to the production and management of agriculturally important animals. Students will understand industry and scientific terminology, analyze and identify external anatomy and internal body systems and physiology, including: nutritional needs, reproduction methods and processes, genetic influence, health, disease, and facility management. Students will use species-specific evaluation and selection methods. Students will analyze the concepts and principles of agriculture in society, revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 9-12; 1 Semester (Fall/Spring); 1.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience CTE 9302

Equine Science, CTE 9325

Equine Science is an advanced science-based course designed to introduce students to the production and management of horses. Students will understand industry and scientific terminology, analyze and identify external anatomy and internal body systems and physiology, including: nutritional needs, reproduction methods and processes, genetic influence, health, disease, and facility management. Students will use species-specific evaluation and selection methods. Students will revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 9-12; 1 Semester (Spring); 1.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience CTE 9302

Veterinary Science, CTE 9328

Veterinary Science is designed to expose students to all aspects of the veterinary field. The course will cover: Animals in Society and in Research, Veterinary Laws and Ethics, Business Management, Common Veterinary Medical Terminology and Equipment, Mathematical Applications in Veterinary Science, External and Internal Anatomy in Dogs, Cats and Livestock, Animal Behavior, and Veterinary Medical Practices in Animal Handling and Identification, Clinical Exams and Vital Signs, Blood Samples, Sutures, and Injections, Laboratory, Hospital and Surgical Procedures, and Pharmacology. Students will revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 9-12; 1 Semester (Spring); 1.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience - CTE 9302.

Animal Science, Equine Science, Biology, and/or Anatomy & Physiology passed with a C or better - Highly

Recommended.

**Industry Certificate Available*

Agribusiness, CTE 9315

Agribusiness is designed to expose students to the vast opportunities available within business related careers. It will be taught as an independent study in order to fit any student's schedule; students are still required to attend during their scheduled blocks each day that school is held at CDC. Content areas include: Introduction to Business, Starting and Operating a Business, Financing, Sales and Marketing, Commodity Trading, Economics, and Agricultural Law. Students will revise career and educational goals, and evaluate their plan for achievement, enhance personal, leadership, and career skills and continue progress in individual Supervised Agriculture Experience Programs, maintain records through the online record keeping system, and evaluate program progress based on records.

Grades 10-12, 1 Semester (Fall/Spring); 1.0 Practical Arts Credit; PreRequisite: Introduction to Agriscience - CTE 9302 & instructor approval

AUTOMOTIVE TECHNOLOGY



****Automotive Maintenance and Light Repair, CTE**

9803

Automotive Maintenance and Light Repair (MLR) explores automotive industry standards and terminology, career opportunities and classifications, shop operations and safety, tool identification and usage, diagnostic equipment identification and usage, automotive systems, tires and wheels, hydraulic braking systems, cooling systems, lubrication systems, and preventative maintenance. Also included is basic operation of automotive braking systems--operation, diagnosis and basic repair of disc, drum, and basic hydraulic braking systems. The basics of electrical systems, electronic systems, batteries, starting systems, charging systems, lighting systems, electrical instruments and accessories, and ignition systems will also be studied. This course focuses on lecture and related experiences in the diagnosis and service of suspensions and steering systems and their components.

This is a prerequisite for all advanced classes.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

FRCC 1st Sem: ASE 101 - Auto Shop Orientation & ASE 110 - Brake Systems

2nd Sem: ASE 120 - Basic Automotive Electricity & ASE 123 - Battery, Starting and Charging Systems

**Industry Certificate(s) Available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all students.*

Brake Systems, CTE 9802

This course examines operation, diagnosis, service and repair of drum, disc, basic hydraulic, anti-lock, power assist units and machine operations of today's automobile brake systems. This class also teaches skills to perform service checks and procedures to automotive foundation braking systems and identify components and types of Anti Lock Braking Systems "ABS" as well as traction control systems.

Grades 10-12; 1 Semester (Fall/Spring);

1.0 Practical Arts Credit; PreRequisite: Automotive Maintenance and Light Repair - CTE 9803

**Industry certificate available*

Suspension and Alignment, CTE 9815

This course examines: design, diagnosis, inspection, and service suspension and steering systems used on light trucks and automobiles. Course includes power steering, Supplemental Restraint System "SRS" (or airbags) and all alignment procedures on industry standard equipment.

Grades 10-12; 1 Semester (Fall); 1.0 Practical Arts Credit; PreRequisite: Automotive Maintenance and Light Repair - CTE 9803

**Industry certificate available*

Engine Performance, CTE 9821

Areas of instruction include intake and exhaust systems, ignition system diagnosis and service, fuel system diagnosis and service, carburetor diagnosis and service, fuel injection diagnosis and service, emission control diagnosis and service, and on-board diagnostic system and service. ***This class meets every day in the afternoon.*** **Grades 11-12; 1 Semester (Spring); 2.0**

Practical Arts Credits; PreRequisite: Automotive Maintenance and Light Repair - CTE 9803

**Industry certificate available*

Engine Repair, CTE 9825

Instruction combines lecture and laboratory experiences in the removal and installation of the automotive engine, transmission, transfer case, and clutch assembly from and into front and rear wheel drive vehicles.

Grades 11-12; 1 Semester (Fall/Spring); 1.0 Practical Arts Credit; PreRequisite: Automotive Maintenance and Light Repair - CTE 9803

**Industry certificate available*

ENGINEERING TECHNOLOGY AND MANUFACTURING



Engineering Technology I and II, CTE 9721 or CTE 9731

Each is a 2 semester course that introduces students to CAD/CAM (computer-aided design and computer-aided manufacturing) software and the use of mills, lathes, and lasers used by machinists and engineers. Students work on a variety of projects and assignments designed to introduce them to 3D mechanical CAD and have the opportunity to create projects on CNC (Computer Numeric Control) and manual shop machines. The courses provide instruction in: Solidworks, Mastercam, Mastercam Mill/CNC, MasterCam Lathe/CNC, Manual Mill, Manual Lathe, Mastercam Mill, Mastercam Lathe, Machining Math, and Technical Writing. Students will also participate in a variety of job skills activities such as resume and cover letter writing as well as interview development.

Grades 9-12; 2 Semesters (Year); 2.0 Practical Arts Credits; Engineering Technology I - CTE 9721 is a PreRequisite for Engineering Technology II - CTE 9731.

**Industry certificate available*

Engineering Technology ISA, CTE 9735 (Independent Study)

This class is for the student who has learned how to take responsibility for his/her own technology career pathway, and is interested in an in-depth, further specialized exploration of machining and manufacturing. Each student will work on his/her own projects with the guidance of the instructor. Self motivation is a must.

Grades 11-12; 2 Semesters (Year); 2.0 Practical Arts Credits; PreRequisite: Engineering Technology II - CTE 9731 and instructor approval

HAIRSTYLING

Hairstyling 2, CTE 9603

This two year program includes haircutting, hairstyling, hair-color treatment, conditioning and scalp treatment, permanent waving and straightening, and dressing wigs. All students enrolled in the program must successfully complete a minimum of 1200 hours of training to take the State Board examination to be a licensed hairstylist. Classes meet every day, morning or afternoon.

Grades 10-12; 2 Semesters (Year); 4.0 Elective Credits; PreRequisite: Hairstyling I - CTE 9602



HEALTH SCIENCES

****New to CDC Health Sciences Pathways starting 2018-19 school year, Exploration of Health Care, CTE 9515 and Medical Terminology, CTE 9516 will be prerequisites to all upper level courses. Class of 2022 will begin this process.****



Students will participate in HOSA (Health Occupation Students of America)

Exploration of Healthcare, CTE 9515

This is the first course in the Health Science Pathway and is based on the National Consortium Of Health Science Education. This course looks at the history of health care, legal issues surrounding health care, characteristics of a healthcare worker, various health care careers and a brief overview of the anatomy of the human body. This course consists of lecture, demonstrations and hands on learning and optional job shadowing.

Grades: 9-12; 1 semester (Fall/Spring); 1.0 Practical Arts Credit; Prerequisite: N/A

****Medical Terminology, CTE 9516**

Medical Terminology is the second course in the Health Science Pathway. This course will explore the language of healthcare and health science. Students will learn the root, prefixes and suffixes of the health sciences language. Health care and health sciences have a language that is not common to those outside the medical field. This course will allow the student to have strong language skills prior to entering advanced courses. This course consists of lecture, demonstrations and hands on learning activities.

Grades 9-12; 1 semester (Fall or Spring); 1.0 Practical Arts Credit; Prerequisite: Exploration of Health Care - CTE 9515

FRCC: Medical Record Terminology, HPR 208

**Industry certificate available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all students.*

Anatomy and Physiology for Health Care, CTE 9517

This course is for students interested in pursuing a career in health care. The course will explore the anatomy and physiology of the human body, as well as more common diseases in each body system that students will encounter as a healthcare worker. Students will learn Heartsaver CPR, First Aid and Universal Precautions with Personal Protective Equipment. This course includes lecture, hands on learning, demonstrations, dissections, cadaver lab and other activities.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisites: Exploration of Healthcare - CTE 9515 and Medical Terminology - CTE 9516

**Industry certificate available*

Introduction to Sports Medicine, CTE 9522

Introduction to Sports Medicine is a one semester class that introduces students to athletic training procedures as they relate to the athlete, physical educator, coach, and athletic trainer. The course includes a history of the athletic training profession, ethics, proper documentation of injuries, taping, and the principles of athletic training. Topics covered in this class include an overview of all aspects of athletic training, prevention and treatment of common to acute and overuse injuries, and general anatomy review.

Grades 11-12; 1 semester (Fall); 1.0 Practical Arts Credit; Prerequisites: Exploration of Healthcare - CTE 9515 and Medical Terminology - CTE 9516

Exercise and Health Science, CTE 9555

The Exercise and Health Science course is for the individual who enjoys physical activity and is interested in learning the science and psychology involved in adopting an active and healthy lifestyle and working in the industry. Students acquire skills in strength training, cardiovascular training, fitness assessment, writing programs, motivation, and communication techniques. Students study human anatomy and physiology, energy production, exercise modalities, first aid and CPR skills, and medical terminology. Students use this knowledge and apply these skills during job shadowing in fitness, sports and research facilities, working with other students, and in the classroom. On completion of course, students will be able to sit for the ACE certification exam.

Grade 12 (Student must be 18 years old by May of Senior Year); 1 semester (Spring), 1.0 Practical Arts Credit; Prerequisites: Exploration of Healthcare - CTE 9515, Medical Terminology - CTE 9516, and Introduction to Sports Medicine - CTE 9522

**Industry certificate available.*

Dental Assisting I, CTE 9501

This class gives the student a basic understanding of the history of dentistry, dental team members' jobs, careers, infection control, the anatomy of the head, anatomy of the oral cavity, histology of the teeth structures, gum structures, oral hygiene, polishing, tooth decay, tooth names, numbers and positioning, impressions, whitening trays, communication skills, ethics, and laws.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; Prerequisite: Exploration of Healthcare CTE 9515 and Medical Terminology - CTE 9516

Dental Assisting II, CTE 9511

Dental Assisting II is designed to instruct students in the treatment rooms and laboratory on all aspects of the dental assistant's duties on the job including: instrument names and passing of them, mixing and passing materials, suctioning, charting, and digital imaging. The course fulfills the radiology and infection control requirements of the Colorado State Dental Practice Act for certification.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: Dental 1 - CTE 9501

**Industry certificate available.*

Emergency Response, CTE 9521

Emergency Response is a one semester course based on the National Transportation Safety Board recommendations and is geared for the student who wants in-depth knowledge and information in pre-hospital emergency care. These individuals, often called "first responders," include but are not limited to firefighters, law enforcement personnel, lifeguards, ski patrollers, emergency response teams, and athletic trainers. The course features lecture, discussion, decision-making activities, skill practice, and video demonstration. This class is being replaced by

Grades 11-12; 1.0 Semester (Fall or Spring); 1.0 Practical Arts Credit; PreRequisites: Exploration of Healthcare - CTE 9515 and Medical Terminology - CTE 9516

**Industry certificate available*

Emergency Medical Technician (Pending District Approval)

Emergency Medical Technician course prepares the EMT student to provide pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. This is a 2 semester course that will provide basic coursework to prepare the student for the work environment as well as for the National Registry Certification. *(Student must be 18 years old by May of Senior Year)*

Grade 12 ; 2 Semesters; 2.0 Practical Arts credits; Prerequisites: Exploration of Healthcare - CTE 9515 and Medical Terminology - CTE 9516

**Industry certificate available*

Nursing Assistant, CTE 9531

Nursing Assistant is for the 12th grade student interested in caring for others. Upon successful completion, students are prepared to take the written and skills exams for Colorado State Board of Nursing; Nurse Aide certification at a cost of \$123.00. This course includes basic theory and skills needed for working as a nursing assistant in a long-term care facility, home health care agency, or a hospital. Students will be trained in American Heart Association Basic Life Support (BLS) for the Healthcare Provider CPR. Time outside of class will be required for clinical experience. Students will be required to have up to date immunizations including the vaccine for Influenza, show proof of a negative Tuberculosis (TB) test and pass a required background check at the cost of approximately \$35.00, to participate. *Due to the mature nature of this course, only 12th grade students will be enrolled and must complete an interview with the instructor before being accepted into the program.*

Grade: 12; 1.0 Semester (Fall or Spring); 1.0 Practical Arts Credit; PreRequisite: Anatomy and Physiology (Either at CDC or home high school)

**Industry certificate available*

PLANT AND ENVIRONMENTAL TECHNOLOGY



Irrigation Technology, CTE 9357 **NEW**

The goal of this course is to introduce students to irrigation systems, the basic math and physics necessary to understand system hydraulics and design capacity, as well as best management practices. Students will become acquainted with the latest technology in irrigation systems and plant-soil-water concepts as well as design, install, and maintain uniform, efficient, and sustainable irrigation systems as they continue to build their knowledge of landscape irrigation management. Additional topics include electric and hydraulic troubleshooting, repair, efficiency, and water conservation practices. The course will be a combination of lecture, discussion, and hands-on activities.

Grades 9-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

**Industry certificate available*

Landscape Design and Maintenance, CTE 9359 **NEW**

Uses a discussion of landscape maintenance practices and best management practices as a launching point for the student to develop a site management plan and understanding of landscape maintenance contracting. Topics include weed identification, tree and shrub pruning, flower bed maintenance, turf care, client care and crew management practices.

Grades 9-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

Greenhouse I and II, CTE 9351 and CTE 9353

Introduces students to the biology of horticultural plants and basic horticultural practices while caring for the program's on-site greenhouse. Also emphasized are greenhouse design, systems, management, and the major greenhouse crops and their cultural needs. Students are responsible for planting, watering, and cultivating a variety of flowers, bedding plants and vegetables.

Grades 9-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

INTERACTIVE MEDIA TECHNOLOGY



****Visual Communications/Photoshop, CTE 9025**

Introduction to Visual Communications is a combination of two college courses where students survey visual communications, its history and its impact on society. Students will demonstrate an understanding of the graphic design and illustration fields today, as well as the tools and media used. The Photoshop portion of the class concentrates on the high-end capabilities of Adobe Photoshop as an illustration, design and photo retouching tool. Students explore a wide range of selection and manipulation techniques that can be applied to photos, graphics and videos. Course competencies and outline follow those set out by Adobe as part of their Adobe Certified Associate exams. At the end of this course, students have the opportunity to take the Adobe Certified Associate exam in Visual Communication Using Adobe Photoshop.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

FRCC: MGD 117 - Intro. to Visual Communications, MGD 111 - Photoshop I

**Industry certificate available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all students.*

****Digital Video Production, CTE 9026**

Digital Video Production is a combination of two college courses and offers an introduction to the principles and techniques of video production, including camera operation, basic script writing, lighting, sound and basic digital editing. Detailed examination of the pre-production, production, and post-production processes, as well as aesthetics, will be included. In the second part of the class students continue to practice the three elements of filmmaking: pre-production, production, and post-production; but this time with an emphasis on post-production techniques including: media management, editing tools, titles, motion control, transitions, and special effects. Students will make a variety of films in this class and are encouraged to enter a local film festival. Both classes cover relevant tools and techniques as well as industry standards, delivery methods and output. At the end of this course, students are given the opportunity to take the Adobe Certified Associate exam in Video Communication Using Adobe Premiere Pro.

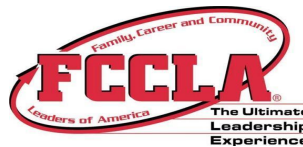
Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

FRCC: MGD 164 - Videography & MGD 165 Digital Video Editing

**Industry certificate available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all students.*

PROSTART AND CULINARY ARTS



Prostart I, CTE 9672

ProStart gives students a platform to discover new career opportunities by providing hands-on training and relevant industry experience. This nationally certified, competency based program covers all facets of the industry and includes instruction in food preparation, lodging, customer service, and business management. By completing ProStart Level I, students master fundamental management and culinary skills needed for success – like leadership, accountability, teamwork and responsibility – which they can take with them to positions in all industries.

Skill areas will include, but not limited to Workplace and Food Safety, Fruits & Veggies, Stocks, Sauces, & Soups, Professionalism, Communication, Interviewing & Resumes, Careers in the Industry, Customer Service, Cooking Methods, Leadership & Teamwork, and Potatoes & Grains. Students are also rotated through production and service stations while serving the community at the Sunset Cafe, our on-site restaurant. Students will also earn ServSafe Food Handler Certification.

Grades 9-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: N/A

Culinary Nutrition at the home high school is strongly suggested.

**Industry certificate available*

Prostart II, CTE 9673

ProStart gives students a platform to discover new career opportunities by providing hands-on training and relevant industry experience. This nationally certified, competency based program covers all facets of the industry and includes instruction in: food preparation, lodging, customer service, and business management. By completing ProStart Level II, students master fundamental management and culinary skills needed for success – like leadership, accountability, teamwork and responsibility – which they can take with them to positions in all industries. Skill areas will include, but not limited to Breakfast Food & Sandwiches, Nutrition, Cost Control, Salads & Garnishing, Purchasing & Inventory, Meat, Poultry, & Seafood, Marketing, Desserts & Baked Goods, Sustainability in the Industry, and Global Cuisine. Students also learn guest relations along with how to keep accurate financial records for the profit and loss of the operation. Students are rotated through production and service stations, while serving community.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credits; PreRequisite: ProStart I - CTE 9672 with a C or better

**Industry certificate available*

Baking and Pastry, CTE 9680

In addition to reviewing and continued practice of safety and sanitation procedures, students will be introduced to the topics of basic baking terminology and measurement, baking percentages and ratios, ingredients, quick bread/yeast/lamination dough, cakes, chocolates, pies and pastries, cookies, planning and organization of bakery production and dessert artistry.

Grades 10-12; 1 Semester (Fall/Spring); 1.0 Practical Arts Credits; PreRequisite: ProStart 1 - CTE 9672

WELDING AND FABRICATION TECHNOLOGY



Welding and Fabrication I, CTE 9901 Welding and Fabrication I provides the foundational understanding of welding and welding processes. In this course students will learn industry based safety standards and become familiar with the following welding processes:

Oxyacetylene welding and torch cutting, plasma cutting, ARC, and MIG welding. Students will become familiar with basic blueprint reading, weld symbols, welding-related math, and measurement. As their skill level is developed, small projects will be introduced throughout the year. Students will have the opportunity to engage in the SkillsUSA student organization, which incorporates leadership, service learning, and competitions to demonstrate skill level attainment.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credit; PreRequisite: N/A

FRCC WEL 100 - Safety for Welders, WEL 101 - Allied Cutting Processes, WEL 105 - Basic Shielded Metal ARC

**Industry certificate available*

***This is a Front Range College class taught at CDC with concurrent credit attached which requires a separate enrollment and registration process for all 1st year students.*

Welding and Fabrication II, CTE 9911

Welding and Fabrication II students will be exposed to more advanced welding process such as GMAW, FCAW, and GTAW, as well as an introduction to TIG welding. In addition, they will have the opportunity to refine what they learned from Level I to a higher standard. Students will identify welding symbols on drawings, read detail drawings, identify physical characteristics and mechanical properties of metal, explain pre and post heating of metals, identify equipment and filler metals utilized in GMAW, FCAW, and GTAW, as well as prepare welding test plates. Through the course of the year, students will have the opportunity to create more advanced welding projects for the community as well as private individuals. Students will have the opportunity to engage in the SkillsUSA student organization, which incorporates leadership, service learning, and competitions to demonstrate skill level attainment.

Grades 10-12; 2 Semesters; 2.0 Practical Arts Credit; PreRequisite: Welding I - CTE 9901

Welding and Fabrication III, CTE 9921

In this course the student will build upon their prior learning in Level II and can expect to engage in more advanced welding processes. These processes include advanced TIG welding including alloys such as aluminum and stainless steel, advanced blueprint reading, drawing and design, specifications, billing of materials, and Welding Procedure Specifications (WPS). Students will engage in advanced layout and fabrication processes to create projects for the community as well as private individuals. Students will have the opportunity to engage in the SkillsUSA student organization, which incorporates leadership, service learning, and competitions to demonstrate skill level.

Grades 11-12; 2 Semesters; 2.0 Practical Arts Credit; PreRequisite: Welding II - CTE 9911

INTERNSHIPS

CTE Internship, CTE 9999

After six weeks of successful participation in a CDC program, students are eligible to participate in industry specific internship in the career pathway of their choice. Internships are both paid and unpaid. Students may earn up to .5 elective credit for every 60 hours spent on the internship. Contact Karen Carr, CDC Internship Coordinator to schedule an appointment at (303) 772-3333 or by email at carr_karen@svvdsd.org

Grades 10-12; 1 semester (Fall/Spring); .5-1.0 Elective Credit; Prerequisite: N/A