

SOCIAL STUDIES

Refer to CMC for additional courses

World Geography

Prerequisites: None
Credits: 1
Full Year Requirement
Credit towards: Social Studies
Grade level: 9
Topics covered:

This course is designed to cover the many regions of the world. The students will learn the various aspects of each region. These include: physical geography, political structures, economies, social structures, history, and the interaction between people and the environment.

World History

Prerequisites: Complete Geography
Credits: 1
Full Year Elective
Credit towards: Elective
Grade level: 10
Topics covered:

This course is designed to cover World History from the dawn of man to the modern era. It covers numerous civilizations, their cultures, and the events that shaped history. The course covers western and eastern civilizations.

U.S. History

Prerequisites: Complete Geography or Instructor Approval
Credits: 1
Full Year Requirement
Credit towards: Social Studies
Grade level: 10, 11
Topics covered:

This course is designed to cover United States History from the period of discovery and exploration to the present. All major wars, political and economic developments, and social movements will be covered.

Psychology

Prerequisites: None
Credits: 0.5
Semester Elective
Credit towards: Elective
Grade level: 10,11,12
Topics covered:

Psychology is the study of mental processes and behavior. The course will cover such topics as sensation, perception, memory, thought, learning, human relations, personality, behavior disorders, and mental health. Types of therapy, techniques of mental measurement, and statistics will also be studied. Consideration will be given to theory and research relative to the topics.

American Government

Prerequisites: Complete US History or Instructor Approval
Credits: 1
Full Year Requirement
Credit towards: Social Studies
Grade level: 11,12
Topics covered:

Students will know what government is, why it exists, and how it is shaped by civic life and politics at the national, state and community levels. Students will understand the basic constitutional principles and democratic foundations of our political system.

Economics

Prerequisites: None
Credits: 0.5
Semester Requirement
Credit towards: Economics
Grade level: 12
Topics covered:

This course is structured to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics.

Colorado History

Prerequisites: Complete Geography
Credits: 0.5
Semester Elective
Credit towards: Elective
Grade level: 10,11,12
Topics covered:

This course surveys prehistoric peoples of Colorado, native peoples, the Spanish colonies, fur trade, mining, transportation, political development, the cattle industry, industrial and energy-related growth, resource allocation, and issues confronting Colorado's future. This course also involves independent research.

Current Issues

Prerequisites: None
Credits: 0.5
Semester Elective
Credit towards: Elective
Grade level: 10,11,12
Topics covered:

Study of events and happenings of our world today.

SOCIAL STUDIES

Refer to CMC for additional courses

Sociology

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:
Sociology is the scientific study of society and human behavior. This course will examine how societal influences affects people's lives, social behavior, social status, and belief systems. The course will give students an overall perspective on the structure and function of societies. This course will provide a study of Classic Sociological theories as well as Contemporary Sociological theories. * This course will be a requirement for future Criminal Justice class to be offered the following semester (spring 2009). Sociology and Criminal Justice will be a requirement for Criminology to be offered the Fall semester (Fall 2010). These courses will be Team taught by Teachers and Law Enforcement.

Sociology of Sport

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Elective
Grade level: 10,11,12
Topics covered:
This course is an introduction and application of the sociology of sport. The students will be taking a look at the relationship between sport and the social world. The course also will be taking a look at and analyzing the human relationships through athletics and athletic competition. Topic areas to be covered will include the following: History of sport, sport and the economy, sport and the mass media, females in sport, minorities in sport, sport and politics, sport in high school and college, coaching, the future of sport, violence in sport, fan behavior, current issues in sport, organized sport programs for children and life long athletics for a healthy living.

Archaeology

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Elective
Grade level: 10,11,12
Topics covered:
We will explore the ancient world through the eyes of an archaeologist. Discuss and analyze the methods used by archaeologists to determine where a site may be to explore. Along will conceptual ideas students will go to the Colorado National Monument to dig for points and other ancient artifacts.

Film Studies of American Culture

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:
Film Studies explores the use of cinema as an emerging form of art and as a reflection of society's values and culture. The entertainment value and influence over viewers is also a key point of discussion. Individual films and various genres will be viewed for instruction in the class with the purpose of students learning to analyze, critique, and create connections to society, culture, and history. Students will give written responses to each film and genre. They will also conduct a research project on films in topics relevant to the class.

World Religions

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:
World Religions is a course about the major religions of the world and the place of religion in human affairs. This course will identify the basic concepts of the major living religions and philosophies of Christianity, Judaism, Islam, Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Geographic influences, historical events, founders, sacred writings, practices, and ceremonies will be explored. Religious concepts and philosophical views will be discussed in an academic and nonjudgmental environment.

20th Century History

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:
This course will examine events throughout the 20th Century. Specifically, the course will pay close attention to the 50's & 60's to the present time. It is important for the students to have a firm grasp of contemporary history and be able to explain the problems facing them in the years to come.

SOCIAL STUDIES

Refer to CMC for additional courses

Integrated US Hist/American Literature

Prerequisites: World Geography and English 9, 10
Credits: 2
Semester
Credit towards: English
US History
Grade level: 11,12
Topics covered:

This course is designed to be taken in conjunction. United States History topics will be covered in an integrated curriculum and the teaching of history through literature. Major wars, political and economic developments, and social movements as well as critical reading and written analysis of these topics as they relate to literature will be covered with a heavy emphasis on the incorporation of project based learning and application. This is two courses that will work in direct correlation.

FINE ARTS

Art 1

Prerequisites: None

Credits: 1
Full year preferred
Elective

Credit towards: Fine Arts

Grade level: 9,10,11,12

Topics covered:

This class is for the beginning art student. It is **required** for all other art classes; graphic design; pottery and all other 2D and 3D art levels. The **Elements of Design** are introduced and are the basis for all projects, as required by the Colorado State Standards. An introduction to drawing, color theory and painting techniques, pottery and sculpture. Art History will be introduced so students learn about famous artists, art styles and vocabulary.

Art 2

Lab Fee \$15

Prerequisites: Art 1 or teacher permission

Credits: 1
Full year preferred
Elective

Credit towards: Fine Arts

Grade level: 10,11,12

Topics covered:

This class is for the serious art student. Subject matter, media and content will be agreed upon by student and instructor. The student will have a large degree of artistic freedom. Take this class if you are serious about art and want to work with other talented students in an environment designed to stimulate artistic expression.

Pottery/Sculpture 1 Lab Fee \$15

Prerequisites: None

Credits: 1
Full year preferred
Elective

Credit towards: Fine Arts

Grade level: 9,10,11,12

Topics covered:

This class is for students who want to learn basic skills and concepts in 3D design. The Elements of Design, materials, and processes and strengthening visual skills are the main focus for this course. Paper, cardboard, foam, clay and other media will be used so students will be asked to provide some of their own materials. Art History will be discussed. Students must learn vocabulary and understand the significance of cultural and

Pottery/Sculpture 2 Lab Fee \$15

Prerequisites: Pottery/Sculpture 1

Credits: 1
Full year preferred
Elective

Credit towards: Fine Arts

Grade level: 10,11,12

Topics covered:

This is an advanced 3D design class. Students must be able to work independently. Students must participate in all art history discussions. Vocabulary quizzes, art shows, and competitions will be required. Students must demonstrate progress in designing and creating works in a multitude of materials.

FINE ARTS

Art: Theory & Appreciation

Prerequisites: Art 1
Credits: 0.5
Semester
Elective

Credit towards: Fine Arts

Grade level: 11,12

Topics covered:

This is class for the serious student and for those want to know more about the Arts. An understanding of art can enhance your own artwork or your personal life. Students will build a Visual Journal, which will include illustrations, collage, and written discussion to support classroom activities. Various media will be used to generate interests and topics for exploration. Artworks past and present will be used to evaluate the contributions of the arts to civilization and contemporary life. Critical thinking skills and the ability to contribute to discussion are required.

Graphic Art Design

Lab Fee \$15

Prerequisites: Art 1
Credits: 0.5
Semester
Elective

Credit towards: Fine Arts

Grade level: 10,11,12

Topics covered:

Adobe Illustrator software. Students make brochures, business cards, advertisements, computer, digital artwork and digital photography. Improve your computer and graphic design, and art skills. Students will build a portfolio and resume to be shared with scholarship committees, community groups, and college admissions.

FAMILY AND CONSUMER SCIENCES

Crafts

Prerequisites: None
Credits: 0.5
Semester
Credit towards: Elective
Grade level: 9,10,11,12
Topics covered:
Students will learn about basic craft skills. Crafts may include sewing, knitting, crocheting, quilting, leatherwork, rug making, scrap booking, beading, and many more. Students will self-evaluate their work. Critical thinking skills, technical reading, and creativity are emphasized. Students will be responsible for providing their own projects.

Relationships

Prerequisites: None
Credits: 0.5
Semester
Credit towards: Elective
Grade level: 10,11,12
Topics covered:
Students will explore healthy, respectful, and caring relationships across the life span. Emphasis is placed on family and friend dynamics, effective communication, and healthy interpersonal relationships.

Consumer Economics

Prerequisites: None
Credits: 0.5
Semester
Requirement
Credit towards: Economics
Grade level: 11,12
Topics covered:
Every teenager lives for the day they move out on his or her own. This course teaches everything you ever wanted to know about surviving in the real world. Learn about finding and keeping a job, careers, decision-making, balancing a checkbook, budgeting, buying a new or used car, insurance, managing credit, and many more life skills.

Introduction to Early Childhood with Lab

CMC Dual Enrollement

Prerequisites: None
Credits: 0.5
Semester
Credit towards: Elective
Grade level: 11, 12
Topics covered:
Developmentally Appropriate Practices; Guidance; Family and Community Relationships; Diversity; Professionalism; Administration and Supervision. Focuses on ages birth through age eight. Students must have college-level reading to take this course.

Discovering Food and Nutrition

Prerequisites: None
Credits: 0.5
Semester
Credit towards: Elective
Grade level: 9,10,11,12
Topics covered:
This class emphasizes nutrition and basic food preparation and techniques. Students will learn about the adventure of food, food careers, wellness, nutrients, and preparation of basic food recipes.

International Lifestyle and Cuisine

Prerequisites: Discovering Food and Nutrition
Credits: 0.5
Semester
Credit towards: Elective
Grade level: 9,10,11,12
Topics covered:
Learn about traditions, protocol and entertaining customs of various cultures as well as authentic food preparation techniques, travel and career options. Students will study American cuisine along with Chinese, Japanese, Italian, French, Caribbean, Mexican and Soul Food.

Guidance Strategies

CMC Dual Enrollement

Prerequisites: None
Credits: 0.5
Semester
Credit towards: Elective
Grade level: 11, 12
Topics covered:
Explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues, and prosocial skills. Addresses ages birth through age 8.

ELECTIVES

Leadership Class

Prerequisites: Teacher Recommendation Only

Credits: 1
Full Year
Elective

Credit towards: Elective

Grade level: 9,10,11,12

Topics covered:

This course will emphasize teaching leadership skills through workshops, conferences, speakers, and hands-on projects. Through this course activities, community service projects, school-wide projects and events will be coordinated and implemented. The course is expected for class officers as well as other club and student leaders, serving as a forum to train and bring together students that want an active voice in the school community.

Intro to Journalism

Prerequisites: None

Credits: 0.5
Semester
Elective

Credit toward: Elective

Grade level: 9,10,11,12

Topics covered:

This course introduces the basic concepts of print journalism, desktop publishing, and photography. Students will be introduced to and use software programs such as Photoshop and In Design as well as have the opportunity to learn what producing a school publication is all about.

Beginning ELL (English Language Learners)

Prerequisites: Teacher Recommendation Only

Credits: 1
Full Year
Elective

Credit towards: Elective

Grade level: 9,10,11,12

Topics covered:

Basic English class for non-native English speakers. Based on basic communication skills, the class focuses on speaking, listening, reading, and writing the English language.

Study Skills

Prerequisites: Teacher Recommendation Only

Credits: 0.5
Semester
Elective

Credit toward: Elective

Grade level: 9,10,11,12

Topics covered:

Study skills will teach how to do the following: Study place, learning styles, setting goals, study groups, listening in class, taking notes in class, taking notes from textbooks, main idea, styles of reading, reading fiction, building vocabulary, spelling long words, forming acronyms, the DETER strategy for taking tests, taking multiple choice tests or true/false tests, taking essay tests, test anxiety, planning for college or careers after high school.

Study Skills for English Language Learners

Prerequisites: Teacher Recommendation Only

Credits: 1
Full Year
Elective

Credit towards: Elective

Grade level: 9,10,11,12

Topics covered:

An elective class for non-native English speakers who want to refine their study skills in order to succeed in mainstream GVHS classrooms.

Life Skills

Prerequisites: Teacher Recommendation Only

Credits: 0.5
Semester
Elective

Credit toward: Elective

Grade level: 10,11,12

Topics covered:

Life skills will teach students how to do the following: Critical thinking, confidence, accountability, conflict resolution, responsibility, respect brainstorming, using money, planning, health, behaviors in public, etc.

ELECTIVES

General Literacy

Prerequisites: Teacher Recommendation

Credits: 1
Semester
Elective

Credit towards: Elective
English

Grade level: 9,10, 11,12

Topics covered:

This course is designed to provide additional support for those students needing instruction in the area of literacy. Reading strategies, basic grammar and writing will be covered. This should be taken in conjunction with an English 9 or 10 course and will therefore assist in building basic literacy skills that students need to improve.

LANGUAGE ARTS

Refer to CMC for additional courses

English 9

Prerequisites: CSAP Scores or Transitional English
Credits: 1
Full Year
Requirement
Credit towards: English
Grade level: 9
Topics covered:
This course is designed as a survey of basic literature, writing, grammatical, and vocabulary skills.

Transitional English

Prerequisites: CSAP Scores or Instructor Recommendation
Credits: 1
Full Year
Elective
Credit towards: English
Grade level: 9,10
Topics covered:
Introduces different modes of writing and reading with an extensive review of mechanics. Class will fill holes in achievement and knowledge to facilitate success in all high school classes with an emphasis on Language Arts classes while still meeting Colorado freshman content standards. Writing remediation and correction based on CSAP scores will be an emphasis area.

Honors English 9

Prerequisites: Instructor Recommendation
Credits: 1
Full Year
English
Credit towards: English
Grade level: 9
Topics covered:
This course incorporates an advanced level curriculum covering the analysis of literature, extensive writing, as well as the examination of grammar, vocabulary, and research skills. Acceptance for the course is based on teacher recommendation.

Broadcasting and Debate

Prerequisites: English 10
Credits: 0.5
Semester
Elective
Credit towards: English
Grade level: 11,12
Topics covered:
This class would focus on an introduction to broadcasting and media, giving the students the opportunity to video peers in a variety of presentation formats. Looking into the difference between "debating" and "arguing", being able to defend a point of view in a formal manner. Research would also be a part of this class, as the students would have to be able to defend both sides of any given issue; therefore, they would need to research a topic extensively.

English 10

Prerequisites: English 9 or Hon Eng 9
Credits: 1
Full Year
Requirement
Credit towards: English
Grade level: 10
Topics covered:
Designed to be a continuation of freshman English with more concentrated instruction in the areas of grammar, writing, literature, and vocabulary.

Reading

Prerequisites: CSAP Scores or Instructor Recommendation
Credits: 1
Full Year
Elective
Credit towards: Elective
Grade level: 9,10
Topics covered:
The reading class is taught as a remedial class in which emphasis is placed on letter combinations, pronunciation or words, fluency, and comprehension. The program is a teacher directed program and has been established to help students improve in the area of reading. This, in turn, will help raise their scores on standardized testing. Students are placed in the class using current reading scores or through a teacher recommendation.

Honors English 10

Prerequisites: English 10
Credits: 1
Full Year
English
Credit towards: English
Grade level: 10
Topics covered:
This course incorporates an advanced level curriculum consisting of in-depth study of literature, composition, and research writing. The use of grammar and vocabulary will also be emphasized in the areas of writing.

British Literature

Prerequisites: English 10
Credits: 1
Full Year
Elective
Credit towards: English
Grade level: 11,12
Topics covered:
This course looks at classic works of world literature with a main focus on British Literature. Authors of study include Homer, Shakespeare, Chaucer, The Romantic Poets, The Victorians, and others. We do much reading and extended writing, and classroom participation is essential. This course carries a 2nd semester research paper.

LANGUAGE ARTS

Refer to CMC for additional courses

Creative Writing

Prerequisites: None
Credits: 0.5
Semester
Elective

Credit towards: English
Grade level: 11,12
Topics covered:

This course will develop writing skills in the areas of fiction, non-fiction, and poetry as well as other various genres of writing. It will encourage and provide students the opportunity to explore their own creativity in the art of writing.

Journalism

Prerequisites: Teacher Approval
Credits: 1
Full Year
Elective

Credit towards: English
Grade level: 10,11, 12
Topics covered:

This class focuses primarily on the publication of the school newspaper and yearbook with emphasis on journalistic writing, photography, publication laws and procedures as well as layout and design using programs such as Photoshop, page maker, and In Design.

Speech

Prerequisites: English 10 or English 9 & teacher recommendation
Credits: 0.5
Semester
Elective

Credit towards: English
Grade level: 11, 12
Topics covered:

This course looks at public speaking and communication skills. We research, prepare, and deliver speeches in front of an audience. We deliver informative, persuasive, and entertainment speeches, as well as oral interpretations of literature. Must participate in class and meet deadlines.

American Literature

Prerequisites: English 10
Credits: 1
Full Year
Elective

Credit towards: English
Grade level: 11,12
Topics covered:

In this course, we look at the history of American Literature. We start with Puritan writings and work our way through to modern times. Topics include Edgar Allan Poe, Mark Twain, Emily Dickinson, Frost, Whitman, Civil War, Steinbeck, the Harlem Renaissance, and much more. We do a lot of reading and writing, and classroom participation is essential.

Mythology

Prerequisites: English 10 or English 9 & Teacher recommendation
Credits: 0.5
Semester
Elective

Credit towards: English
Grade level: 11,12
Topics covered:

This course will explore the legend and culture of mythos. A thorough exploration of Greek and Roman myth will be studied along with general studies in other less common cultural myths and traditions. Making connections through allusion exploration is the main goal.

Women's Literature

Prerequisites: English 10
Credits: 0.5
Semester
Elective

Credit towards: English
Grade level: 11,12
Topics covered:

This course will focus on literature written by female authors including classic and contemporary texts. Genres will include short stories, narrative pieces, poetry, and novels with the emphasis being placed on author studies and themes of women's literature.

LANGUAGE ARTS

Refer to CMC for additional courses

English for Everyday Use

Prerequisites: English 10
Credits: 0.5
Semester
Elective
Credit towards: English
Grade level: 12
Topics covered:
This course is for the 12th grade English student that is interested in learning writing and reading skills that will be applicable to the work force immediately upon graduation. Topics will include resume, letter, and everyday writing assignments as well as general study of information reading including editorials, news, and magazine analysis.

Multicultural Literature

Prerequisites: English 10
Credits: 0.5
Semester
Elective
Credit towards: English
Grade level: 11,12
Topics covered: Defining multicultural
Non-Fiction
Annotating: connections, predictions, questions, summaries, inferencing, determining importance, etc.

ELL English (English Language Learners)

Prerequisites: Teacher Recommendation Only
Credits: 1
Full Year
English
Credit towards: English
Grade level: 9,10,11,12
Topics covered:
Designed for non-native English speakers who already have a basic command of the English language. This class focuses basic reading and writing skills aligned with the Colorado State English standards for 9th grade students.

Integrated US Hist/American Literature

Prerequisites: World Geography and English 9, 10
Credits: 2
Semester
Credit towards: English
US History
Grade level: 11,12
Topics covered:
This course is designed to be taken in conjunction. United States History topics will be covered in an integrated curriculum and the teaching of history through literature. Major wars, political and economic developments, and social movements as well as critical reading and written analysis of these topics as they relate to literature will be covered with a heavy emphasis on the incorporation of project based learning and application. This is two courses that will work in direct correlation.

INDUSTRIAL ARTS/ TECHNOLOGIES

Fundamentals of woodworking

Course # FIW 100
Prerequisites: none
Pathway: Construction
Credits: 1
Full Year
Credit towards: Elective
Grade level: 9,10,11,12
Topics covered:
Introduces the manipulation of materials, drawings, hand and power tools, sharpening, joinery, assembly, and preparation for and finishing to accomplish woodworking.

Adv Furniture-Cabinet Const

Course # FIW 220
Prerequisites: FIW 100
Pathway: Construction
Credits: 1
Full Year
Credit Towards: Elective
Grade Level: 10,11,12
Topics Covered:
Enables the student to produce a finished piece of salable quality. Includes a demonstrated understanding of the materials available, their sources, shop drawings, various construction and finishing methods and reasonable design and technical skills.

Intro to Construction 1

CMC Dual Enrollement

Course # CON 110
Prerequisites: FIW 100
Pathway: Construction
Credits: 1
Full Year
Credit towards: Elective
Grade level: 11,12
Topics covered:
Explores the expanding array of careers within the construction industry. Students will be exposed to the construction industry through job site tours, hands-on experience, and classroom activities. Math and science application will be established through the academic integration of jobsite technical skills and classroom theory.

Intro to Construction 2

CMC Dual Enrollement

Course # CON 111
Prerequisites: FIW 100, CON 110
Pathway: Construction
Credits: 1
Full Year
Credit towards: Elective
Grade level: 11,12
Topics covered:
Explores additional careers within the construction industry. Students will be exposed to the construction industry through job site tours, hands-on experience, and classroom activities. Math and science application will be established through the academic integration of jobsite technical skills and classroom theory.

Auto Maintenance 1

Course # ASE 103
Prerequisites: none
Pathway: Automotive
Credits: 1
Full Year
Credit Towards: Elective
Grade Level 9,10,11,12
Topics Covered:
This course addresses three primary areas of concern for the average car owner. The first is the basics of how various systems on the automobile work. The second is the maintenance required for the vehicle. The third is the financial concerns of owning the vehicle.

Auto Maintenance 2

Course # ASE 103
Prerequisites: ASE 103
Pathway: Automotive
Credits: 1
Full Year
Credit Towards: Elective
Grade Level 10,11,12
Topics Covered:
This is an introductory class to the world of engines and automobiles. We will be investigating engines, the process that makes them run, electric circuits, body repair, and common automotive systems. This is a hands on class where we discover these processes by diving in to them in real life situations. We will start off working on small machines such as snowmobiles and four wheelers then progressing into more advanced machines like cars and trucks.

INDUSTRIAL ARTS/ TECHNOLOGIES

Brakes 1

CMC Dual Enrollement

Course # ASE 110
Prerequisites: ASE 103
Pathway: Automotive
Credits: 0.5
Semester
Credit Towards: Elective
Grade Level 11,12
Topics Covered:
Covers basic operation of automotive braking systems. Includes operation, diagnosis, and basic repair of disc brakes, drum brakes, and basic hydraulic systems.

General Engine Diagnosis

CMC Dual Enrollement

Course # ASE 130
Prerequisites: ASE 103
Pathway: Automotive
Credits: 0.5
Semester
Credit Towards: Elective
Grade Level 11,12
Topics Covered:
Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors.

Steering and Suspension 1

CMC Dual Enrollement

Course # ASE 140
Prerequisites: ASE 103, ASE 110, ASE 130
Pathway: Automotive
Credits: 0.5
Semester
Credit Towards: Elective
Grade Level 11,12
Topics Covered:
Focuses on lecture and related experiences in the diagnosis and service of suspensions and steering systems and their components.

Man Trans/Transaxles&Clutches

CMC Dual Enrollement

Course # ASE 151
Prerequisites: ASE 103, ASE 110, ASE 130
Pathway: Automotive
Credits: 0.5
Semester
Credit Towards: Elective
Grade Level 11,12
Topics Covered:
Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles and clutches and related components.

Manufactureing Processes

Course # MTE 120
Prerequisites: None
Pathway: Manufacturing
Credits: 1
Full Year
Credit Towards: Elective
Grade Level: 9,10,11,12
Topics Covered:
Provides the student an overview of the different methods, tools and machines which are used to manufacture industrial and consumer products. In general metals we will be learning all about metals and metal processes. We will be covering topics such as welding, machining, casting, blacksmithing, CNC, plasma, water jet, powder metals, and other ways of processing metals.

Advanced Manufactureing Processes

Prerequisites: None
Pathway: Manufacturing
Credits: 1
Full Year
Credit Towards: Elective
Grade Level: 10,11,12
Topics Covered:
Students will dig deeper into all the different aspects of manufactureing to get a better idea of how things are made and the processes it takes to make them. Provides the student an overview of the different methods, tools and machines which are used to manufacture industrial and consumer products. In general metals we will be learning all about metals and metal processes. We will be covering topics such as welding, machining, casting, blacksmithing, CNC, plasma, water jet, powder metals, and other ways of processing metals.

INDUSTRIAL ARTS/ TECHNOLOGIES

Basic Shielded Metal Arc I

CMC Dual Enrollement

Course # Wel 103
Prerequisites: MTE 120
Pathway: Manufacturing
Credits: 0.5
Semester
Credit Towards: Elective
Grade Level: 11,12
Topics Covered:

Covers performing safety inspections, making minor repairs, adjusting operating parameters, and operating SMAW equipment utilizing E-6010 and E-7018 electrodes. Layout procedures and practices will also be introduced. We also go over basic Oxy-fuel cutting processes.

Basic Shielded Metal Arc II

CMC Dual Enrollement

Course # Wel 104
Prerequisites: Wel 103
Pathway: Manufacturing
Credits: 0.5
Semester
Credit Towards: Elective
Grade Level: 11,12
Topics Covered:

Covers performing safety inspections, making minor repairs, adjusting operating parameters, and operating SMAW equipment utilizing E-7014 E 6013 electrodes. Layout procedures will be practiced during this course. We also go over basic Oxy-fuel cutting processes.

Advanced Shielded Metal Arc I

CMC Dual Enrollement

Course # Wel 110
Prerequisites: Wel 104
Pathway: Manufacturing
Credits: 0.5
Semester
Credit Towards: Elective
Grade Level: 11,12
Topics Covered:

Covers safety inspections, minor repairs, operating parameters, operation of SMAW equipment, and SMAW operations on groove and fillet welds utilizing E-6010 and E-7018 electrodes. Layout procedures will be practiced during this course. Course focus is the application and fabrication aspect or the special electrodes.

Advanced Shielded Metal Arc II

CMC Dual Enrollement

Course # Wel 111
Prerequisites: Wel 110
Pathway: Manufacturing
Credits: 0.5
Semester
Credit Towards: Elective
Grade Level: 11,12
Topics Covered:

Covers safety inspections, minor repairs, operating parameters, operation of SMAW equipment utilizing various electrodes, essential welding information from codes or other standards, and performance of weld inspections. The focus of the class is to Learn the application of the rods in the fabrication and also learn about the application of GTAW, and GMAW.

INDUSTRIAL ARTS/ TECHNOLOGIES

Computer Aided Drafting 1

Course # CAD 101
Prerequisites: none
Pathway: Drafting and Design
Credits: 1
Full Year
Credit towards: Elective
Grade level: 9,10,11,12
Topics covered:
Focuses on basic computer aided drafting skills using the latest release of CAD software. Includes file management, Cartesian coordinate system, drawing set-ups, drawing aids, layer usage, drawing geometric shapes, editing objects, array, text applications, basic dimensioning, and Help access.

Invention and Design

Course #
Prerequisites: CAD101 or FIW100 or MTE120
Pathway: Drafting and Design
Credits: 1
Full Year
Credit towards: Elective
Grade level: 10,11,12
Topics covered:
The nature of highly creative human intellectual endeavors will be explored and demystified by examining recent models of discovery, invention and design. Among the models are theories of discovery as problem solving, evolutionary accounts of innovation, and explanations of how seemingly irrational humans can produce reliable knowledge. A special feature of the course will be students individual choice of an important creative episode or person (e.g. scientific discovery, inventor), which will be interpreted using the models and serve as a context for the critical evaluation of the models.

Basic Architectural Drafting

Course # AEC 101
Prerequisites: CAD 101
Pathway: Drafting and Design
Credits: 1
Full Year
Credit towards: Elective
Grade level: 10,11,12
Topics covered:
introduces the student to basic architectural drafting techniques. Topics explored in lecture and through project work include: use of instruments, geometric construction, multiview, oblique and isometric projections, and basic construction drawings.

Intro to Mechanical Design

Course # ENT 133
Prerequisites: CAD 101
Pathway: Drafting and Design
Credits: 1
Full Year
Credit towards: Elective
Grade level: 10,11,12
Topics covered:
Focuses on industrial design concepts for mass production. Introduces tolerancing, industrial fasteners, economic considerations, and terminology. Incorporates small design projects.

INDUSTRIAL ARTS/ TECHNOLOGIES

Architectural Design & Modeling

CMC Dual Enrollement

Course # AEC 110
Prerequisites: CAD 101, AEC 101
Pathway: Drafting and Design
Credits: 1
 Full Year
Credit towards: Elective
Grade level: 11,12
Topics covered:

Students will be introduced to conceptual architectural design through manual drafting techniques that include a variety of multi-view projection, isometric projects, and architecture details. The student will also be required to produce physical models of architectural details through a combination of manual drafting, CAD, and physical modeling techniques. Students will be required to present a design solution and evaluation of the assigned program through conceptual models and drawings.

Engineering Technology

CMC Dual Enrollement

Course # ENT 137
Prerequisites: CAD 101, ENT 133
Pathway: Drafting and Design
Credits: 1
 Full Year
Credit towards: Elective
Grade level: 11,12
Topics covered:

Prepares students for success in the Engineering Technology program. Focuses on engineering job skills and duties, academic requirements, calculator usage, engineering reference and handbooks, geometry, trigonometry, problem solving skills, and introduction to wordprocessing and spreadsheets.

MATHEMATICS

Refer to CMC for additional courses

Algebra 1A

Prerequisites: Teacher Approval
Credits: 1
Full Year
Math Requirement Met

Credit towards: Math

Grade level: 9

Topics covered: We will explore the concepts and applications of each topic in Algebra 1. The class will focus on the **first semester** of Algebra over a one year time frame.

Algebra 1

Prerequisites: Pre-Algebra or Equivalent
Credits: 1
Full Year
Math Requirement Met

Credit towards: Math

Grade level: 9,10

Topics covered: We will explore the concepts and applications of each topic in Algebra 1. The class will focus on processes and techniques that are a basis for the study of high school math.

Algebra 2

Prerequisites: Grade of C or higher in Algebra 1 or Equivalent
Credits: 1
Full Year
Math Requirement Met

Credit towards: Math

Grade level: 10,11,12

Topics covered: In Algebra 2, we explore the more advanced concepts of Algebra that deal with and prepare us for Pre-Calculus and beyond. The class is the fundamental foundation for college mathematics and is the equivalent to the lowest class one must pass in college in order to graduate.

Algebra 1B

Prerequisites: Grade of C or higher in Algebra A or Equivalent
Credits: 0.5
Semester
Math Requirement Met

Credit towards: Math

Grade level: 9,10

Topics covered: We will explore the concepts and applications of each topic in Algebra 1. The class will focus on the **second semester** of Algebra over a one year time frame.

Geometry

Prerequisites: Grade of C or higher in Algebra 2 or Equivalent
Credits: 1
Full Year
Math Requirement Met

Credit towards: Math

Grade level: 9,10,11,12

Topics covered: We will explore more the logical side of mathematics in Geometry. We deal with shapes and their properties, how objects relate to each other, and how we can logically reason or prove that a statement, process, or item is true or false.

Trigonometry

Prerequisites: Grade of C or higher in Algebra 2 or Equivalent
Credits: 1
Full Year
Math Requirement Met

Credit towards: Math

Grade level: 10,11,12

Topics covered: Pre-Calculus involves two major sections in one class. First, we explore Trigonometry, which deals with the trigonometric functions and their identities. Next, we move to the true Pre-Calculus math with conic sections and advanced functions. We conclude with a brief study of Calculus.

MATHEMATICS

Refer to CMC for additional courses

Calculus

Prerequisites: Grade of C or higher in Trigonometry or Equivalent

Credits: 1
Full Year
Math Requirement Met

Credit towards: Math

Grade level: 11,12

Topics covered: Calculus is where the real math fun begins! It involves many real world applications through the use of limits, derivatives, integrals, continuity, and logarithms. Applications are included from engineering, water flow, related rates, physics, and so much more. It is a great jump start into college mathematics.

Statistics

Prerequisites: Grade of C or higher in Algebra 2 or Equivalent

Credits: 1
Full Year
Math Requirement Met

Credit towards: Math

Grade level: 11,12

Topics covered: This course is intended to provide an introduction to the fundamental concepts and methods of statistics and probability. The course consists of an introduction to descriptive statistics and statistical inference. Topical coverage includes basic measures of central tendency and variability, elementary probability theory, sample sizes, hypothesis testing, correlation, regression, and analysis of variation.

General Math

Prerequisites: CSAP Scores or Instructor Recommendation

Credits: 1
Full Year
Elective

Credit towards: Elective

Grade level: 9,10

Topics covered: The General Math class is taught as a remedial class in which emphasis is placed on finding and filling holes students have in math. The program is a teacher directed program and has been established to help students improve in the area of math. This, in turn, will help raise their scores on standardized testing. Students are placed in the class using current math scores or through a teacher recommendation.

PERFORMING ARTS

Choir

Prerequisites: None
Credits: .5,1
Full Year Preferred
Elective
Credit towards: Music
Grade level: 9,10,11,12
Topics covered:
Singing Techniques; Choral, small ensemble, and solo literature; Music Reading; Vocal Music Performance; Vocal Music History; World Music Styles.

High School Band

Prerequisites: 8th grade band
Credits: .5,1
Full Year Preferred
Elective
Credit towards: Music
Grade level: 9,10,11,12
Topics covered:
Will develop basic skills and proficiency for any grade level high school band student. Students will perform in concert twice per year in addition to pep band and festival performances.

Guitar I

Prerequisites: None
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Music
Grade level: 9,10,11,12
Topics covered:
Instruction includes basic chords and strum patterns, bass guitar, lead guitar, staff and tablature notation, and introductory Barr chords. Music of all styles is utilized including Rock, Folk, Pop, and Classical. Guitars are provided for in-school use.

Guitar II

Prerequisites: 1 semester of Guitar or Instructor permission
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Music
Grade level: 9,10,11,12
Topics covered:
Students will further their ability to read standard notation as well as tablature, improve technique, and explore playing with other in small ensembles. All styles of music will be covered, including folk, blues, rock, and classical.

Guitar III

Prerequisites: 2 semesters of Guitar or Instructor permission
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Music
Grade level: 9,10,11,12
Topics covered:
Students will focus on adding expression to musical performances in the context of both solo and small ensemble performance. Students will also choose a musical genre (rock, folk, jazz, blues, etc..) to explore in greater detail.

Chamber Winds

Prerequisites: Participation in Band or Instructor permission
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Music
Grade level: 10,11,12
Topics covered:
In this auditioned group, 12 outstanding band students will develop their technical and expressive facilities on their instrument through the study of literature for small ensembles. Literature will cover many musical styles including jazz, classical, and pop.

Drama/Theater Tech I

Prerequisites: None
Credits: .5,1
Semester/Full Year
Elective
Credit towards: English
Grade level: 9,10,11,12
Topics covered:
Acting Techniques; Set Design and Construction; Sound and Lighting Systems; Drama Production (1 per semester)

Drama/Theater Tech II

Prerequisites: Drama/Theater Tech
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Fine Arts
Grade level: 10,11,12
Topics covered:
Theatre II is an extension that focuses more on the directorial process and theatre development while preparing college bound students for the audition for theatre programs process.

PERFORMING ARTS

Women's Choir

Prerequisites: Participation in Choir or Chamber Choir or permission by instructor
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Music
Grade level: 9,10,11,12
Topics covered:
This advanced group will study challenging arrangements for women's voices. Students will also study mechanics of vocal production and the history of women in the vocal arts.

History of Popular Music

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Music
Grade level: 9, 10,11,12
Topics covered:
Students will study the evolution of popular music beginning with classical and jazz forms of the late 19th century and progressing through modern popular music. Assessment will be mostly in the form of listening quizzes and small research project.

Music Theory

Prerequisites: None
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Music
Grade level: 9, 10,11,12
Topics covered:
Students will discuss, examine and learn about musical styles and sociological aspects of each historical period. They will explore lives, individual styles and representative works of many composers through listening and reading. Content of class includes ear training, harmony, melody, triads, chords, rhythm, style, calligraphy, analysis of musical forms and composition.

Jazz Band

Prerequisites: 8th grade or High School Band
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Music
Grade level: 9,10,11,12
Topics covered:
Provides basic instruction in jazz-related rhythm, tone, style, concept, listening skills, woodwind doubling possibilities and improvisation. The ultimate goal of this ensemble is to give interested students an opportunity to study and perform jazz ensemble literature.

Chamber Singers

Prerequisites: Instructor Recommendation
Credits: .5,1
Semester/Full Year
Elective
Credit towards: Music
Grade level: 10,11,12
Topics covered:
This will be an auditioned group of at least 12 of the most advanced singers at GVHS. Students will sing very challenging music, which will be mainly accapella, and focus on singing 4 part music. This course is open to any 10-12.

PHYSICAL EDUCATION

Team Sports

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Physical Education
Grade level: 9,10,11 12
Topics covered:
PE credit would be directed at more of the traditional PE class: basketball, flag football, soccer, softball, etc.

Individual Sports

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit toward: Physical Education
Grade level: 9,10,11 12
Topics covered:
PE credit would directed at more of the individual sports such as: badminton, tennis, running, swimming, etc.

Beginning Weight Training

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Physical Education
Grade level: 9,10,11 12
Topics covered:
Directed for any student who wants to learn their way around the weight room.

Athletic Weight Training

Prerequisites: Beginning Weight Training or Coach Approval
Credits: 0.5
Semester
Elective
Credit toward: Physical Education
Grade level: 9,10,11 12
Topics covered:
Directed towards students who are involved in athletics and would like to have a class designed around more athletic driven weight training.

Women's Weight Training

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit towards: Physical Education
Grade level: 9,10,11 12
Topics covered:
Designed specifically for girls who would like to be in a weight training class and feel more comfortable with out a presence of male peers.

Fitness for Life

Prerequisites: None
Credits: 0.5
Semester
Elective
Credit toward: Physical Education
Grade level: 9,10,11 12
Topics covered:
Focus being on total body health: flexibility, cardio (dance formats and aerobics), strength, core training, and nutrition. Students need to understand the importance of lifetime fitness, and this class would allow other alternatives to the everyday "sports" theme that is often times the focus in traditional PE.

Health

Prerequisites: None
Credits: 0.5
Semester
Requirement
Credit towards: Health
Grade level: 9,10
Topics covered:
Health and wellness (physical, emotional, social) of teens as individuals, family members, and community members.

SCIENCE

Refer to CMC for additional courses

IPC

Prerequisites: none
Credits: 1
Full Year
Requirement
Credit towards: Science
Grade level: 9
Topics covered:

Physics through Meteorology, Newton's laws, and structural science. Chemistry through the study of matter, food science. Physical science through the study of natural resources.

Chemistry

Prerequisites: Successful completion of Algebra and Biology
Credits: 1
Full Year
Elective
Credit towards: Science
Grade level: 10,11,12
Topics covered:

Data Analysis, Matter, Atom, Periodic Table, Ionic Compounds, Covalent Bonding, Chemical Reactions, The Mole, Stoichiometry, States of Matter, Hydrocarbons, Nuclear Chemistry, Environment.

Biology

Prerequisites: Successful completion of IPC or permission
Credits: 1
Full Year
Requirement
Credit towards: Science
Grade level: 10,11,12
Topics covered:

The Web of Life, Populations, Communities, Ecosystems, Matter and Energy, The Cell, Reproduction, Heredity, Evolution, Classification, Dissection, Biomes, Human Interactions.

Geology

Prerequisites: Successful completion of Algebra and IPC
Credits: 0.5
Semester
Elective
Credit towards: Science
Grade level: 10,11,12
Topics covered:

Geologic landforms and processes, map interpretation, rocks and mineral identification.

Physics

Prerequisites: Algebra II or instructors consent
Credits: 1
Full Year
Elective
Credit towards: Science
Grade level: 11,12
Topics covered:

Mechanics, properties of Matter, Heat, sound and light, electricity and magnetism.

Astronomy

Prerequisites: Successful completion of IPC
Credits: 0.5
Semester
Elective
Credit towards: Science
Grade level: 10,11,12
Topics covered:

History of astronomy, formation of the solar system, in depth study of all the planets, cosmology.

SCIENCE

Refer to CMC for additional courses

Environmental Science

Prerequisites: Instructors consent

Credits: 1
Full Year
Elective

Credit towards: Science

Grade level: 11,12

Topics covered:

This class will provide a survey of the local environment through hands-on outdoor activities. In a constantly changing environment, students can gain the information, tools, and skills to become a positive contributing member of society. The goal of the class is to raise student awareness of environmental issues in their local community. Coursework will consist of Colorado Riverwatch, GIS/ GPS, and research activities. Students can become stewards of and gain an appreciation for their local

Human Anatomy/Physiology

Prerequisites: Biology

Credits: 1
Full Year
Elective

Credit towards: Science

Grade level: 11,12

Topics covered:

Human anatomy and physiology courses present exciting challenges. A basic knowledge of the structure and function of cells, organs, and organ systems is necessary to understand how life is maintained and how we can survive changes. Nearly everyone is interested in knowing more about the human body.

Applied Science

Prerequisites: None

Credits: 0.5
Semester
Elective

Credit towards: Elective

Grade level: 10,11,12

Topics covered:

Students will be engaged in hands-on explorations of real-world problems. This is a research and project based class with an emphasis on Math, Engineering, and Science. They will be actively monitoring their own progress on the Colorado Model Content Standards and choosing projects to demonstrate growth on low areas in math and science. The students will be problem solving using critical thinking skills, information management, collaboration, self direction and innovation to demonstrate the knowledge, skills, and concepts in real-world, relevant contexts.

FOREIGN LANGUAGE

Spanish 1

Prerequisites: None

Credits: 1
Full Year
Requirement

Credit towards: Foreign Language

Grade level: 9,10,11,12

Topics covered: Basic language skills

This is an introductory course to Spanish. The course objectives are to learn to listen to, speak, read, and write Spanish, and to become culturally literate. Instruction is in Spanish and students are expected to speak Spanish in class. Among other things, students will complete projects and an essay in Spanish.

Spanish 2

Prerequisites: Spanish 1 or Teacher Approval

Credits: 1
Full Year
Elective

Credit towards: Foreign Language

Grade level: 10,11,12

Topics covered: Basic language skills, Literature

This is an intermediate course in Spanish. Students will build on the language skills developed in Spanish 1, improving their ability to speak, read, write, and listen to Spanish. Instruction is in Spanish and students are expected to speak Spanish in class. Students will complete projects and essays in Spanish as well as learn to read a poem, legend, and short story in Spanish.

Spanish 3

Prerequisites: Spanish 2 or Teacher Approval

Credits: 1
Full Year
Elective

Credit towards: Foreign Language

Grade level: 10,11,12

Topics covered: Basic language skills, Literature, Composition

This is an advanced intermediate course in Spanish. Students will continue to develop basic language skills such as listening, speaking, reading, and writing. Instruction is in Spanish and students are expected to speak in Spanish. While students will complete projects, essays, and presentations in Spanish, they will also read poems, legends, short stories, a play, and a novel in Spanish.

Spanish 4

Prerequisites: Spanish 3 or Teacher Approval

Credits: 1
Full Year
Elective

Credit towards: Foreign Language

Grade level: 11,12

Topics covered: Basic language skills, Literature, History, Composition

This is an advanced course in Spanish. Students will continue to work on speaking, reading, writing, and listening in Spanish. Instruction is in Spanish and students are expected to speak Spanish. Besides projects, essays, presentations, and research papers in Spanish, students will be expected to develop creative writing skills in Spanish. Students will also study Hispanic history and literature.

Spanish for Spanish Speakers

Prerequisites: Teacher approval and Spanish 4

Credits: 1
Full Year
Elective

Credit towards: Foreign Language

Grade level: 9, 10, 11, 12

Topics covered: Basic language skills, Literature, Composition

This course is designed for Spanish speakers to develop and enhance their skills in the areas of grammar, vocabulary, reading, and writing.

TECHNOLOGY

Word Processing Technologies I

Course #: BTE 155
Prerequisites: Keyboarding (Bus Tech)
Track: Business
Credits: 0.5
Semester
Technology Requirement Met
Credit towards: Technology
Grade level: 9,10,11,12
Topics covered: Create documents using a word processing package. Select and edit text. Format characters. Use tools associated with the word processing package. Format paragraphs. Set margins. Set tabs. Move and copy text. Find and replace text. Print documents.

Introduction to Multimedia

Course #: MGD102
Prerequisites: Keyboarding
Track:
Credits: 0.5
Semester
Elective
Credit towards: Technology
Grade level: 9,10,11,12
Topics covered: Introduces the types of equipment and technical considerations used in multimedia productions and the multimedia professions. It focuses on current types of equipment such as scanners, printers, digital cameras and computers. Students gain hands-on experience in how the technology is utilized for input and output in production and design projects. Over view of software and basic design principles will be explored. Students will also demonstrate keyboarding speed competency and use of basic business document creation tools. This is the core introductory class for students entering any of the tracks.

Web Design I

Course #: MGD141
Prerequisites: Keyboarding
Track: Web Design
Credits: 0.5
Semester
Elective
Credit towards: Technology
Grade level: 10, 11, 12
Topics covered: Introduces web site planning, design and creation using industry-standards-based web site development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

Web Design II

Course #: MGD241
Prerequisites: MGD141
Track: Web Design
Credits: 0.5
Semester
Elective
Credit towards: Technology
Grade level: 11, 12
Topics covered: Introduces students to game design from conceptual development and functionality, through production of a virtual world prototype. Students examine such things as character registration, in-betweens, inking and clean up used for creating real-time game environments. Storytelling and visual metaphor development are emphasized.

Game Design I

Course #: MGD 167
Prerequisites: MGD 102
Track: Game Design
Credits: 0.5
Semester
Elective
Credit towards: Technology
Grade level: 11, 12
Topics covered: Introduces basic 3D modeling and rendering features of a specific 3D modeling software. Students will understand 3D geometry, model management, creating materials, material editor effects, beginning photo-realistic rendering, project management, basic rendering concepts and archiving projects. Students will understand how to use modeling translators, file formats, and conversion applications to move models from the modeling application for use in a gaming application, gaming engine or gaming environment.

Photo Image Capture I

Course #: PTO121
Prerequisites: BTE155 or MGD 102
Track: Photography
Credits: 0.5
Semester
Elective
Credit towards: Technology
Grade level: 11, 12
Topics covered: This foundation course provides the fundamental operation of a DSLR camera. General operations of the camera, proper camera handling, exposure control, depth of field, lenses and the visual characteristics of lenses and an understanding of how digital capture works are emphasized. Additional topics including F-stops, shutter speeds, camera metering techniques and exposure and metering modes of modern DSLR cameras. Advanced functions such as use of the histogram, file compression methods, image resolution, auto focus, auto bracketing, and exposure compensation will be covered.

TECHNOLOGY

Photo Image Capture II

Course #: PTO122
Prerequisites: PTO121
Track: Photography
Credits: 0.5

Semester
Elective

Credit towards: Technology
Grade level: 11, 12

Topics covered:

This course is a continuation of Photo Image Capture I and further develops camera operation skills and an understanding of digital imaging terminology. A more advanced control and application of camera techniques such as exposure, depth of field, optical effects and zone focusing will be emphasized. In addition to demonstrating technical competency in the aforementioned areas, students will be expected to utilize these techniques as visual communication tools in order to clearly convey their photographic intent. Additional topics include: macro photography, the effect of image compression on image quality or resolution, the advantages and disadvantages of shooting JPEG vs. RAW, how and when to utilize fill flash and copying flatwork.

Digital Darkroom I

Course #: PTO161
Prerequisites: Photography
Track: Photography
Credits: 0.5

Semester
Elective

Credit towards: Technology
Grade level: 11, 12

Topics covered:

This course will cover post processing of the captured images. Methods of transferring the files from camera to computer, image editing tools, optimizing the files for print and screen, image sharpening, proper understanding of black and white tonal scale, methods of converting color captures to black and white images, printing and matting.

Videography

Course #: MGD104
Prerequisites:
Track: Video/Multimedia
Credits: 0.5

Semester
Elective

Credit towards: Technology
Grade level: 9, 10,11, 12

Topics covered:

Offers an introduction to the principles and techniques of videotape 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.

After Effects I

Course #: MGD165
Prerequisites:
Track: Video/Multimedia
Credits: 0.5

Semester
Technology Requirement Met

Credit towards: Technology
Grade level: 10, 11, 12

Topics covered:

Provides the fundamental techniques for creating digital motion graphics such as 2D animations, animated logos, video graphics, etc. Classes cover relevant tools and techniques as well as industry standards, delivery methods and output.

Graphic Design 1

Course #: MGD133
Prerequisites:
Track: Game Design
Credits: 0.5

Semester
Technology Requirement Met

Credit towards: Technology
Grade level: 9,10,11,12

Topics covered:

Focuses upon the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos, and brochures

Graphic Design 2

Course #: MGD233
Track: Game Design
Credits: 0.5

Semester
Elective

Credit towards: Technology
Grade level: 9,10,11,12

Topics covered:

Continues instruction in idea development for advanced graphic design. Use a variety of media and processes to create advanced graphic designs. Demonstrate an advanced knowledge of vocabulary, materials, and technology used in generating graphic designs. Identify and apply the visual elements to advanced graphic design problems. Select, analyze and compose graphics and layouts that demonstrate an advanced knowledge of visual communication skills. Utilize graphic design principles to generate graphics that emphasis self-expression and creativity. Assemble and assess a presentation of your work that demonstrates professionalism.

ALTERNATIVE HIGH SCHOOL

Painting

Prerequisites: None
Credits: 0.25
Credit towards: Fine Arts
Grade level: 10,11,12
Topics covered:

This class is for any level of art student. The students will learn about watercolor and acrylic painting. They will learn to use the tools of painting and how to care for them. Choosing between watercolor or acrylic or both, they will create a minimum of two works of art. With the teacher's help, they will work in the classroom or in their own time using the selected medium.

Calligraphy

Prerequisites: None
Credits: 0.25
Credit towards: Fine Arts
Grade level: 10,11,12
Topics covered:

This class is for any level of art student. The students will learn the about the tools of calligraphy, how to use and care for them. They will practice the alphabets and numbers for several different styles of lettering. Students will create works of art in the classroom or in their own time using various styles of lettering.

Financial Planning

Prerequisites: None
Credits: 1
Credit towards: Elective
Grade level: 10,11,12
Topics covered:

This curriculum was adopted from the NEFE (National Endowment for Financial Education) High School Financial Planning Program. The students will learn sound money management skills including: Career, Budget, Savings and investment, credit and Insurance.

COLORADO MOUNTAIN COLLEGE

Eng Composition I/II (ENG 121/122)

Prerequisites: Application and Interview

Credits: 3 or 4
Full Year
English

Credit towards: English

Grade level: 11,12

Topics covered:

Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative, and persuasive/argumentative writing. Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and/or persuasive papers that incorporate research. Students must test into college-level English to take English Composition I. Students must complete English Composition I with a "C" or higher to take English Composition II.

Math for Liberal Arts (MAT 120)

Prerequisites: MAT-099 & Acculacer score

Credits: 4.0 credits
Semester

Credit towards: Mathematics

Grade level: 11, 12

Topics covered:

Develops mathematical and problem-solving skills. Appropriate technological skills are included. Content is selected to highlight connections between mathematics and the society in which we live. Topics include set theory and logic, mathematical modeling, probability and statistical methods, and consumer mathematics. Additional content will include one topic in geometry, memoration systems, decision theory, or management science.

General Biology I/II (BIO 111/112)

Prerequisites: Application and Interview

Credits: 3 or 4
Full Year
Science

Credit towards: Science

Grade level: 11,12

Topics covered:

Examines the fundamental molecular, cellular and genetic principles characterizing plants and animals. Includes cell structure and function, and the metabolic processes of respiration, and photosynthesis, as well as cell reproduction and basic concepts of heredity. The course includes laboratory experience. A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience. Students must have college-level reading to take College Biology I. Students must complete College Biology I with a "C" or higher to take College Biology II.

College Algebra/Trig (MAT 121/122)

Prerequisites: Application and Interview

Credits: 3 or 4
Full Year
Math

Credit towards: Math

Grade level: 11,12

Topics covered:

College Algebra: Includes a brief review of intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. Students must test into college-level math to take this course. College Trigonometry: Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. Students must complete College Algebra with a "C" or higher to take this course.

Statistics (MAT-135)

Prerequisites: MAT-099 & Accuplacer score

Credits: 3.0 credits
Semester

Credit toward: mathematics

Grade level: 11, 12

Topics covered:

Includes data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypotheses testing, comparison of populations, correlation, and regression.

Anatomy & Physiology I (BIO 201)

Prerequisites: BIO-111 & Application

Credits: 4.0 credits
Semester

Credit toward: Science

Grade level: 11, 12

Topics covered:

Focuses on an integrated study of the human body, including the histology, anatomy, and physiology of each system. Examines molecular, cellular, and tissue levels of organization plus integuments, skeletal, articulations, muscular, nervous, and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations, and dissection. This is the first semester of a two-semester sequence.

COLORADO MOUNTAIN COLLEGE

College Environmental Science

Prerequisites: Application and Interview
Credits: 3 or 4
Full Year

Credit towards: Health and Consumer Science
Grade level: 11,12

Topics covered:

Fall Semester - Introduction to Natural History
Studies the natural forces of change and environmental evolution in relation to current global and local ecology. Geology, weather, soil, ecological principles, and life histories of representative flora and fauna are included. The course includes laboratory experience. Students must have college-level reading to take this course.

Spring Semester - Basic Ecology
Studies the interrelationships between organisms and their environment. Includes population dynamics and the diversity of ecosystems. Laboratory includes field experience. The course includes laboratory experience. Students must have college-level reading to take this course.

Early Childhood Education

Prerequisites: Application and Interview
Credits: 3 or 4
Full Year

Credit towards: Health and Consumer Science
Grade level: 11,12

Topics covered:

Fall Semester - Introduction to Early Childhood Education
Provides an introduction to Early Childhood Education. Includes the eight key areas of professional knowledge: Child Growth and Development; Health, Nutrition and Safety; Developmentally Appropriate Practices; Guidance; Family and Community Relationships; Diversity; Professionalism; Administration and Supervision. Focuses on ages birth through age eight. Students must have college-level reading to take this course. This course must be taken with Introduction to Early Childhood Lab Techniques.

Spring Semester - Guidance Strategies
Explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues, and prosocial skills. Addresses ages birth through age 8. Students must have college-level reading to take this course.

Business and Technical

Prerequisites: Application and Interview
Credits: 3 or 4
Full Year

Credit towards: Business
Grade level: 11,12

Topics covered:

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

Spring Semester - Desktop Publishing
Introduces the concepts and applications for desktop publishing. Emphasizes page layout and design with techniques for incorporating text and graphics and final production of printed documents. Students must have completed Introduction to PC Applications with a "C" or higher to take this course.

Process Technology

Prerequisites: Application and Interview
Credits: 3 or 4
Full Year

Credit towards:
Grade level: 11,12
Topics covered:

Fall and Spring Semesters - Introduction to Process Technology/Math Provides an overview or introduction into the field of Process Operations within the process industry. The course will introduce the roles and responsibilities of process technicians, the environment in which they work, and the equipment and systems in which they operate. The course includes laboratory experience. This course will combine technical math and process technology for a year long course. Students must have college-level reading and test into the appropriate math level to take this course.

COLORADO MOUNTAIN COLLEGE

World Civilization I (HIS-111)

Prerequisites: Application and Accuplacer scores
Credits: 3.0 credits
Semester
Credit towards: Social Studies
Grade level: 11, 12
Topics covered:
Enables the student to view history up to 1500 CE in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders, to provide a better appreciation for different cultures.

Poly Sci/Am. Government (POS 105/111)

Prerequisites: Application and Interview
Credits: 3 or 4
Full Year
Social Studies
Credit towards: Social Studies
Grade level: 11, 12
Topics covered:
Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and non-democratic governments, and processes, and international relations. Includes the background of the U.S. Constitution, the philosophy of American government, general principles of the Constitution, federalism, and civil liberties. Examines public opinion and citizen participation, political parties, interest groups, and the electoral process, and the structure and functions of the national government. Students must have college-level reading to take these courses.

Public Speaking (COM-115)

Prerequisites: Application and accuplacer scores
Credits: 3 credits
Semester
Credit towards: English
Grade level: 11, 12

20th Century World History (HIS-247)

Prerequisites: College level reading accuplacer
Credits: 3.0 credits
Semester
Credit towards: Social Studies
Grade level: 11, 12
Topics covered:
Investigates the major political, social, and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to

WESTERN COLORADO COMMUNITY COLLEGE

Computer-Aided Design

Prerequisites: Application and Interview
Credits: 3
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Using freehand sketching and computer-aided drafting (CAD) software, students learn the techniques of basic drafting principles and methods used in today's engineering, manufacturing, architectural and electronics industries.
*Mesa State College credit may be earned through achievement of advanced course competencies

Graphic Communications

Prerequisites: Application and Interview
Credits: 3
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Students will gain basic skills in creative thinking, layout and design, typography, desktop publishing and creative art both with and without a computer. Students will work with Adobe Photoshop, Illustrator and Quark Xpress software. If you are interested in advertising, cartooning, publishing, marketing or public relations, consider this class.

Marketing Education

Prerequisites: Application and Interview
Credits: 3 or 4
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Provides an opportunity for students to learn firsthand the dynamics of business ownership, management and marketing. Students operate a retail store at Mesa Mall, getting hands-on experience with entrepreneurship. Students must provide their own transportation to and from Mesa Mall.
*Mesa State College credit may be earned through achievement of advanced course competencies.

Construction Technology

Prerequisites: Application and Interview
Credits: 4
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

This program is designed for those students who are interested in pursuing a career in residential or commercial building construction. Blueprint reading, estimation, building codes, frame construction, roof framing, interior and exterior finishing and safety are covered.
*Mesa State College credit may be earned through achievement of advanced course competencies.

Machining Technology

Prerequisites: Application and Interview
Credits: 4
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Students learn the use of tools and equipment found in manufacturing. Work in the areas of blueprint reading, general machining and maintenance, computer numerical control (CNC) machining, computer-aided drafting(CAD), and related mathematics.
*Mesa State College credit may be earned through achievement of advanced course competencies.

Media Technology

Prerequisites: Application and Interview
Credits: 3
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Prepare for entry into the exciting field of broadcasting, film, video and television production. You will obtain skills to work within all aspects of the media. In addition to personal growth and the ability to work cooperatively with others, students gain an understanding of career opportunities in the media and communication fields.

WESTERN COLORADO COMMUNITY COLLEGE

Medical Preparation

Prerequisites: Application and Interview
Credits: 3
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Develop skills and gain knowledge for beginning work in the healthcare field. This is an excellent start for students who will be furthering their education in a health field of any type. The student will be certified in CPR and first-aid, learn medical terminology and have job shadowing experiences in the community.

Technology Integration

Prerequisites: Application and Interview
Credits: 4
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Learn DC/AC circuitry and develop basic skills in analyzing, troubleshooting, repairing computer networks and the design and manufacturing of integrated circuits. Students learn to use standard test equipment such as multi-meters, oscilloscopes and function generators.
*Mesa State College credit may be earned through achievement of advanced course competencies.

Transportation Technology

Prerequisites: Application and Interview
Credits: 4
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Learn the fundamentals of electronics, starters, ignition and charging systems, air conditioning, cooling and heating systems, safety, related math, use of technical manuals, basic management skills, written and oral communications skills and leadership.
*Mesa State College credit may be earned through achievement of advanced course competencies.

Animation Technology

Prerequisites: Application and Interview
Credits: 3
Full Year
Elective
Credit towards: Elective
Grade level: 11,12
Topics covered:

Students learn techniques of basic animation methods in today's animation fields, using 3DS Max software. Program concepts include modeling, lighting, motion, character building, scene creation, environment manipulation, and visual effects. Gain skills in problem solving and creative thinking. Use your passion for video games and movies to enhance your school day and learn skills you can use in a fascinating and fun career. Learn 3D Animation.