



Monte Vista High School

Course Descriptions

For Academic Year 2021-22

**MONTE VISTA CONSOLIDATED
SCHOOL DISTRICT C-8**

BOARD OF EDUCATION

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SCHOOL DISTRICT ADMINISTRATION

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High School Principal – Mr. Jose Ortega

MONTE VISTA HIGH SCHOOL

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FINE ARTS

Graduation Requirement: Must have one Fine Art for both the Collegiate and Comprehensive Diplomas.__

INTRO TO ART**Course Code: 05154**

CREDIT: .50

LENGTH: One Semester

LEVEL: Grades 9 - 12

PREREQUISITE: None

Intro to Art is designed for students who want to learn about art. Prior knowledge of drawing is not needed to enroll. Basic techniques and media will be explored in this introduction to art and students will also learn about the elements and principles of art. There will be a \$10 fee for materials used in this class. This course meets the Fine Arts requirement.

PAINTING**Course Code: 05155**

CREDIT: .50

LENGTH: One Semester

LEVEL: Grades 9 - 12

PREREQUISITE: Intro to Art

Painting is a semester-long visual arts course where students will explore and experience a variety of painting techniques, media and historical approaches to art. Painting is a problem solving course employing fundamental design and composition concepts. There will be a \$10 fee for materials used in this class. This course meets the Fine Arts requirement.

DRAWING FUNDAMENTALS**Course Code: 05156**

CREDIT .50

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITE: Intro to Art

Drawing Fundamentals is a semester-long visual art course that is an introductory studio drawing course with emphasis on learning to see and develop basic drawing skills using various media by employing fundamental design and composition concepts. There will be a \$10 fee for materials used in this class. This course meets the Fine Arts requirement.

CERAMICS**Course Code: 05159**

CREDIT: .50

LENGTH: One Semester

LEVEL 9-12

PREREQUISITE: Intro to Art

Ceramics is a semester-long course that will introduce students to building with clay. Focus will be on the hand building techniques; pinch, coil and slabs. Functional as well as sculptural applications will be explored. There will be a \$10 fee for materials used in this class. This course meets the Fine Arts requirement.

ADVANCED ART A**ADVANCED ART B**

CREDIT: .50

LENGTH: Semester (Must take for one year)

LEVEL: Grades 11 - 12

PREREQUISITE: Four semesters of Art

Course Code: 05170**Course Code: 05170***

Advanced Art will allow students to explore all the possibilities in their areas of interest. Students will work more independently toward their artistic goals using experience gained in 4 semesters of art. This course is for serious art students and must have teacher recommendation.

MIXED MEDIA ART

CREDIT: .50

LENGTH: Semester

LEVEL: Grades 9-12

PREREQUISITE: Intro to Art

Course Code: 05199

Mixed Media is a semester-long course that will enable students to work with a wide range of media such as print making, paper mache, recycled projects and cardboard relief. Students will learn different techniques and methods often related to crafts.

PERFORMING ARTS**JAZZ BAND**

CREDIT: .50

LENGTH: One Semester

LEVEL: Grades 9 - 12

PREREQUISITE: Director's approval as well as ability to play a jazz band instrument.

Course Code: 05105

Jazz Band performs standard jazz, jazz-rock, and rock music. Students will learn jazz improvisation techniques. The jazz band will attend at least one jazz festival each year in addition to performing in several concerts, both at home and at other schools. Jazz Band is a performance-based class and attendance is required at all performances and rehearsals.

MARCHING BAND

CREDIT: 1.0

LENGTH: One Semester 2 Periods

LEVEL: Grades 9 - 12

PREREQUISITE: Ability to play a wind or percussion instrument/Spring Tryouts for Color Guard

Course Code: 05103

Marching band performs in competition at several sites each year, both in state and out-of-state. In addition, the marching band performs at home league and play-off football games. The Monte Vista High School color guard is an auxiliary to the MVHS marching band. Tryouts for this precision drill team are held in the spring, prior to the upcoming year. Color guard members must be present at all band functions and rehearsals. Color guard is a performance-based class and attendance is mandatory. Extra rehearsals may be required during the season and attendance is mandatory. This course meets the fine arts requirement for graduation.

CONCERT BAND**Course Code: 05102**

CREDIT .50

LENGTH: One Semester

LEVEL: 9-12

PREREQUISITE: Ability to play a wind or percussion instrument.

After marching season, the concert season begins. Concert band is where musical skills are heightened. Pep band is part of this season. Several concerts are presented in addition to the band performing for other schools. Pep band performs for home, league basketball games. In addition, the concert band performs for graduation at the end of the year. Band is a performance-based class and attendance is required at all band functions and rehearsals. This course meets the fine arts requirement for graduation.

THEATER**Course Code: 05052**

CREDIT .50

LENGTH: One Semester

LEVEL 9-12

Theatre arts courses focus on the study and performance of drama including musical theatre. These courses review a wide range of scripted materials, such as plays, screen plays, teleplays, readers' theatre scripts, dramatic criticism, creation of original dramatic works, and the role of dramatic arts in society. In addition, students will work collaboratively on performances.

LANGUAGE ARTS

GRADUATION REQUIREMENT: Must have four English credits for Collegiate and Comprehensive Diplomas.

BASIC ENGLISH SKILLS IA

Course Code: 01067

BASIC ENGLISH SKILLS IB

Course Code: 01067*

CREDIT: .50 Each Semester

LENGTH: Semester (Must take both semesters)

LEVEL: 0 (9-10)

PREREQUISITE: None

This course offers students the opportunity to focus on their reading and writing skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension up to the desired level or to develop strategies to read more efficiently. Assistance is targeted to students' particular weaknesses and is designed to bring students' writing skills up to the desired level or to develop strategies to write more efficiently.

BASIC ENGLISH SKILLS IIA

Course Code: 01992

BASIC ENGLISH SKILLS IIB

Course Code: 01992*

CREDIT: .50 Each Semester

LENGTH: Semester (Must take both semesters)

LEVEL: 0 (9-10)

PREREQUISITE: None

This course is a continuation course from Basic English Skills IA and IB. It continues to offer students the opportunity to focus on their reading and writing skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension up to the desired level or to develop strategies to read more efficiently. Assistance is targeted to students' particular weaknesses and is designed to bring students' writing skills up to the desired level or to develop strategies to write more efficiently. This course is also designed to assist students in acquiring the skills necessary to pass proficiency examinations.

SPEECH AND COMPOSITION

Course Code: 01151

CREDIT: .50

LENGTH: Semester

LEVEL: I (9)

PREREQUISITE: None

*Must take Composition + 2nd Semester

This course enables students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

COMPOSITION +
CREDIT: .50
LENGTH: Semester
LEVEL: I (9)
PREREQUISITE: None

Course Code: 01105

This course prepares students to write research papers and/or technical reports. Students will also be exposed to different styles of writing such as descriptive, narrative, persuasive, or expository writing. This course will also emphasize researching (primary and secondary sources), organizing (material, thoughts, and arguments) and writing in a persuasive or technical style.

NOVEL STUDIES

Course Code: 01053

CREDIT: .50
LENGTH: Semester
LEVEL: II (10-11)
PREREQUISITE: Speech & Comp+

*Must have one semester of reading and one semester of writing.

Mix and match Novel Studies, Literary Analysis, Practical Reading & Writing

This course will offer the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students will improve their critical-thinking skills as they determine the underlying assumptions and values within the reading selection and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of this course. It may survey representative works, reflect a particular genre or a specific theme, or survey works of a particular time or people.

LITERARY ANALYSIS

Course Code: 01001

CREDIT: .50
LENGTH: Semester
LEVEL: II (10-11)
PREREQUISITE: Speech & Comp+

*Must have one semester of reading and one semester of writing.

Mix and match Novel Studies, Literary Analysis, Practical Reading & Writing

This course is intended to continue to offer students the opportunity to study and reflect upon themes presented in literature while also seeking to develop the writing processes and practices necessary for producing successful high school compositions. Students will typically learn to write persuasive, critical, and analytical multi-paragraph essays and compositions. Students will be exposed to some literature study to exemplify illustrations of various forms of writing and to hone their analytical skills.

PRACTICAL READING

Course Code: 01066

CREDIT: .50
LENGTH: Semester
LEVEL: II (10-11)
PREREQUISITE: Speech & Comp+

*Must have one semester of reading and one semester of writing.

Mix and match Novel Studies, Literary Analysis, Practical Reading & Writing

This course is intended to improve a student's vocabulary, critical-thinking and analysis skills, or comprehension level. It will emphasize works of nonfiction and may include some works of fiction. This course will assist students in learning how to time-manage, offer strategies for note-taking or for understanding and evaluating the important points of a text.

PRACTICAL WRITING**Course Code: 01103**

CREDIT: .50

LENGTH: Semester

LEVEL: II (10-11)

PREREQUISITE: Speech & Comp+

*Must have one semester of reading and one semester of writing.

Mix and match Novel Studies, Literary Analysis, Practical Reading & Writing

This is a composition course that focuses on students' writing skills and develops their ability to compose different types of papers for a range of purposes and audiences. This course will enable students to explore and practice descriptive, narrative, persuasive, or expository styles as they write paragraphs, essays, letters, applications, formal documented papers, or technical reports. This course may present some opportunities for creative writing; however, its focus remains on nonfiction, scholarly, or formal writing.

AMERICAN LITERATURE A**Course Code: 01054**

CREDIT: .50

LENGTH: Semester

LEVEL: III (11-12)

PREREQUISITE: 1 Full Credit Of A Level II Course

*Mix and Match

This American Literature course focuses upon commonly known American authors and their work. Students will improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. This course will focus on the colonial, Romantic, and transcendental periods. Oral discussion is an integral part of this course, and written compositions are required.

AMERICAN LITERATURE B**Course Code:01054***

CREDIT: .50

LENGTH: Semester

LEVEL: III (11-12)

PREREQUISITE: 1 Full Credit Of A Level II Course

*Mix and Match

This American Literature course focuses upon commonly known American authors and their work. Students will improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. This course will focus on the modern and postmodern time periods. Oral discussion is an integral part of this course, and written compositions are required.

INTRO TO BRITISH LITERATURE A**Course Code: 01056**

CREDIT: .50

LENGTH: Semester

LEVEL: III (11-12)

PREREQUISITE: 1 Full Credit Of A Level II Course

*Mix and Match

This British Literature course will provide a survey of British literature or may focus on a selected timeframe of England's history. This will be the first half of the time frame studied. Students will improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of this course, and written compositions are required.

INTRO TO BRITISH LITERATURE B**Course Code: 01056***

CREDIT: .50

LENGTH: Semester

LEVEL: III (11-12)

PREREQUISITE: 1 Full Credit Of A Level II Course

*Mix and Match

This British Literature course will provide a survey of British literature or may focus on a selected timeframe of England's history. This will be the latter half of the time frame studied. Students will improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of this course, and written compositions are required.

AP ENGLISH LITERATURE A (2021-22)**Course Code: 01006****AP ENGLISH LITERATURE B****Course Code: 01006***

CREDIT: .50 Each Semester

LENGTH: Semester (Must take both semesters)

LEVEL IV (11-12)

PREREQUISITE: Teacher Recommendation

Following the College Board's suggested curriculum designed to parallel college-level English courses, this course is designed to approach literature historically and analytically and explores the evolution of various literary forms, genres, themes, and symbols still recurring in the arts and media. Students will analyze sonnets, essays, novels, and short stories through hands-on tasks, readings, discussions, and writing. Students will study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing). The goal of this course is to prepare students for the Advanced Placement exam as well as higher level high school and college courses.

AP ENGLISH LANGUAGE AND COMPOSITION A**Course Code: 01005****AP ENGLISH LANGUAGE AND COMPOSITION B****Course Code: 01005***

CREDIT: .50 Each Semester

LENGTH: Semester (Must take both semesters)

LEVEL IV (11-12)

PREREQUISITE: Teacher Recommendation

Following the College Board's suggested curriculum designed to parallel college-level English courses, this course exposes students to prose written in a variety of periods, disciplines, and rhetorical contexts. Emphasis is placed on nonfiction prose, including journals, speeches, essays, editorials, histories, biographies, and letters, as well as visuals (images, photos, and cartoons) and fiction (short stories, novels, and dramatic selections). Focus is placed on the rhetorical context and strategies used to establish purpose in reading and writing. The goal of this course is to prepare students for the Advanced Placement exam as well as higher level high school and college courses.

YEARBOOK**Course Code: 11104**

CREDIT: .50 Each Semester

LENGTH: Semester (Must take both semesters)

LEVEL: Grades 9-12

PREREQUISITE: Submitted application and teacher recommendations; Approval by the instructor/administration

This course is designed to publish the *Pirateer* yearbook. The goal is to define and record the school year in a poignant and provoking photographic historical record that creates lasting memories of student life, sports, academics, clubs, our school community, and most importantly, the people who breathe life into our school. Students will be taught standards of good yearbook production including page layout designs, copywriting, caption writing, headline writing, advertisement design, advertisement sales, yearbook sales, and photojournalism techniques. Computer skills are a must. Students will develop the skills to take pride in their work and be reliable, loyal, committed, and able to handle deadline pressure.

LANGUAGE ACQUISITION (EL SUPPORT)**Course Code 01008**

CREDIT: .50 Each Semester

LENGTH: Semester

LEVEL: 9-12

PREREQUISITE: Language Acquisition Teacher approval

This class is designed to satisfy the CDE and MVSD EL program requirements for serving students whose first language is a language other than English. EL students will be enrolled by the Language Acquisition teacher after a full review of assessment data and classroom performance.

Instruction aligned with the WIDA standards for ELs will focus on developing dual language literacy and may be used to either satisfy a Language Arts or elective credit. Explicit instruction in English and/or Spanish will enhance the four language domains of reading, writing, speaking, and listening. Opportunities will be provided for students to enhance conversational and listening skills through discussion and listening comprehension activities. Students will focus on developing the skills necessary to be successful in core classes. The teacher will support content area classes through reteaching, allowing extra time for completion of assignments.

Students will continue to develop and apply proper grammar and mechanics to a variety of types of writing, including a memoir, biography, response to literature, and/or creative writing. New vocabulary will be introduced, developed, and applied.

FOREIGN LANGUAGE

Graduation Requirement: Two consecutive credits for the Collegiate Diploma.

SPANISH IA

Course Code: 06101

CREDIT: .50

LENGTH: Semester

LEVEL: Grades 9 - 12

PREREQUISITE: None

Listening, speaking, reading, writing, and culture are emphasized in this class. Instruction focuses on oral proficiency. Students learn sufficient structure and vocabulary to satisfy basic survival skills and minimum social demands. Conversations, games, songs, speeches, videos, and other strategies are used.

SPANISH IB

Course Code: 06101*

CREDIT: .50

LENGTH: Semester

LEVEL: Grades 9 - 12

PREREQUISITE: None

Listening, speaking, reading, writing, and culture are emphasized in this class. Instruction focuses on oral proficiency. Students learn sufficient structure and vocabulary to satisfy basic survival skills and minimum social demands. Conversations, games, songs, speeches, videos, and other strategies are used.

SPANISH IIA

Course Code: 06102

CREDIT: .50

LENGTH: Semester

LEVEL: Grade 10 - 12

PREREQUISITE: Spanish I

This class continues the study of Spanish I with a focus on the domains: listening, speaking, reading, writing, and cultural understanding. Students acquire greater ease in speaking and enrich vocabulary in order to satisfy limited social demands. Conversations, games, songs, skits, videos, and other strategies are used.

SPANISH IIB

Course Code: 06102*

CREDI: .50

LENGTH: Semester

LEVEL: Grade 10 - 12

PREREQUISITE: Spanish I

This class continues the study of Spanish I with a focus on the domains: listening, speaking, reading, writing, and cultural understanding. Students acquire greater ease in speaking and enrich vocabulary in order to satisfy limited social demands. Conversations, games, songs, skits, videos, and other strategies are used.

SPANISH IIIA**Course Code: 06103**

CREDIT: .50

LENGTH: Semester

LEVEL: Grade 10 - 12

PREREQUISITE: Spanish II

This class continues the study of Spanish II with a focus on the domains: listening, speaking, reading, writing, and cultural understanding. Students will complete this course online with teacher approval.

After completing a pretest, the online program will assign students to a certain level of Spanish and progress will be monitored by the teacher. Students practice oral language skills, record their speech, and are given multiple opportunities for vocabulary practice and reinforcement of learned skills.

Students will also be given the opportunity to maintain a journal and conduct literary analysis of literature from Spanish-Speaking countries.

SPANISH IIIB**Course Code: 06103***

CREDIT: .50

LENGTH: Semester

LEVEL: Grade 10 - 12

PREREQUISITE: Spanish II

This class continues the study of Spanish II with a focus on the domains: listening, speaking, reading, writing, and cultural understanding. Students will complete this course online with teacher approval.

After completing a pretest, the online program will assign students to a certain level of Spanish and progress will be monitored by the teacher. Students practice oral language skills, record their speech, and are given multiple opportunities for vocabulary practice and reinforcement of learned skills.

Students will also be given the opportunity to maintain a journal and conduct literary analysis of literature from Spanish-Speaking countries.

FILM IS LITERATURE (Elective)**Course Code: 01099**

CREDIT: .50

LENGTH: Semester

LEVEL: Grade 10 - 12

In this course students learn to view films as an art form and as a means of communication beyond their entertainment purpose. They are taught to “read” a film, analyzing its narrative structure, genre conventions, subtext, technical and artistic factors, and purpose.

FANTASY FICTION (Elective)**Course Code: 01065**

CREDIT: .50

LENGTH: Semester

LEVEL: Grade 10 - 12

Fantasy is currently one of the most popular genres across every platform in fiction. From film to gaming to literature, fantasy tops the charts. Why? Why do people who believe in democracy and live with the magic technology appear to long for wizards and dragons and the matters of kingship? This class explores this question, and from that base read articles, novels, write exercises and stories in this genre. Please note that this class demands heavy reading.

MATHEMATICS

Monte Vista High School requires students to earn at least three credits of mathematics for graduation, or four credits for the collegiate diploma. Students planning to pursue a college education should adhere to the following math sequence: Algebra I → Geometry + Statistics → Algebra II → Precalculus

Course Offerings: Algebra ½ A, Algebra ½ B, Algebra I, Algebra II, Geometry (1 sem), Financial Literacy (1 sem), Statistics, Probability & Data Science (1 sem), Precalculus

ALGEBRA ½ A-1

ALGEBRA ½ A-2

CREDIT: .50 Each

LENGTH: Semester

LEVEL: Grades 9-12

PREREQUISITE: None

Course Code: 02053

Course Code: 02053*

This course covers the first half of Algebra I over an entire year.

ALGEBRA ½ B-1

ALGEBRA ½ B-2

CREDIT: .50 Each

LENGTH: Semester

LEVEL: Grades 9-12

PREREQUISITE: None

Course Code: 02053

Course Code: 02053*

This course covers the second half of Algebra I over an entire year.

ALGEBRA IA

ALGEBRA IB

CREDIT: .50 Each

LENGTH: Semester

LEVEL: Grades 9-12

PREREQUISITE: **Demonstrated mastery of pre algebra skills, typically assessed at end of 8th grade.**

Course Code: 02052

Course Code: 02052*

Algebra 1 is the critical element in secondary and post-secondary mathematics education. Algebra 1 is the first math course that uses symbols to represent quantities without fixed values, known as variables. This course explores linear, quadratic, and exponential relationships. Students analyze and explain the process of solving linear and quadratic equations and inequalities. Students learn function notation and develop the concepts of domain and range. They interpret functions graphically, numerically, symbolically, and verbally, translate between representations, and understand the limitations of various representations. Students compare and contrast linear and quadratic functions and explore systems of equations and inequalities. They analyze polynomials and become acquainted with factoring. Students compare the key characteristics of quadratic, linear and exponential functions. Students will learn to utilize math software and graphing calculators. An Algebra I credit is required for high school graduation and for college entry.

GEOMETRY**Course Code: 02071**

CREDIT: 0.5

LENGTH: One semester

LEVEL: Grades 9 - 12

PREREQUISITE: Algebra I

In this course students explore more complex geometric situations and deepen their explanations of geometric relationships through the development of inductive and deductive reasoning skills. Students identify, construct, and analyze line and angle relationships. Students establish triangle congruence criteria based on analyses of rigid motions and formal constructions. They use line and angle relationships along with triangle congruence as a familiar foundation for the development of formal proof. Students build a formal understanding of triangles, use similarity to solve problems, and apply similarity in right triangles to understand right triangle trigonometry, with particular attention to special right triangles and the Pythagorean Theorem. Students investigate two-dimensional and three-dimensional objects to create informal explanations of circumference, area and volume formulas. Students use a rectangular coordinate system to verify geometric relationships, including properties of special triangles and quadrilaterals and slopes of parallel and perpendicular lines. Students prove basic theorems about circles, such as a tangent line is perpendicular to a radius, the inscribed angle theorem, and theorems about chords, secants, and tangents dealing with segment lengths and angle measures.

STATISTICS, PROBABILITY & DATA ANALYSIS**Course Code: 02201**

CREDIT: 0.5

LENGTH: One semester

LEVEL: Grades 9 - 12

PREREQUISITE: Algebra I

This course introduces the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, permutations and combinations, independent and dependent events, populations and samples, frequency tables, measures of central tendency, and presentation of data (graphically and numerically). Course topics may also include normal distribution and measures of variability.

FINANCIAL LITERACY**Course Code: 02157**

CREDIT: 0.5

LENGTH: One semester

LEVEL: Grades 9 - 12

PREREQUISITE: none

How money smart are you? Step into this course specifically designed for high school students to understand the importance of the financial world, including planning and managing money wisely. The course will cover behavioral finance, taxes, checking and savings accounts, paying for college, types of credit, managing credit, investing, insurance and budgeting. Through project-based learning activities and tasks, students will apply mathematical concepts in realistic scenarios and will actively engage by applying the mathematics necessary to make informed decisions related to personal finance. Financial Literacy places great emphasis on problem solving, reasoning, representing, connecting and communicating financial data.

ALGEBRA IIA**ALGEBRA IIB**

CREDIT: .50

LENGTH: Semester

LEVEL: Grades 10 - 12

PREREQUISITE: Algebra I

Course Code: 02106**Course Code: 02106***

This course is recommended for any student who wants or will need a broad algebra base for his/her vocation. Students extend their repertoire of functions to include polynomial, rational, and radical functions. Students develop the structural similarities between the system of polynomials and the system of integers. They connect multiplication of polynomials with multiplication of multi-digit integers and division of polynomials with long division of integers. Students identify zeros of polynomials, including complex zeros of quadratic polynomials. Students expand their previous algebra work with functions, their geometric work with trigonometric ratios and circles, and how to use the coordinate plane to extend trigonometry to model periodic phenomena. Students extend their work with exponential functions to include solving exponential equations with logarithms. They identify appropriate types of functions to model a situation, they adjust parameters to improve the model, and they compare models by analyzing appropriateness of fit and making judgments about the domain over which a model is a good fit. Additionally, students identify different ways of collecting data including sample surveys, experiments, and simulations - and the role that randomness and careful design play in the conclusions that can be drawn.

PRE-CALCULUS A**PRE-CALCULUS B**

CREDIT: .50

LENGTH: Semester

LEVEL: Grades 11 - 12

PREREQUISITE: Algebra II

Course Code: 02110**Course Code: 02110***

This course is recommended for any student planning on attending college. Specific topics in this course include a comprehensive review of Algebra II concepts, all of the trigonometric topics, polar coordinates and vectors. Advanced algebra topics of exponential functions, logarithms, and sequences and series are also taught. Skills and problem solving involving realistic applications are stressed. Appropriate technology, including graphing utilities, is integrated into the curriculum.

PRE-CALCULUS 106**Fall****Course Code: 02069**

CREDIT: .50

LENGTH: Semester

LEVEL 11-12

PREREQUISITE: Algebra II

An introduction to the basic techniques of algebra. Topics include functions (linear, quadratic, polynomial, root, rational, exponential, and logarithmic), systems of equations, matrix algebra, inequalities, and complex numbers. Optional topics include partial fractions, synthetic division, mathematical induction, sequences and series, and counting principles.

PRE-CALCULUS 107**Spring****Course Code: 02069***

CREDIT: .50

LENGTH: Semester

LEVEL 11-12

PREREQUISITE: Algebra II

An introduction to the tools and techniques of trigonometry. Topics include angles and their measures, the six trigonometric functions and their properties, inverse trigonometric functions, graphs, identities including the Law of Sines and the Law Cosines, trigonometric equations, and solving triangles. Optional topics include complex numbers, De Moivre's Theorem, polar coordinates, and analytic geometry.

GENERAL MATH**Course Code: 02002**

CREDIT .50

LENGTH: Semester

LEVEL 9-12

PREREQUISITE: None

General Math courses reinforce and expand students' foundational math skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures, congruence and similarity, angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities.

PHYSICAL EDUCATION/HEALTH

GRADUATION REQUIREMENT: One P.E. credit and ½ Health credit for Collegiate and Comprehensive Diplomas.

ATHLETIC DEVELOPMENT A

Course Code: 08009

ATHLETIC DEVELOPMENT B

Course Code: 08009*

CREDIT: .50

LENGTH: Semester

LEVEL: 9-12

PREREQUISITE: For Athletes Only

This class is an advanced fitness class designed to help student athletes develop a stronger team culture and stimulate a higher-quality output, through continuous training and alignment. Essential to the athletic routine is that it involves frequent personal interaction and continuous training.

FITNESS AND CONDITIONING A

Course Code: 08005

FITNESS AND CONDITIONING B

Course Code: 08005*

CREDIT: .50 each

LENGTH: Semester

LEVEL: Grades 9 - 12

PREREQUISITE: None

This course is designed to increase the students' overall cardiovascular endurance, strength, agility, and flexibility. Activities will include running, jogging, weight training, plyometric training, agility training, and flexibility training.

LIFETIME ACTIVITIES A

Course Code: 08004

LIFETIME ACTIVITIES B

Course Code: 08004*

CREDIT: .50 each

LENGTH: Semester

LEVEL: Grade 9-12

PREREQUISITE: None

This course is designed to increase students' acquisition of lifetime activities to stay healthy and fit. Activities include individual sports such as tennis, running, and yoga to group sports such as badminton, soccer, volleyball, basketball, team handball and softball

HEALTH

Course Code: 08051

CREDIT: 50

LENGTH: Semester

LEVEL: Grade 9

PREREQUISITE: None

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

CAREER AND TECHNICAL EDUCATION CERTIFICATION PROGRAMS

Graduation Requirement: Must have one Practical Art credit for the Collegiate and Comprehensive Diplomas.

BUSINESS

INTRODUCTION TO CTE (Business, Agriculture and Woods)

Course Code: 22151

CREDIT: .5

LENGTH: One semester, each area on a 6 week rotation

LEVEL: Grades 9 - 12

PREREQUISITE: None

Course Description:

All incoming freshmen will take this class and rotate through each of 3 sections as an introduction to CTE classes so that they may choose one pathway to focus on throughout their high school career in order to receive a CTE Certificate in one of these areas of study.

INTRODUCTION TO BUSINESS - LEVEL 1

Course Code: 12051

CREDIT: .5

LENGTH: One semester

LEVEL: Grades 9 - 12

PREREQUISITE: None

Course Description:

Introduces the application of fundamental business principles to local, national, and international forums. This course examines the relationship of economic systems, governance, regulations, and law upon business operations. It surveys the concepts of career development, business ownership, finance and accounting, economics, marketing, management, operations, human resources, regulations, and business ethics.

PERSONAL FINANCE - LEVEL 1

Course Code: 12149

Credit: .5

Length: One Semester

Level: Grade 9-12

Prerequisite: Level 1 Class

Course Description:

Surveys the basic personal finance needs of most individuals and introduces the personal finance tools useful in planning and instituting a successful personal financial philosophy. The course emphasizes the basics of budgeting, buying, saving, borrowing, career planning, investing, retirement planning, estate planning, insurance, and income taxes. Through project-based learning activities and tasks, students will apply mathematical concepts in realistic scenarios and will actively engage by applying the mathematics necessary to make informed decisions related to personal finance. Financial Literacy places great emphasis on problem solving, reasoning, representing, connecting and communicating financial data.

PRINCIPLES OF MARKETING LEVEL 2**Course Code: 12151**

CREDIT: .5
LENGTH: One semester
LEVEL: Grades 10 - 12
PREREQUISITE: Level 1 Class

Course Description:

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

ACCOUNTING PRINCIPLES I - LEVEL 2**Course Code: 12104**

CREDIT: .5
LENGTH: 1 Semester
LEVEL: Grades 10 - 12
PREREQUISITE: Level 1 Class

Course Description:

This course introduces accounting principles for understanding the theory and logic that underlie procedures and practices for business organizations. Major topics include the accounting cycle for service and merchandising companies, internal control principles and practices, notes and interest, inventory systems and costing, and plant and intangible asset accounting.

ACCOUNTING PRINCIPLES II - LEVEL 3**Course Code: 12104***

CREDIT: .5
LENGTH: 1 Semester
LEVEL: Grades 10 - 12
PREREQUISITE: Level 2 Class

Course Description:

This course continues the application of accounting principles to business organizations. Major topics include corporate equity and debt financing, investments, cash flow statements, financial analysis, budgeting, cost and managerial accounting.

SOCIAL MEDIA FOR BUSINESS LEVEL 3**Course Code: 12167**

CREDIT: .5
LENGTH: One semester
LEVEL: Grades 10 - 12
PREREQUISITE: Level 2 Class

Course Description:

Teaches students how to use social media as a business strategy and covers how to match that strategy with the goals of the business. This course addresses current trends, ethics, regulations, legal challenges, strategy, content development, and change management. This course helps students develop a better understanding of how marketing with social media is similar to and different from traditional marketing and how to best use online methods to further business goals

GRAPHIC DESIGN - LEVEL 3**Course Code: 11152**

CREDIT: .5

LENGTH: One Semester

LEVEL: Grades 10 - 12

PREREQUISITE: Level 2

Course Description:

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

LEGAL ENVIRONMENT OF BUSINESS - LEVEL 3**Course Code:12054**

CREDIT: .5

LENGTH: One Semester

LEVEL: Grades 10 - 12

PREREQUISITE: Level 2

Course Description:

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

PRINCIPLES OF MANAGEMENT - LEVEL 3**Course Code: 12052**

CREDIT: .5

LENGTH: One Semester

LEVEL: Grades 10 - 12

PREREQUISITE: Level 2

Course Description:

Provides an overview of the principles of management. Emphasis is on the primary functions of planning, organizing, staffing, leading and controlling with a balance between the behavioral and operational approaches

BUSINESS LEADERSHIP - LEVEL 4**Course Code: 12049**

CREDIT: .5

LENGTH: One semester

LEVEL: Grades 11- 12

PREREQUISITE: **Level 1, 2****Course Description:**

This course focuses on the leadership skills for contemporary organizations. Covers development and communication a shared vision to motivate and empower employees to manage conflict, to negotiate, and to develop teams.

CAPSTONE BUSINESS ADMINISTRATION - LEVEL 4**Course Code: 12999**

CREDIT: .5

LENGTH: One semester

LEVEL: Grades 11- 12

PREREQUISITE: **Level 1, 2****Course Description:**

This course allows for individualized, advanced, and/or cumulative work in a program of study. This work is individualized to the student within a specific program of study to allow for specialized study. It may include problem-/project-based learning or preparation for industry certification. The specific content and course design is determined by the instructor, in collaboration with the individual student.

BUSINESS WORK BASED LEARNING - LEVEL 4**Course Code: 12998**

CREDIT: .5

LENGTH: One semester

LEVEL: Grades 11- 12

PREREQUISITE: **Level 1, 2****Course Description:**

Students build on prior knowledge and skills in the program of study to further develop and apply employability and technical skills that prepare them for success in future career and postsecondary education.

SCHOOL BASED ENTERPRISE - RETAIL - LEVEL 4**Course Code: 12202**

CREDIT: .5

LENGTH: One semester

LEVEL: Grades 11- 12

PREREQUISITE: **Level 1, 2****Course Description:**

This course is an entrepreneurial operation in a school setting that provides goods/services to meet the needs of a market. Students will learn hands-on retail procedures including customer service, advertising, sales, merchandising and math.

AGRISCIENCE & TECHNOLOGY

INTRODUCTION TO CTE (Business, Agriculture and Woods)

Course Code: 22151

CREDIT: .5

LENGTH: One semester, each area on a 6 week rotation

LEVEL: Grades 9 - 12

PREREQUISITE: None

Course Description:

All incoming freshmen will take this class and rotate through each of 3 sections as an introduction to CTE classes so that they may choose one pathway to focus on throughout their high school career in order to receive a CTE Certificate in one of these areas of study.

INTRODUCTION TO AGRISCIENCE & TECHNOLOGY

Course Code: 18001

CREDIT: .50

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITE: None

An introductory course for first year agriculture education students. This course introduces students to the foundational principles of agriculture, food and natural resources. Students will gain knowledge in career development, leadership, personal development, communications, animal science, plant science, natural resources, food science, power/structure and agribusiness.

PRINCIPLES OF AG POWER, STRUCTURE, AND TECHNICAL SYSTEMS A **Course Code: 18401**

PRINCIPLES OF AG POWER, STRUCTURE, AND TECHNICAL SYSTEMS B **Course Code: 18401***

CREDIT: .50 each semester

LENGTH: Semester

LEVEL I

PREREQUISITE: Intro to Agriculture

A is an introductory course educating students to the basic skills and knowledge in construction and land management. This course covers topics including safety, project management, land site management, irrigation and drainage and agriculture structures and components. Upon completion of this course, proficient students will be prepared for more advanced coursework in agricultural mechanics.

PRINCIPLES OF PLANT SCIENCE A

Course Code: 18051

PRINCIPLES OF PLANT SCIENCE B

Course Code: 18051*

CREDIT: .50 Each Semester

LENGTH: Semester

LEVEL II

Plant Science provides students with knowledge and information about the growth, development, and reproduction of plants used for food, fiber, and beautification. Topics may include plant anatomy and physiology, plant growth processes such as photosynthesis, propagation (reproduction) methods, taxonomy and classification, and plant identification. The course will also highlight developing communication skills, leadership skills, and incorporate a survey of the careers within the plant science industry. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

PRINCIPLES OF FOOD SCIENCE

Course Code: 22203

CREDIT: .50

LENGTH: One Semester

LEVEL: II

Apply principles of nutrition, biology, chemistry and human behavior to the food we eat every day. Refine skills in measurement, following recipes, interpreting food labels and identifying safe storage and processing techniques.

PRINCIPLES OF FOOD PRODUCTION

Course Code: 18305

CREDIT: .50

LENGTH: One Semester

LEVEL: II

Identify changes and trends in local and global food systems while understanding the selection, evaluation and inspection of existing food systems. Learn about the production and distribution channels of both animal and plant products while also recognizing the role of marketing in the food industry

INDUSTRIAL ARTS

INTRODUCTION TO CTE (Business, Agriculture and Woods)

Course Code: 22151

CREDIT: .5

LENGTH: One semester, each area on a 6 week rotation

LEVEL: Grades 9 - 12

PREREQUISITE: None

Course Description:

All incoming freshmen will take this class and rotate through each of 3 sections as an introduction to CTE classes so that they may choose one pathway to focus on throughout their high school career in order to receive a CTE Certificate in one of these areas of study.

PRINCIPLES OF WOODWORKING:

Course Code:13003

CREDIT .50

LENGTH: Semester

LEVEL: 9-12

PREREQUISITE: None

Industrial Arts courses expose students to the tools and machines that they may encounter in manufacturing-related occupations and enable them to develop the skills they need to use these tools in various applications. Course topics typically include (but are not limited to) drawing and planning, graphic arts, and woodwork, This course will cover general safety and career exploration as well.

WOODS I A

Course Code: 17006

WOODS I B

Course Code: 17006*

CREDIT: .50 Each Semester (Must take A & B)

LENGTH: Semester

LEVEL: Grades 9 - 12

PREREQUISITE: None

This course will develop skills in the proper use and identification of hand and power tools while working with wood. Students will build an assigned project the first semester. This is designed to build skills and confidence around the tools inside the shop. After successful completion of the project, students will design and build a project of their choice. A set of criteria will be set for this project. Material cost for this project will need to be paid for in advance. Safe work habits will be stressed along with design, craftsmanship, problem solving, and application of skills. Enclosed shoes and proper work attire will be required at all times. Attendance is crucial in this hands-on course. Students may take initiative to have the ability to make up any time missed for any reason, as completion of each semester's projects is required by the end of the semester to successfully pass the class. There will be a **\$15 lab fee, students must pay for materials for the second project constructed in this class.**

WOODS II A**WOODS II B**

CREDIT: .50 Each Semester

LENGTH: Semester (Must take A & B)

LEVEL: Grades 10 - 12

PREREQUISITE: Woods I

Course Code: 17007**Course Code: 17007***

This course is for students who want to expand their woodworking skills. It will further improve and develop intermediate skills in the use of hand and power tools while working with wood materials. Students will be expected to plan and build a piece of furniture or make a cabinet to meet certain criteria each semester. Safe work habits will be stressed, along with design, craftsmanship, problem solving, and application of skills. Enclosed shoes and proper work attire will be required at all times. There will be a **\$15 lab fee for glue, sand paper, screws, nails and miscellaneous supplies. In addition students must pay for their materials for their projects in advance.** Attendance is crucial in this hands-on course. A successful student will take the initiative to make up any time missed for any reason, as completion of each semester's projects is required by the end of the semester to successfully pass the class.

WOODS IIIA**WOODS III B**

CREDIT: .50 Each Semester

LENGTH: Semester (Must take A & B)

LEVEL: Grades 11- 12

PREREQUISITE: Woods II (Woods I & II A & B)

Required Material: Personal Protective Equipment (Glasses at minimum)

Course Code: 17047**Course Code: 17047***

Woodworking Technology III provides continuing instruction in woodworking with a blend of historic and modern technology skills. This course includes in-depth instruction of hand tools, power tools, custom made tools, advanced woodworking techniques, drafting and wood science.

PROPERTY MAINTENANCE & REPAIR A**PROPERTY MAINTENANCE & REPAIR B**

CREDIT: .50 Each Semester

LENGTH: Semester (Must take A & B)

LEVEL: Grades 11- 12

PREREQUISITE: Woods II (Woods I & II A&B)

Course Code: 17009**Course Code: 17009***

Students will gain knowledge in the basic needs of maintaining residential and commercial property. In addition to general safety, curriculum will include, but is not limited to, the following non-code topics: concrete, framing and finishing walls, basic writing, wood finishing, and electrical topics, mounting a toilet, changing a bath/kitchen fixture, sprinkler systems, changing door hardware, painting, installing roofing and fencing, and basic furniture repairs, and preventive maintenance to name a few.

SCIENCE

The Monte Vista High School offers a wide variety of courses to meet student needs for future goals and avenues for the required credits for graduation.

REQUIRED SCIENCE CREDITS:

COLLEGIATE DIPLOMA: Intro to Science + 3-½ additional Science credits.

COMPREHENSIVE DIPLOMA: Intro to Science + 2-½ additional Science credits.

INTRO TO SCIENCE:

Course Code:03202

CREDIT: .50

LENGTH: One Semester

LEVEL: 9

PREREQUISITE: None

Introduction to Science as a discipline and methodology: Lab based, students learn scientific terminology, literature review and citing sources, proper experimental design, proper lab reports, oral presentation, evidence-based explanations, scientific argument, dimensional analysis, significant digits, etc.

****Required for all students**

INTRO TO BIOLOGY:

Course Code: 03062

CREDIT: .50

LENGTH: One Semester

LEVEL: Grade 9

PREREQUISITE: Intro to Science

Essential concepts in Biology

INTRO TO CHEMISTRY:

Course Code: 03105

CREDIT: .50

LENGTH: One Semester

LEVEL: Grade 9

PREREQUISITE: Intro to Science

Essential concepts in Chemistry

INTRO TO PHYSICS:

Course Code: 03152

CREDIT .50

LENGTH: One Semester

LEVEL: Grade 9

PREREQUISITE: Intro to Science

Essential concepts in Physics

GENERAL BIOLOGY A**GENERAL BIOLOGY B**

CREDIT: .50 each semester

LENGTH: One Semester

LEVEL: Grades 10-12

PREREQUISITE OR CONCURRENT: Intro to Science

Course Code: 03052

Course Code: 03052*

General Biology courses cover biological systems in more detail. Topics that may be explored include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation of organisms. AP Prep

AP BIOLOGY A (Yearly)**AP BIOLOGY B**

CREDIT: .50 each

LENGTH: One Semester

LEVEL: Grade 10-12

PREREQUISITE: General Biology A & B

Course Code: 03056

Course Code: 03056*

AP Biology is a rigorous and demanding class, which serves as the equivalent of an introductory college biology course. Content will be covered in greater depth, with an emphasis on interpretation and analysis of information, linkage of complex ideas and concepts, as well as mastery of content-specific vocabulary and nomenclature. In addition, statistical analysis of data, self-directed scientific inquiry, and modeling of concepts will be expected. Students will be required to spend a significant amount of studying at home to allow time for discussion, labs, and inquiry during class time, and to ensure their success in this course. The AP Biology curriculum encompasses four 'big ideas', with Essential Knowledge and Process Skills that support each one. **Big Idea 1: Evolution** – the process of evolution drives the diversity and unity of life. **Big Idea 2: Cellular Processes (Energy and Communication)** – Biological systems utilize free energy and molecular building blocks to grow. **Big Idea 3: Genetics and Information Transfer** – living systems store, retrieve, transmit, and respond to information essential to life processes. **Big Idea 4: Interactions** – Biological systems interact and these systems and their interactions possess complex properties. At the end of the course, students will have the opportunity to take the AP Biology exam and earn college credit towards an introductory Biology course.

GENERAL CHEMISTRY A**GENERAL CHEMISTRY B**

CREDIT: .50

LENGTH: One Semester

LEVEL: Grade 10-12

PREREQUISITE OR CONCURRENT: Intro to Science

Course Code: 03102

Course Code: 03102*

Chemistry courses cover chemical properties and interactions in more detail. Advanced chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry. AP Prep

AP CHEMISTRY A (Every Other Year)

AP CHEMISTRY B

CREDIT: .50 each

LENGTH: One Semester

LEVEL: Grades 11 -12

PREREQUISITE: General Chemistry A & B

Course Code: 03106

Course Code: 03106*

This is an advanced placement course designed to prepare the student for the AP Chemistry exam. The course covers the equivalent of one full year of college level General Chemistry, comparable to a first-year course at a college or university. The course is a rigorous math-based course, with a strong laboratory component. It is intended for students who have demonstrated a willingness to commit considerable time to studying and completing assignments outside of class, and who have successfully completed a prior course in chemistry during high school. The course will develop the students' ability to incorporate mathematical skills in the solution of chemistry problems, through both the use of textbook problems and laboratory activities. Because passing the AP exam may qualify the student to earn college credit and by-pass a first-year college chemistry course, AP chemistry should not be considered "college prep." Rather this is a college class with college-level expectations for behavior, participation, and effort.

HUMAN ANATOMY AND PHYSIOLOGY A

HUMAN ANATOMY AND PHYSIOLOGY B

CREDIT: .50 Each

LENGTH: One Semester

LEVEL: Grades 11 - 12

PREREQUISITE: Intro to Biology or General Bio A

Course Code: 03053

Course Code: 03053*

This course will provide students an opportunity to explore the sophisticated relationships between structure and function in the human body within the context of evolutionary changes that have led to the modern design of the human body-plan. Students will examine the inner workings of each major body system, and explore topics such as homeostasis, anatomical and physiological disorders, medical diagnosis and treatment, modern and past imaging techniques, biochemistry, cytology, and histology within the remarkable array of body systems that comprise the human body. Laboratory activities using mammalian specimens, plastic models, and online interactive media will reinforce concepts and principles presented in the course.

GENERAL PHYSICS A

GENERAL PHYSICS B

CREDIT: .50 Each

LENGTH: One Semester

LEVEL: Grade 10-12

PREREQUISITE OR CONCURRENT: Intro to Science

Course Code: 03151

Course Code: 03151*

Comprehensive coverage of Physics concepts.



The main objective of Science, Technology, Engineering, and Mathematics (STEM) is to offer students a wide range of opportunities from career readiness and hands-on experience to college preparation. Monte Vista High School STEM Classes set high standards for rigorous and engaging study, developing students' innovative, collaborative, and problem-solving skills.

These classes may count as the third or fourth science or math credit needed for the Comprehensive or Collegiate high school diploma once other science requirements have been met as stated above in the graduation requirements section.

AQUATIC ECOLOGY

Course Code: 03005*

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITE: Intro to Science, Biology Chemistry or Physics

Students will collect, analyze, and present data related to ecological systems they monitor in class or in the field. Students will also be trained as volunteers for the Colorado Parks and Wildlife program, River Watch, where they will learn how to collect stream water samples and perform several chemical tests to determine the health of the river. Students will also learn how nutrients cycle within ecosystems, and how to manage their own "aquaponics" tank.

TERRESTRIAL ECOLOGY

Course Code: 03005

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITE: Intro to Science, Biology Chemistry or Physics

Students will study how organisms interact with one another and with their physical environment. The distribution and abundance of organisms on Earth is shaped by both biotic, living-organism-related, and abiotic, nonliving or physical, factors.

CISCO CERTIFIED NETWORK PROFESSIONAL

Course Code: 10102

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITE:

Introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

FORENSICS

Course Code: 03204

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITE:

Students in the Forensics class will learn the applications of the methods of the natural and physical sciences to matters of criminal and civil law.

ROBOTICS II/INTRODUCTION TO ENGINEERING (Fall)**Course Code: 21009**

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9 - 12

PREREQUISITE: None

This course will use robotics to cover the fundamentals of problem solving, program design, algorithms and programming using an intro-level computer language. A robot is an embedded system of software and hardware. Programming and building robots applies science, technology, engineering and math (STEM) concepts. Students will compete at a robotics competition. The major focus of Intro to Engineering is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation.

INTRO TO ROBOTICS/3D PRINTING (Spring)**Course Code: 10251**

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9 - 12

PREREQUISITE: None

This course will use robotics to cover the fundamentals of problem solving, program design, algorithms and programming using an intro-level computer language. A robot is an embedded system of software and hardware. Programming and building robots applies science, technology, engineering and math (STEM) concepts. 3D Printing is a project-based course for the self-motivated student. It utilizes an interdisciplinary set of technologies that can be applied to solve real-world problems. Students will work independently and/or form teams to identify a project they would like to design and implement. After projects are identified, classes will be working sessions on these projects.

SCIENCE SEMINAR**Course Code: 03999**

CREDIT: 0.5 each semester

LENGTH: Year Long

LEVEL: Grades 9-12

PREREQUISITES: Teacher Approval

This course involves students conducting rigorous, independent research on Science/Math/Engineering topics of their choice. Project designs can be experimental/manipulative (classic “scientific method”), or technological (such as computer programming, robotics, or engineering). The project will culminate with attendance and competition at the San Luis Valley Regional Science Fair (SLVRSF) held in the spring semester. Throughout this process, students will learn how to manage their time and complete a long-term project, conduct a literature review relating to their topic, write a journal-style research report in APA format, use statistics, create a display, and give oral presentations to peers, teachers, and fellow scientists. Students with projects that showcase excellent design and thorough execution may be chosen to compete at the Colorado Science and Engineering Fair (CSEF) or the International Science and Engineering Fair (ISEF) as determined by a panel of judges at the SLVRSF or CSEF.

WEB PAGE DESIGN**Course Code: 10201**

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITES: Teacher Recommendation

This course is an introduction to website management, website graphics, and animation for students who want to learn how to create and manage web pages. Students will learn how to design websites and upload files to the Internet. One of the primary objectives of the class will be the upkeep, design, and expansion of the Monte Vista School District websites.

ZOOLOGY**Course Code: 03061**

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITES: None

This course will introduce students to the wide variety of life found on Earth, and the evolutionary relationships between the major groups. All major forms of life will be investigated using labs, videos, experiments, and discussions, and will include prokaryotes (bacteria), protists, fungi, plants, invertebrate and vertebrate animals.

STATISTICS FOR RESEARCH**Course Code: 02209**

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grades 9-12

PREREQUISITES: None

Statistical analysis is used in designing scientific studies to increase consistency, measure uncertainty, and produce robust datasets.

PHYSICAL EARTH SCIENCES**Course Code: 03007**

CREDIT: 0.5

LENGTH: One Semester

LEVEL 9-12

PREREQUISITES: None

Physical Earth Science courses equip students with an understanding of the constraints and possibilities that the physical environment places on human development. These courses include discussion of the physical landscape through geomorphology and topography, the patterns and processes of climate and weather, and natural resources.

HISTORICAL EARTH SCIENCE**Course Code: 03001**

CREDIT: .50

LENGTH: One Semester

LEVEL 9-12

PREREQUISITES: None

Earth Science courses offer insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography.

ATMOSPHERIC SCIENCE**Course Code: 03006**

CREDIT: .50

LENGTH: One Semester

LEVEL 9-12

PREREQUISITES: None

This course is designed for the student who will be learning about current weather maps; structure of the atmosphere and the role of moisture in the development of dew, clouds, and precipitation; air masses, fronts, cyclones, thunderstorms, tornadoes, and hurricanes. Elements of weather forecasting, instrumentation and communication are included.

INTRO TO MICROBIOLOGY**Course Code: 03060**

CREDIT: .50

LENGTH: One Semester

LEVEL 9-12

PREREQUISITES: None

Microbiology courses provide students with a general understanding of microbes, prokaryotic and eukaryotic cells, and the three domain systems. Additional topics covered may include bacterial control, cell structure, fungi, protozoa, viruses and immunity, microbial genetics, and metabolism.

SCIENCE POTPOURRI**Course Code: 03201**

CREDIT: .50

LENGTH: One Semester

LEVEL 9-12

PREREQUISITES: None

The specific content of Integrated Science courses varies, but they draw upon the principles of several scientific specialties—earth science, physical science, biology, chemistry, and physics—and organize the material around thematic units. Common themes covered include systems, models, energy, patterns, change, and constancy. These courses use appropriate aspects from each specialty to investigate applications of the theme.

SOCIAL STUDIES

Required courses for the Comprehensive and Collegiate diplomas.

- 1. .5 Credits of History**
- 2. .5 Credits of Geography**
- 3. .5 Credits of Government**
- 4. .5 Credits of Economics**
- 5. 1 General Social Studies Credits**

ADVANCED PLACEMENT GOVERNMENT A
ADVANCED PLACEMENT GOVERNMENT B

Course Code: 04159
Course Code: 04159*

CREDIT: .50 Each Semester

LENGTH: Semester (Must take the full year)

LEVEL: Grade 11 - 12

PREREQUISITE: Must be a junior or senior

***Students who take this course must take Economics separately to fulfill the graduation requirement as the course does not cover that topic.**

This course will examine the structure and purposes of government in the United States. This will include the study of the structure and function of the United States government and political system. As part of this study, students will examine important foundational documents and important US Supreme Court cases. The pace and rigor of this class will be more demanding than the regular Government class. The expectation of the students is that they will take the Advanced Placement Government and Politics Test at the end of the year. This course meets the Government credit requirement and .5 credits of general social studies credit required for graduation.

CIVIC GOVERNMENT A
CIVIC GOVERNMENT B

Course Code: 04151
Course Code: 04151*

CREDIT: .5

LENGTH: Semester

LEVEL: Grade 11 - 12

PREREQUISITE: None

This course will examine the structure and purposes of government at the federal, state, and local levels. Part of this will include an in depth study of the US Constitution. Civic responsibility of the citizenry will also be discussed. This course meets the Government credit requirement for graduation.

U. S. HISTORY - CIVIL WAR +

Course Code: 04102

CREDIT: .5

LENGTH: One semester

LEVEL: Grade 9

PREREQUISITE: None

This course will be a survey of the various historic periods of United States History from the Civil War through the Great Depression. Both foreign and domestic topics and their impact on the United States will be covered. This course meets the History credit requirement for graduation.

U. S. HISTORY - World War II +**Course Code: 04103**

CREDIT: .5

LENGTH: One semester

LEVEL: Grade 9

PREREQUISITE: None

This course will be a survey of the various historic periods of United States History from World War II into modern times. Both foreign and domestic topics and their impact on the United States will be covered. This course meets the History credit requirement for graduation.

WORLD GEOGRAPHY**Course Code: 04052**

CREDIT: .5

LENGTH: One year

PREREQUISITE: None

World Geography will be studied by examining the various aspects of geography. Various concepts of geography will be covered. Students will study the geography and cultures of the different regions of the world. This course meets the Geography credit requirement for graduation.

ANCIENT WORLD HISTORY**Course Code: 04058**

Tour the ancient world as we survey the development of civilization from the dawn of history to 1500 CE. This course examines the major cultures such as: China, Japan, India, Egypt, Greece, Rome, Medieval Europe, the Byzantine Empire, Africa, the Islamic Empire, and the Mayan, Aztec, Incan, and Native American worlds. Students will gain a foundation in the world's major religious traditions such as: Buddhism, Christianity, Hinduism, Islam, and Judaism, as well as explore philosophical and political traditions such as Confucianism and Greek thought.

PSYCHOLOGY**Course Code: 04254**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 10 – 12

PREREQUISITE: None

This course is a basic introduction to psychology. It will cover various topics dealing with human behavior. This is an excellent course to take if a student is interested in taking post secondary psychology courses. This course meets a General Social Studies credit requirement for graduation.

SOCIOLOGY**Course Code: 04258**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 10 – 12

PREREQUISITE: None

This course will look at society as a whole. Sociology is the study of society. This class will delve into the structure of society and roles of various groups within societies. Students will become familiar with several different social philosophies and the scientists who devised these theories. This is an excellent course to take if a student is interested in taking post secondary sociology courses. This course meets a General Social Studies credit requirement for graduation.

CURRENT EVENTS**Course Code: 04999**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 9 – 12

PREREQUISITE: None

This course will study various current events. Local, national, and international issues will be discussed from various political perspectives. This course meets a General Social Studies credit requirement for graduation.

WOMEN IN AMERICAN HISTORY**Course Code: 04108**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 10 – 12

PREREQUISITE: None

This course examines the role of women in American History with special emphasis on how the story of women is told by historians over time. It examines the experience of women from various ethnicities and economic backgrounds. In addressing how Americans construct their understanding of women's lives in the U.S., the course will also reassess how focusing on women's lives might alter one's understanding of the broader patterns and interpretations of American History.

HISTORY FAIR**Course Code: 04097**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 9 – 12

PREREQUISITE: None

History Fair, a year-long academic program (completed in a Fall semester course) for 9th to 12th grade students, is centered around historical research, interpretation, and creative expression. For their NHD (National History Day) projects, students become writers, filmmakers, web designers, playwrights, and artists as they create unique contemporary expressions of history. The program culminates in a series of contests at the local and state levels – and an annual national competition in the nation's capital each June.

SPORTS HISTORY**Course Code: 04299**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 9 – 12

PREREQUISITE: None

This course is a study of the history of sports and leisure in the United States Presidency from colonial times to the present, with special attention devoted to the changing social context in which sporting activities have taken place. Other topics of particular interest are the roles of race and gender in shaping the world of sport, and the roles of marketing, professional organizations, and media such as television in examining how sport has become part of the fabric of American life. This course views sport both as reflective of broader trends in American society but also as a catalyst of change.

ECONOMICS**Course Code: 04201**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 11 – 12

PREREQUISITE: None

This course provides students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economics system. This course will also cover principles of macroeconomics, international economics, and comparative economics.

CRIMINAL JUSTICE**Course Code: 04162**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 11 – 12

PREREQUISITE: None

This course provides the philosophical and historical background of the agencies that compose the criminal justice system. It focuses on the development of justice and law, crime and punishment, the administration of laws, the agencies' functions, career orientation and public relations. By the end of the course each student should have a better understanding of the local, state, and federal criminal justice systems.

COLORADO HISTORY**Course Code: 04105**

CREDIT: .5

LENGTH: Semester

LEVEL: Grades 9 – 12

PREREQUISITE: None

This course will explore the historical events, people, groups, cultures, ideas and institutions in what is now the state of Colorado, including the multiple perspectives of gender, class, and ethnicity. The period of study will span the time that Native American Indians were the sole inhabitants through the modern era.

MISCELLANEOUS OFFERINGS

ASU Concurrent Semester 1

Course Code:7000

ASU Concurrent Semester 2

Course Code:7000*

TSJC Concurrent Semester 1

Course Code:1257

TSJC Concurrent Semester 2

Course Code: 1257*

CREDIT: MVHS will grant 1.0 credit for every 3-hours of credit from ASC or TSJC. See counselor for details.

LENGTH: ASC/TSJC semester

LEVEL: Grades 11 - 12

PREREQUISITE: Approval of Principal, Grade Point Average of 3.0 or higher. Must be a course not offered at MVHS or the student is required to take the MVHS course before the college course.

A student who is interested in taking a class at ASC or TSJC and receiving Monte Vista High School credit should set up a meeting with the counselor, the student, and the student's parent(s) to discuss enrollment policy and procedure. A letter explaining the student's wishes and requesting high school credit must be addressed to the counselor at least two months prior to the beginning of class. Transportation, fees, books, and supplies are the responsibility of the student. The school district assumes the cost of tuition. Tuition is paid by the student and reimbursed by the school district upon completion of the class. This opportunity is very limited and academically decided by the high school principal.

INTERNSHIP

Course Code 22995

CREDIT: .50

LENGTH: Semester

LEVEL: Grade 12 and some 11th with special consideration

PREREQUISITE: The setting must meet goals in the student's career plan

Students will have the opportunity to work in a job setting that is aligned with future career and educational goals. The position does not have to be paid; it can be for work experience and credit only. Students are expected to secure the internship themselves and are responsible for their own transportation. The internship learning opportunities will be tied to an academic pathway of study. This class is graded on a pass/fail system, if paid, and does not count toward calculation of Grade Point Average (GPA). If it is not a paid position it may be graded on a letter grade system.

LIBRARY MEDIA CENTER

CREDIT: 0.5

Course Code: 22053

LENGTH: One Semester

LEVEL: Grade 12

PREREQUISITE: Librarian approval

Students explore careers in library science and audiovisual applications by training as a paraprofessional under the MVHS librarian. They learn how the school library operates, about cataloging systems, filing, automated library tools, and the use of other common reference tools. The emphasis is on print, audiovisual technology, and automated formats. On-line retrieval includes use of the Internet, ACLIN, and SWIFT. This is a service-oriented position that facilitates success in education. This class is graded on a pass/fail system and does not count toward calculation of Grade Point Average (GPA).

OFFICE AIDE*

Course Code: 22051

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grade 12

PREREQUISITE: Office secretary approval

Students will explore careers in office work in a school setting by working with office personnel. This class is graded on a pass/fail system and does not count toward calculation of Grade Point Average (GPA).

TECH SUPPORT**Course Code: 10256**

CREDIT: 0.5

LENGTH: One year

LEVEL: 10 – 12

PREREQUISITE: District Network Administrator permission

Students will learn the basics of computer repair and network support. This will include building spare computers, replacing network cabling and equipment, and troubleshooting common computer and network problems. Students will assist the District Network Administrator in many facets of technology support. This class is graded on a pass/fail system and does not count toward calculations of Grade Point Average (GPA).

WORK RELEASE***Course Code: 22998**

CREDIT: 0.5

LENGTH: One Semester

LEVEL: Grade 12

PREREQUISITE: Counselor/Principal approval

Students are given the opportunity to explore careers by working with local businesses. Students are expected to secure employment and make arrangements with the Counselor/Principal. A contract is established between the employer, the school, the student, and his parents. The employer will complete a written evaluation each quarter. (Only granted when all graduation requirements have been met.) This class is graded on a pass/fail system and does not count toward calculation of Grade Point Average (GPA). A maximum of one credit per year will be granted for work release.