

BUSINESS/TECHNOLOGY

COMPUTER APPLICATIONS 9: *Required (9th grade)

Year, 1.0 Credit

This is a required one-year course designed to help students develop computer skills needed for college preparation, business, advertising, graphic design, programming, and personal use. Students will explore applications in four areas throughout the year: productivity, graphic design, coding, and multimedia production. Productivity will be focused around in-depth knowledge of the Google Apps Suite heavily used in college and business. Coding addresses computer science with an introduction and application industry standard coding languages such as JavaScript and Python. Students will also complete a rigorous unit on Adobe's Photoshop graphic manipulation software, where they will apply their graphic design skills in projects revolving around advertising, marketing, and promotions. Finally students will learn how to professionally produce and edit video content focused on business and advertising use.

INTRO TO CODING & WEB DESIGN 10: *Required (10th grade)

Year, 1.0 Credit

This is a required one-year course that will introduce students to the exciting world of web design using HTML, CSS, and JAVASCRIPT coding languages. Students will learn about effective web site creation methods, creating custom web elements, practice efficient debugging practices, implementing responsive design techniques, and how to validate, publish, and maintain a site. Students will be introduced to a wide variety of web tools that apply to productivity, multimedia, and graphic design and that will offer a solid foundation for college and career.

Graphic Design and Audio/Visual Production : (11th and 12th grade)

(*Prerequisite: Computer Applications, Advanced Computer Applications) (With instructor and admin. approval. May be repeated)

Year, 1.0 Credit

This fun and creative class is focused on effective use of deeper level graphic design concepts in areas of layout, typography, and color theory. Students will receive a rigorous unit on using professional level graphic design tools, namely Adobe Illustrator, to complete several projects throughout the year. This class also serves as the graphic design department for the school district, creating posters, web ads etc. for school and district events, giving students real-world design experience. Students will also be introduced to sound engineering when they produce, write, host, and edit their own podcast series. Students will work with sound equipment and learn techniques to record a source professionally. Finally, students will learn professional video editing techniques to produce content for a fictional film company. Students may also get experience having to write, storyboard, and create an animated commercial. All areas will include the students practicing sales and presentation skills by “pitching” their products in a mock corporate setting.

CAREER & COLLEGE PREPARATION

ACT/SAT PREPARATION: Required (11th grade - 2nd SM)

This is a partial-semester program that follows Health for all 11th grade students. This course is designed to prepare the 11th Grade class for their upcoming SAT Test. The class reviews math, science, writing and reading and discusses strategies for success in taking the SAT Test.

JUNIOR/SENIOR SEMINAR: *Required (11th-2nd SM - Follows ACT/SAT PREP)

1 Semester, .5 Credit

This course is integrated with ACT/SAT Prep. Students will focus on developing on exploring post-secondary educational and career opportunities. Students will also be provided with an essay writing workshop to hone their personal essay writing skills in preparation for college and scholarship essay writing.

ENGLISH

ENGLISH 9: *Required (9th grade)

2 Semesters, 1 Credit

This course focuses on literature and writing; includes reading and analysis of a variety of literary genres (short story, drama, epic, poetry, and novel), review the rules of grammar, usage, and mechanics and apply them through written composition, write well-organized and well-developed paragraphs and multi-paragraph essays, and develop oral communication skills through class discussions, small group work, and oral presentations.

ENGLISH 10: *Required (10th grade)

2 Semesters, 1 Credit

Sophomores expand their reading experience with more sophisticated literary works combined with a greater emphasis on formal writing responses to their reading. Students continue to develop their skills in the language arts. In the literature segments of the course, students read short stories, poetry, drama, and tales. In the grammar and composition lessons, students study parts of speech, basic parts and characteristics of sentences, capitalization and punctuation, and the step-by-step development of a paper. This course is integrated with the history program.

ENGLISH 11: *Required (11th grade)

2 Semesters, 1 Credit

In this introduction to American literature juniors read a variety of American authors. Texts range from the Revolutionary War to the 21st century. With connections to American history students develop a literary context to the ideas which formed the United States, developed through time, and are now in use. Writing requirements build on an in-depth analysis of different forms of essay writing, the six-traits of writing, and creative writing.

ENGLISH 12: *Required (12th grade) **or College English 121 and 122**

2 Semesters, 1 Credit

English 12 covers a wide range of British and contemporary authors, while preparing students for the next stage of their life. With an emphasis on writing for different audiences, correcting grammatical mistakes, public speaking, and understanding contemporary issues, students work to develop their potential as writers and critical thinkers.

COLLEGE ENGLISH: ENGL 111 – Colorado Mesa University (fall)

Prerequisite: teacher approval.

(Students with admissible ACT/SAT scores, a 3.00 GPA & Instructor approval, can apply for 3 credit hours with CMU)

2 Semesters, 1 Credit

Honors Class: College English courses are offered through Colorado Northwest Community College. English 111 is an introduction to composition where students study the art of rhetoric. We begin the semester with a look at the craft of creative writing and apply those skills to a “This I believe...” essay. Students will then read many personal essays from Socrates to Fitzgerald to identify elements of rhetoric and develop their own writing process through forming opposing opinions as well as crafting their own opinions into well designed papers.

COLLEGE ENGLISH: ENGL 112 – Colorado Mesa University (spring)

Prerequisite: teacher approval.

(Students with admissible ACT/SAT scores, a 3.00 GPA & Instructor approval, can apply for 3 credit hours with CMU)

2 Semesters, 1 Credit

Honors Class: English 112 is an advanced composition class where students build on their instruction in English 111 and continue to build their rhetorical skills. However, this time they are responsible for performing original research to generate evidence, which will then be argued for or against in papers. One such project will result in a formal speech of 12 minutes to presented to a portion of the student body. The semester culminates in an extended inquiry into a prominent author’s life and work, resulting in a 15 page paper synthesizing research and literature.

YEARBOOK:

Prerequisite: Application/teacher approval

2 Semesters, 1 Credit

Students will learn how to use computers in conjunction with digital cameras and scanners to create the school year’s *Yearbook*. InDesign and PhotoShop are software used. This course is an excellent way for student writers to be heard and explore all aspects of the publishing world.

HUMANITIES

ART FOUNDATIONS:

2 Semesters, 1 Credit

Using a variety of drawing and painting mediums, students will learn the basics of design and drawing. First semester will concentrate on drawing skills with an emphasis on value studies, while second semester will be devoted to understanding of color theory, portraits and figure drawing. Students will continue to incorporate the elements and principles of design as a basis for the creation of each assignment. Every student will use a sketchbook to draw from life, record design ideas and notes from lectures on principles of design and art history. These notes will be used at semester for a mid-term and final exam, as well as a bi-monthly sketchbook grade.

STUDIO ART:

Prerequisite: Foundations in Art (Repeatable course)

2 Semesters, 1 Credit

This course is a repeatable course for students continuing study in drawing and painting. Students will use advanced level assignments in a variety of mediums; graphite, printmaking, colored pencil, watercolor, pastels, acrylic painting and pen and ink, to explore the elements and principles of design. Independent projects will be assigned to students to develop specific individual skills in their area of concentration. Assignments will incorporate art in relation to historical and cultural ideas, as well as, critiques of professional and personal art. Every student will use a sketchbook to draw from life, record design ideas and notes from lectures on principles of design and art history. These notes will be used at semester for a mid-term and final exam, as well as, a bi-monthly sketchbook grade.

PRE AP - DRAWING or 2-D DESIGN:

Prerequisite: Foundations of Art and Studio I

2 Semesters, 1 Credit

This course is a prerequisite to AP Drawing or 2-D design. Students will start their portfolio for college credit. They will start to create a body of work called a "Breath" which are smaller projects that give students ideas and develop artistic abilities in several areas. They will also

be developing an area of “Concentration” which coincides with their Artist Statement. Students will start creating a body of work that reflects this personal area of Concentration.

AP - DRAWING or 2-D DESIGN

Prerequisite: Pre AP Drawing or Pre AP 2-D design

2 Semesters, 1 Credit

This course will complete the body of work that is needed to get college credit in Fine Arts. Students will have completed at the end of the school year, 12 small “Breath” projects towards their portfolio and 12 projects in their personal “Concentration” area. All 12 “Breath” and 12 “Concentration” projects will be sent to the College Board electronically and 5 of the 12 “Concentration” projects will be mailed to the College Board for review and grade at the end of the school year. There is a cost for this class to receive college credit that is paid at the start of the school year.

BEGINNING CERAMICS:

2 Semesters, 1 Credit

Students will learn the basics of hand building, additive and subtractive sculpture techniques. This course includes instruction: coil, pinch and slab pottery techniques, various techniques in glazing, staining etc..., and methods of adding textural surface qualities. First year Ceramics students will also be introduced to throwing on the wheel. If they decide to pursue the wheel throwing course they will learn to throw a bowl and a mug, as well as the basic cylinder. If they decide to follow the handbuilding course, they will create various projects including using various molds, whistles, tile design, raku and horsehair pottery firings.

ADVANCED CERAMICS:

prerequisite: Beginning Ceramics

(Repeatable course)

2 Semesters, 1 Credit

Advanced Ceramics students will have decided which course of interest they want to pursue; either hand building or throwing on the wheel. The wheel throwing course will start with reviewing techniques from Ceramics I (bowls and mugs) then continue into a 6” cylinder, vases, plates, lidded vessels and throwing using larger amounts of clay. They will also be expected to continue with some handbuilding sculptures each quarter. Those students who decided to follow the handbuilding course will be doing projects related to sculptural hand building and refine the craftsmanship and creativity in which this method lends itself. Figurative pots, Altered Cylinder shapes, hand built teapots and cups, an Idiom, as well as,

research and inspiration from potters before the 1400's, are some of the projects these students will create.

HS Band/Jazz Band (9th-12th Grade Repeatable Course) 1 Semester, .5

Credit

This class is open to all 9th-12th grade students who play or would like to play a woodwind, brass, or percussion instrument. The normal prerequisite for high school band class is to have knowledge of musical instruments at the middle school level. (Exceptions will be made and private instruction may be given for students with no experience who wish to learn an instrument). This is a performance class where high energy, hard work, and passionate musicians experience music at an advanced level! The majority of your grade will be determined by your participation in class and practice at home. In addition to school concerts, students will have opportunities to perform outside of school through honor bands, solo and ensemble festivals, and more. Students will perform a variety of musical genres including classical, popular, jazz, etc. and learn the theory and history of music through performance.

HS Choir (9th-12th Grade Repeatable Course) 1 Semester, .5 Credit

This class is open to all 9th-12th grade students who have an interest in singing. No experience is required for this class, just a willingness to work hard. This is a performance class where singers learn to conquer their fear of performance and develop into confident and passionate musicians! In this class students will learn how to read music, how to sing it on sight, how to sing harmony, and how to sing as a member of a large ensemble. Everyone is welcome!

This class will perform concerts every year and students will also have the opportunity to take advantage of other outside performances throughout the year. These performances include honor choirs, select choirs, all-state choir, and festival choirs. In this class you will develop your singing voice and your musical ear. You will be exposed to music of multiple genres and languages and will learn the theory and history of music through performance.

DRUMLINE (9th-12th Repeatable Course) 1 Semester, .5 Credit

This course is for students who have an interest in drums, a passion for school spirit, and an openness to try new things. Some experience in band is preferred. Students should know how to read notated rhythms. This class has a limited number of positions open, and auditions will be given if there are too many registered for the class. This class's performances will be for sporting events. Students who engage in after school sports or other activities are advised not to enroll due to scheduling conflicts.

MusicComposition(9th-12th Repeatable Course) 1Semester .5 Credit

This course is for those interested in writing electronic music. This class will use the writing program Ableton Live to compose music. Other programs will not work unless the student provides his or her own program and laptop.

Guitar/Modern Band (9-12 Repeatable Course):

1 Semester, .5 Credit

This course is designed for beginner guitar players, but accepts students at an upper level too. Students will learn to play various chords, scales, bar chords, and songs that they listen to and a few that they haven't. Performance opportunities will be given as necessary. If the class receives students who play other instruments besides guitar, we will form an ensemble to perform concerts as a rock band.

THEATER PERFORMANCE:

1 Semester, .5 credit

****Fall Pre-Requisite: none***

****Spring Pre-requisite: at least (1) Fall semester, cannot be participating in basketball, soccer, or track.***

Students explore all aspects of dramatic production and work together as an ensemble to learn the fundamentals of acting, improvisation, comedic timing, stage movement, dance, and producing a small to medium scale production. Participation in a public performance will be required as part of the class grade. No previous experience is required for the fall. Students must be willing to work hard *as a team* and commit to **after school** commitments during production weeks and during some Saturdays. *Involvement in sports prohibits students from complying with this expectation, therefore students involved in basketball/soccer/track are ineligible for this class for the **spring** semester only.*

COMPETITIVE SPEECH:

(Extracurricular activity)

This extracurricular activity focuses on developing communication skills through speech writing and competitive tournament performance. The emphasis is on public speaking skills in tournament presentations of literary works in the categories of Original Oratory, Drama, Humor, Poetry, Extemporaneous Speaking, and Duo Interpretation.

FOREIGN LANGUAGE

Spanish Course Descriptions

Spanish I: Required (9th grade):

1 year, 1 credit

This is an introductory course that gives students basic vocabulary, grammar and sentence structure. Fundamental, conversational, reading and pronunciation skills are emphasized.

Spanish II: Required (10th grade):

1 year, 1 credit

Prerequisite: Spanish I

This course is a follow-up to Spanish I and continues study of indicative verb tenses and vocabulary development. Additionally, it includes basic literature and composition, as well as emphasizing conversation.

Conversational Spanish:

This course should be taken for those who did not pass 8th Grade Spanish, or Spanish 1. It can also be used to earn Foreign Language for new students to the district who did not take Spanish previously. This class will focus primarily on the spoken language with an emphasis on real world application. (Teacher approval is necessary for registering in this course.)

Spanish III:

1 year, 1 credit

Prerequisite: Spanish II and a grade of "C" or higher with at-least 70% or better on the final examination.

This course is a continuation of Spanish II. Students begin the study of intermediate level literature and written composition. Emphasis is placed on listening and conversational skills. Students begin master the simple indicative verb tenses.

AP Spanish:

1 year, 1 credit

Prerequisite: Spanish III and a grade of “C” or higher with at-least 70% or better on the final examination.

This course builds upon the skills acquired in the previous three Spanish courses. The emphasis is on further grammatical structures and verb tenses, as well as an introduction to the subjunctive tense. Students continue vocabulary development. A review of literature for the purpose of culture learning will be examined which will allow for a further demonstration of speaking and listening skills.

INDIVIDUAL OPTIONS

CORRESPONDENCE COURSES:

The amount of credit is determined by the instruction from which the course is obtained. Correspondence classes can be taken by a student for classes not offered at RHS, for make-up credit for classes failed at RHS (at student expense), or for unique opportunities. Prior approval by a joint agreement of parent, student, counselor and principal is required.

TEACHER ASSISTANT:

1 Semesters, .50 Credit

The student will work for a teacher, librarian, custodian, cook, or office staff. Possible activities will be typing and/or duplicating materials, scoring papers, preparing charts and bulletin boards, tutoring younger students as well as performing other duties as assigned by the supervising teacher. Grade is Pass/Fail only. A journal and reflective semester essay is required for credit.

A maximum of 2 credits may be used towards graduation requirements.

WORK STUDY / INTERNSHIP:

Prerequisite: Introduction to Business or administrative approval and have Junior or Senior status.

Work-Study offers the student the opportunity to earn high school credit while participating in real world business experiences. Students are required to work a minimum of eighty-five hours for each .5 credit earned. Work-Study requires the collaboration of the student's

employer and prior approval by the principal or counselor. It is the responsibility of the student to maintain the necessary records in order for credit to be awarded. There is appropriate paperwork that must be completed and reflective essays required at semester exams. No more than 2 credits may be earned in Work-Study. Grade is pass/fail only.

INDUSTRIAL ARTS

HS Shop (\$20.00 materials fee. In addition, students must supply their own personal safety equipment or purchase from the school at reduced prices.) 2 Semesters, 1 credit

Woodworking 1 is geared towards the student who wishes to learn about the safety, tools, and techniques of the woodworking trade. We will learn how to properly use the hand tools, power tools, and floor tools commonly found in woodworking shops. We will learn how to handle workshop math as we design, plan and build projects that you will use for years to come.

Woodworking 2 is geared towards the high school student who wishes to delve deeper into the art of woodworking with emphasis on professional behavior and quality. We will focus on the use of power tools as they apply to production and finished quality. We expect each student to design, plan, and produce a functional and classic furniture piece by the end of the term.

MATHEMATICS

ALGEBRA I: *Required

2 Semesters, 1 Credit

Algebra I is the first level course in High School mathematics. Students study algebraic topics of expressions, linear equations and inequalities, functions and piecewise functions, quadratic functions and exponential functions. Throughout the course students will be engaged in writing, solving, and graphing these expressions. Graphing calculators will be used to support student understanding of these concepts.

GEOMETRY:

Prerequisite: Algebra I

2 Semesters, 1 Credit

Geometry is the second course of High School mathematics. The course will introduce the basic properties of points, lines, planes, and both 2 and 3d shapes, as well as coordinate geometry, transformations, congruence, similarity and right triangle trigonometry. Throughout the course, students will use both inductive and deductive reasoning, leading to both informal and formal proofs.

ALGEBRA II:

Prerequisite: Algebra I and Geometry, or Instructor approval

2 Semesters, 1 Credit

This course exposes students to ways in which perceived patterns of behavior in the natural sciences and human endeavor can be described through algebraic functions; and how to solve associated problems. Specifically, the course emphasizes deepening conceptual understanding and procedural fluency in working with the basic family of algebraic functions, their transformations and inverses; in particular polynomial functions as the generalization of the power function, rational functions as the ratio of two polynomials, exponential functions and logistic growth models, and trigonometric functions as the model of periodic behaviors. The course also help students connect algebra to geometry with conic sections; and to statistics by modeling behaviors. Strong emphasis is placed on solving application problems that involve one or more patterns of behaviors; and thinking and reasoning mathematically, modeling with math, and constructing viable arguments to support thinking.

COLLEGE ALGEBRA: (Math 113 – Colorado Mesa University):

Prerequisite: Algebra II

(Students admissible ACT/SAT scores, a 3.00 GPA and Instructor approval, can apply for 4 credit hours with Colorado Mesa University)

1 Semester, .5 Credit

Honors Class: College Algebra is a college level course with the same rigor and expectations of any college or university. College Algebra is a continuation of Algebra II, but going into more depth within each topic. Students will apply the language and properties of functions as well as use graphs of the functions to help interpret and explain each topic. During the course students will explore in detail the following functions: linear, polynomial, rational, exponential, logarithmic, and piecewise-defined functions. Matrices, analytic geometry, the conic sections, and sequences and series are also included. The graphing calculator and real world problem solving plays a major role in this class.

COLLEGE TRIGONOMETRY: (Math 130 – Colorado Mesa University)

Prerequisite: College Algebra

(Students with admissible ACT/SAT scores, a 3.00 GPA and Instructor approval, can apply for 3 credit hours with Colorado Mesa University)

1 Semester, .5 Credit

Honors Class: Trigonometry is a college level course with the same rigor and expectations of any college or university. The class begins with the development of the fundamental functions of trigonometric. Then, by defining Degree and Radian measures, and the Unit Circle, students will develop and evaluate the trigonometric functions using special angles and graphs of the functions. Students will find solutions to right and oblique triangles, solve trigonometric equations, work with trigonometric identities, develop the inverse trigonometric functions, and use vectors to set up and solve problems from areas such as surveying, engineering, science, and aviation. Applying trigonometry to real world problems is continuous throughout this course.

COLLEGE CALCULUS: (MAT 201-Colorado Northwest Community College)

Prerequisite: Admissible ACT/SAT score, College Algebra and Trigonometry with grades of B or better and Instructor approval is required. This is a 5 credit college course offered through Colorado Northwest Community College.

2 Semesters, 1 Credit

Honors Class: College Calculus is a full academic year of work in calculus with the same rigor and expectations of any college or university. Students will work with functions in a variety of ways: graphical, numerical, analytical, and verbal. They will explore in detail four major areas: Limits, Derivatives, Indefinite Integrals, and Definite Integrals, and apply these topics in real world problems.

STATISTICS: (11th- 12th grade)

Prerequisite: Algebra I & Geometry

2 Semesters, 1 Credit

Statistics is the science of systematically studying data in order to make decisions. The two major branches of statistics are (i) describing and drawing meaning from data; and (ii) making inferences about a population given data about a sample of that population. Probability – the study of random behavior – is the bridge between the two branches. This course emphasizes analysis of data (i.e., types of graphs and ways to describe data numerically (shape, center, and spread); statistical studies, including production of data, questioning, bias, and what it means for a study to be “well-designed”; theory versus practice in terms of the probability of an event happening; sampling and estimation (i.e., how to predict outcomes or behavior); and interpretation (i.e., how to test claims, including hypothesis testing). The course relies heavily on discussion, activities, the use of technology, and writing to show how statistics relates to real-world situations.

COLLEGE STATISTICS: (MAT 135-Colorado Northwest Community College)

Prerequisite: Admissible ACT/SAT score, GPA of 3.00 or better, Algebra II with grade of B or better and Instructor approval is required. This is a 3 semester hours college course offered through Colorado Northwest Community College.

1 Semester, 0.5 Credit

Honors Class: College Statistics is a one-semester course of work with the same rigor and expectations of any college or university. Students will explore and apply data presentation and summarization techniques, work with concepts of probability and probability distributions to represent data, and study statistical inference – the science of estimation, hypothesis testing, comparison of populations, correlation and regression.

CAREER MATH: (Math 107– Colorado Mesa University)

Prerequisite: Algebra II

(Students with admissible ACT/SAT scores, a 3.00 GPA and Instructor approval, can apply for 3 credit hours with Colorado Mesa University)

1 Semester, .5 Credit

College Career Math is a college level course with the same rigor and expectations of any college or university. The course is designed to provide students with a practical application to mathematics. Topics include number sense and estimating, common fractions and decimals, ratios and proportions, fundamentals of algebra, plane and solid geometry, and fundamentals of trigonometry. The course is intended to develop mathematical and critical thinking skills with a focus on practical applications and problem solving for technicians.

HISTORY OF MATHEMATICS: (11th - 12th grade)

Prerequisite: Algebra II

1 Semester

This new course (2016 - 2017) covers many interesting topics not usually covered in a present day upper-level math course, as well as certain basic topics such as the development of the calculus and the solution of polynomial equations. The fact that the topics are introduced in their historical contexts will enable students to better appreciate and understand the mathematical ideas involved. The course includes exercises as well as commentary that helps place the math itself in context...If one constructs a list of topics central to a history course, then they would closely resemble those chosen here. The course relies heavily on discussion, activities, the use of technology, and writing to show how mathematics relates to real-world situations.

PHYSICAL EDUCATION

PHYSICAL EDUCATION AND HEALTH: (Required 9th Grade)

1 Semester, .5 Credit

This course provides development of basic physical movement of exercise and games. The course will involve stretching, exercise circuits, and the learning and performance of common games such as soccer, badminton, hockey, etc. This course also includes comprehensive health lessons that focus on nutrition, sexual education, drug abuse prevention, and other topics that provide students with a healthy mind to maintain a healthy body.

WEIGHT TRAINING:

1 Semester, .5 Credit

This course provides development of basic weight training skills to increase and maintain muscular strength, flexibility and body composition. The course will involve: *Muscular strength and conditioning*: circuit training, free weights & exercises & *Relaxation*: stretching, flexibility. Students will perform a personalized fitness profile and be responsible for documenting progress toward personal goals.

SCIENCE

PHYSICAL SCIENCE: *Required (9th grade)

2 Semesters, 1 Credit

This introductory science class will introduce students to elementary chemistry and physics with integrated concepts from Earth/space sciences. Chemistry concepts include properties of matter (physical, chemical and nuclear), the periodic table and periodic trends, bonding, and chemical reactions. Physics concepts include dynamics, kinematics, energy, and circuits.

BIOLOGY: *Required (10th grade)

2 Semesters, 1 Credit

Students taking this class will learn basic principles of Biology. In this course we explore all elements of life - from the ecology and interactions of ecosystems to human sciences (cells, tissues, organs, organ systems) and genetics. This class will be rich with hands-on explorations (Semester 1) and dissection opportunities (Semester 2).

CHEMISTRY:

Prerequisite: Semester grades of "C" or better in Physical Science & Biology or approval of instructor

2 Semesters, 1 Credit

Chemistry studies matter and the interactions of matter. Topics include the periodic table, chemical reactions, atomic theory, bonding, reactions, solutions, equilibrium, and thermodynamics. This class emphasizes a problem solving approach and laboratory investigation.

ANATOMY & PHYSIOLOGY:

Prerequisite: Biology or approval of instructor.

2 Semesters, 1 Credit

Anatomy and Physiology is an in depth study of human systems including musculoskeletal, nervous, digestive, respiratory, reproductive, etc. This class covers the locations, names, and functions of structures as well as the interrelationship between the systems. This class uses dissection of preserved specimens throughout the year.

ASTRONOMY:

Prerequisite: Physical Science or approval of instructor; geometry or higher

2 Semesters, 1 Credit

Astronomy focuses on learning more about Earth, our Solar System and distant objects in space through the study of light using Earth and space-based technologies. Geology, physics and chemistry concepts are integrated. Topics include archaeoastronomy, light & optics, space exploration, geology of the Moon, internal and external processes of Earth and other planets, stellar and galactic astrophysics, the history and fate of our universe, and astrobiology. Evening observing nights are incorporated throughout the year. Instruction includes a mix of hands-on labs and activities, project-based learning and some lecture.

PHYSICS:

Prerequisite: Semester grades of "C" or better in

Physical Science & Biology or approval of instructor; algebra II or higher

2 Semesters, 1 Credit

Physics studies the elementary interactions in the Universe. Topics include dynamics, kinematics, work and energy, waves, electricity, and magnetism. This class utilizes the modeling approach, in which comprehension and understanding are developed using laboratory data before focusing on mathematical computations.

SOCIAL STUDIES

WORLD GEOGRAPHY & CULTURES: *Required (9th grade)

2 Semesters, 1 Credit

This course explores relationships between people, their physical environments, and society. While studying the major geographical regions of the world, students will learn how the features of landscape, climate, and natural resources influence culture, economics, and history. This course emphasizes using and developing communication and research skills with a focus on current events and how history has shaped contemporary issues of the interconnectedness of our world culture.

WORLD HISTORY: *Required (10th grade)

2 Semesters, 1 Credit

This course balances a study of the rise of western civilization with the history of non-western regions such as Asia, Africa, Latin America, and the Middle East. Major themes include the emergence of various civilizations and forms of government, worldviews of philosophy and religion, human conflict, culture and innovation, colonialism and imperialism, revolution and globalization. While developing a broad chronological organization of world historical events, students will identify and explain historical relationships, use a variety of primary and secondary sources, and explore how science, technology, economics, arts, and culture have developed and changed over time. Research, writing, organization, and discussion skills are emphasized in World History.

UNITED STATES HISTORY: *Required (11th grade)

2 Semesters, 1 Credit

This course covers events from America at the time of colonial settlement to the present. Major themes include: formation of a new country, development of an American identity, geographic and economic growth, and the assumption of global role for the United States. While developing a broad chronological organization of American historical events, students will identify and explain historical relationships, use a variety of primary and secondary sources and explore how science, technology, economic activity, and arts and culture have developed, changed and affected American society over time. This course will also introduce students to political, military, economic, cultural and social lenses through which to view history. Research, writing, organization and discussion skills are emphasized in U.S. History.

AP UNITED STATES HISTORY: *Required (11th grade)

2 Semesters, 1 Credit

This course covers events from America at the time of colonial settlement to the present. Major themes include: formation of a new country, development of an American identity, geographic and economic growth, and the assumption of global role for the United States. While developing a broad chronological organization of American historical events, students will identify and explain historical relationships, use a variety of primary and secondary sources and explore how science, technology, economic activity, and arts and culture have developed, changed and affected American society over time. This course will also introduce students to political, military, economic, cultural and social lenses through which to view

history. Research, writing, organization and discussion skills are emphasized in U.S. History. Upon completion of the course, students will complete the AP U.S. History exam and may earn college credit.

For more information, please visit the website below:

<https://advancesinap.collegeboard.org/english-history-and-social-science/us-history>

UNITED STATES GOVERNMENT: *Required (12th grade)

1 Semester, .5 Credit

U.S. Government is divided into two sections. The first section examines the framework and function of federal, state and local governments. Major topics include the Constitution, the legislative, executive and judicial branches, federalism, political ideology and participation, civil rights and civil liberties, and various topics in public policy and foreign policy. Moreover, students will analyze current events in the context of government, politics and economics. The second section examines the role of economics in government, with particular attention to the basic principles of microeconomics and macroeconomics. Major topics include: law of supply and demand; saving, borrowing, and spending; the Federal Reserve System and the money supply; and the role of government in an open market economy.

History Through Film: Elective (2 semesters, 1 credit)

In this class, students will study modern American history through the medium of film. This will be done through viewing, writing, and discussing both historical and contemporary pieces on topics related to the political, social, economic, and racial history of the United States. Grouped thematically, students will examine the historiography of slavery, the Great Depression, the Holocaust, the Second World War, the Civil Rights Movement, and Vietnam. Besides examining these historical events, students will examine the legacy of racism, poverty, corruption, patriotism, civics, and ideology on contemporary American culture. In addition to each film's historical and cultural importance, the course will also concentrate on film appreciation and the study of cinematography.

AP Human Geography: Elective (fulfills 9th grade requirement) (Any grade)

2 Semesters, 1 Credit

The purpose of the AP course in Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Upon completion of the course, students will complete the AP Human Geography exam and may earn college credit.

For more detailed information visit the College Board website:

<https://apstudent.collegeboard.org/apcourse/ap-human-geography/course-details>

Personal Finance/Consumer Economics: *Required (Fulfills graduation requirement) (1 semester .5 credits)

In this introductory finance course, students learn basic principles of economics and best practices for managing their own finances. Students learn core skills in creating budgets, developing long-term financial plans to meet their goals, and making responsible choices about income and expenses. They gain a deeper understanding of capitalism and other systems so they can better understand their role in the economy of society. Students are inspired by experiences of finance professionals and stories of everyday people and the choices they make to manage their money.