

***Roberts School
District***

Course Catalogue



ROCKETS

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Agricultural Education 7/8

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

None

Course Description:

This course exposes seventh and eighth grade student to the Roberts Ag-Ed program. Students will be exposed to safe shop procedures, wood working tools, wood project construction, Supervised Agriculture Experience (SAE) and FFA.

Learner Outcomes:

1. Develop proper safety habits when working in the shop area.
2. Demonstrate the skills needed to plan and fabricate a shop project.
3. Explore a Supervised Agricultural Experience.
4. Practice making decisions using the decision making process.
5. Develop skills and knowledge of FFA

Agricultural Education I

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

None

Course Description:

This course is an introductory vocational agriculture class. A broad range of agricultural topics will be covered. Topics will include leadership development, agricultural mechanics, animal science, agricultural business, natural resource management, and FFA. Students will learn to safely operate hand tools and shop equipment. They will construct projects for FFA activities and FFA fundraising.

Students may participate in FFA activities. This course will require students to establish a Supervised Agricultural Experience (SAE), develop skill for Career Development Events (CDE), participate in Leadership Development Events, and Personal Development Activities.

Learner Outcomes:

1. Develop knowledge and skills in range plant identification, range management, and range improvements.
2. Practice greenhouse operation, plant production, soil analysis, fertilization, and weed control.
3. Demonstrate the skills needed to plan and fabricate a shop project.
4. Demonstrate the safe use of power tools and construct a wood project.
5. Practice beef production and animal husbandry.
6. Identify work place competencies and foundation skills needed for employment.
7. Identify personal career paths and Supervised Agricultural Experience.
8. Develop public speaking skills.
9. Demonstrate the ability to make decisions using the decision making process.
10. Develop skills and knowledge of FFA

Agricultural Education II

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

Agricultural Education I or another Agricultural Education Course

Course Description:

AG II is the second year of the Roberts High School Ag-Ed program. This class offers students the opportunity to continue their development of knowledge and skills covering the areas of agricultural sciences, agricultural mechanics, automotive mechanics, building construction, production horticulture, leadership development, public speaking, FFA, and their Supervised Agriculture Experience.

Learner Outcomes:

1. Further develop knowledge and skills in range plant identification, range management and range improvements.
2. Practice greenhouse operation, plant production, soil analysis, fertilization, and weed control.
3. Develop basic carpentry skills needed for building construction.
4. Develop competencies in the areas of arc welding, plasma cutting, and oxy welding.
5. Practice beef production and animal husbandry.
6. Practice work place competencies and foundation skills needed for employment.
7. Continue to develop personal career paths and Supervised Agriculture Experience.
8. Develop positive leadership roles and responsibilities.
9. Further develop skills and knowledge of FFA

Agricultural Education III

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

Agricultural Education I or II

Course Description:

Agricultural Education III is a combination of applied sciences, mechanical skills, business applications and construction practices to further improve both production agriculture and agribusiness students. Students will participate in a wide variety of activities including internal combustion, alternative energy sources, agriculture construction, crop pests and diseases, hydroponics, irrigation practices, animal genetics, livestock feeds and feeding, personal development, safety in agriculture, financial situation analysis and credit. Students will continue participating in a SAE activity and complete a proficiency award application

Agricultural Education IV

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

Two (2) Agricultural Education Courses

Course Description:

Agricultural Education IV is designed to meet the needs of students who plan to further their education as well as those who plan to seek employment upon graduation. Students will participate in activities including advanced agribusiness, marketing, agricultural law, precision agriculture, horticulture, animal pests and diseases, and career skills. Students will summarize their SAE (supervised agricultural experience) by applying for their State FFA Degree.

Agronomy 9-12

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

None

Course Description:

This course will study the basic fundamentals of plants and soil science and range management. Students will learn how to identify the various grasses, and shrubs that are native to Montana's range and are important to both cattle and wildlife. They will learn to calculate the amount of feed available on the range and look for indicators as to its health. Students will study various seeding and plant propagation techniques as well as photosynthesis, reproduction, essential plant nutrients, fertilizer and chemical applications. Students will study basic soil types, and various growing media. They will learn how to raise plants hydroponically in a soilless environment. Finally, students will study insect and weed pests and the biological and chemical control of these pests. Students will gain experience in greenhouse production practices, as they raise and sell horticultural crops. Students will also be taught some basic turf grass management strategies, floriculture, landscape design and landscape construction practices. Class time will be divided between classroom instruction and hands on activities in the green house.

Agricultural Education / Independent Study 11/12

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

None

Course Description:

Students will select and build a variety of woodworking and metal projects. Projects are Students ideas and for student use with the instructors approval. Projects need to be practical and useful in nature. Students will be required to finance the materials used on any personal project. Class time will be greatly hands on in the shop. All students will be encouraged to have a supervised agriculture experience program, and to be involved in FFA activities.

Small Motors 11/12

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

None

Course Description:

This course will consist of the theory and maintenance of the internal combustion engine. Students will completely tear down a small four cycle gas engine. Students will study proper vehicle maintenance, as they study the various systems including the fuel and carburetor system. Students will study the operation, maintenance and calibration of basic farm machinery. Student will also use metal fabrication tools and woodworking tools to build projects. Class time will be divided between hands on activities in the shop and classroom instruction. All students will be encouraged to have a supervised agriculture experience program, and to be involved in FFA activities.

Metal Working 11/12

Text Used:

Various outside resources based on teacher discretion

Prerequisite:

Agricultural Education II

Course Description:

This course will consist of the theory and maintenance of the internal combustion engine. Students will completely tear down a small four cycle gas engine. Students will study proper vehicle maintenance, as they study the various systems including the fuel and carburetor system. Students will study the operation, maintenance and calibration of basic farm machinery. Student will also use metal fabrication tools and woodworking tools to build projects. Class time will be divided between hands on activities in the shop and classroom instruction. All students will be encouraged to have a supervised agriculture experience program, and to be involved in FFA activities.

Band 7/8; 9-12

Text Used:

Standard of Excellence Band Method Books

Prerequisite:

5th and 6th Grade Band, preferably

Course Description:

The course will allow students to study and perform repertoire including General Pep Band charts, Concert/Festival pieces, and Jazz Band charts. Students will also have the opportunity to do solo and small ensemble work for concerts and Festival. Music is a valuable part of public education, and to better appreciate that value, this class will also touch on music theory, composers and history, as well as aural skills. The student of music employs both “sides” of the brain (logical and creative), so expect to develop not only into better musicians, but also better students. Individual practice time, sectional work, and group rehearsals are essential to the success of the student individually, and is imperative to building a dynamic group.

Choir 7/8; 9-12

Text Used:

None

Prerequisites:

None

Course Description:

The course will allow students to study and perform repertoire including Concert/Festival scores, Folk and jazz styles, women’s and men’s ensemble and solo material. Music is a valuable part of public education, and to better appreciate that value, this class will also touch on music theory, composers and history, as well as aural skills. The student of music employs both “sides” of the brain (logical and creative), so expect to develop not only into better musicians, but also better students. Individual practice time, sectional work, and group rehearsals are essential to the success of the student individually, and is imperative to building a dynamic group.

Theatre 9-12

Text Used:

Acting for Life: A Textbook on Acting (Meriwether Publishing) 2008

Prerequisite:

None

Course Description:

Students who enroll in Theatre 1 will get a complete understanding of the basics in acting/drama. They will learn and understand character development, play analysis, blocking, lighting, script reading, directing, working with other actors, intros and exits, body and face movement, one-acts, monologues, working our voice, character emotion, cues, stage fighting, projecting, observing, and theatre etiquette. In addition, students will give at the minimum one live, public performance. Depending on the school calendar, a second performance will be possible in spring. We will take various field trips to a couple of stages in Billings, as well, participate in viewing a live performance.

Grading:

Grading will be completed on a total point system. The grading scale used will be the grading scale adopted by the Roberts Public School. The class will consist of performance, participation, effort, and weekly activities.

Learner Outcomes:

1. Know and understand how to project with your voice
2. Know and understand how to effectively “block” out a scene
3. Know how to and effectively work with other actors at the same time
4. Understand how and why props are important
5. Understand and demonstrate “entrances” and “exits” of the stage
6. Know and understand stage direction
7. Know and understand stage etiquette
8. Know how to pick up and apply “ques”
9. Understand character development
10. Know how to analysis a play for meaning
11. Understand how emotions work in theatre
12. Obtain knowledge about lighting, state movement, and costuming.

Keyboarding 7

Text Used:

Century 21 – 7th Edition, (Southwestern Publishing) 2002 – 20 copies
Various Websites

Prerequisite:

None

Course Description:

The course will focus on Keyboarding.

Keyboarding will be taught on computers with general computer skills such as turning on the computer, entering a desired program and backing out. The following units are covered: home row, mastery of keyboard, general typing techniques, letter forms, report forms, job application of skills, timed writings, printing, saving and recalling data.

Word Processing 8

Text Used:

Century 21 – 7th Edition, (Southwestern Publishing) 2002 – 20 copies

Prerequisite:

Keyboarding 7

Course Description:

The course will continue from Keyboarding 7 and move on to application. Programs that will be used are:

Microsoft Office 2007/2010
Animating Programs
Internet Search
Windows 7

The class will work in conjunction with other classes as well to meet student needs.

Informational Technology

Text Used:

Access It! (Business Education Publishing) 2008 – 14 copies
Various Materials

Prerequisite:

None

Course Description:

The course will enhance general skills and techniques necessary to use Microsoft Office products. The students will also learn how to send electronic e-meetings and acquire skills to research using the internet. The following topics will be covered:

- 1) Intermediate to Advanced skills using Microsoft Word 2007/2010
- 2) Basic to Intermediate skills using Microsoft Excel 2007/2010
- 3) Basic to Advanced skills using Microsoft PowerPoint 2007/2010
- 4) Basic skills using Microsoft Access 2007/2010
- 5) Internet Usage
 - a. Search Engines
 - b. Researching Skills
 - c. E-mailing
 - d. Skype
 - e. Google Drive

Introduction to Business

Text Used:

Glencoe: Introduction to Business 2008 – 10 copies
Various outside sources and Guest Speakers

Prerequisite:

None

Course Description:

Students enrolled in Introduction to Business will be covering a broad range of topics dealing with business and the free enterprise system. Students will be able to identify and apply the strategies for succeeding in a business as well as forming a business plan. During the course students' participate in the state wide Business Challenge. Advertising and marketing of business products along with the management of business resources will also be addressed.

Learner Outcomes:

1. Understand business principles, types of business ownership, entrepreneurship and requirements.
 - a. Know and be able to apply the principles of supply and demand, profit and loss, private and public companies.
 - b. Know and be able to compare sole proprietorships, partnerships, corporations.
 - c. Be able to identify and manage startup costs, operating expenses, and cash flow.
 - d. Be able to identify and manage payroll costs and insurance requirements.
2. Understand how to determine the potential and impact of a business.
 - a. Be able to perform a market analysis, analyze the profit potential, and perform a break-even analysis.
 - b. Be able to identify and manage the regulations with relation to environmental, ethical and social factors.
3. Be able to apply strategies for succeeding in business.
 - a. Know and be able to apply the benefits of projecting a positive image and providing added service to customers.
 - b. Know and be able to apply the methods of purchasing and pricing.
 - c. Know and be able to apply the methods and strategies for and effects of marketing.
 - d. Know the environmental, ethical, and social impact of a business.
4. Understand the operations of the American free enterprise system.
 - a. Know and be able to apply the principles of supply and demand.

Continue: Introduction to Business

- b. Know and be able to apply the principles of profit and loss (margin, break even, overhead, volume).
 - c. Know about private and public companies.
- 5. Understand how stocks and the stock market work
 - a. Know and be able to apply trading
 - b. Know and be able to apply short selling
 - c. Know and be able to apply brokerage fees
 - d. Participate in the Stock Market Game
- 6. Be able to apply strategies to form a business plan
 - a. Know and be able to apply parts of a business plan
 - b. Know and be able to apply financing
 - c. Know and be able to apply formation of a business plan

Accounting I

Text Used:

Glencoe Accounting: Real World Applications & Connections, (McGraw Hill), 2000 –
12 copies plus teacher edition

Prerequisite:

None

Course Description:

Students enrolled in Accounting I will complete the basic accounting cycle for a sole-proprietorship, discuss cash control and banking, prepare payroll accounting, and complete the accounting cycle for a merchandising corporation. Students will be required to complete homework, quizzes, projects, and tests dealing with the information covered in class.

Learner Outcomes:

1. each student completing Accounting I will possess the skills to begin Accounting II.
2. define an asset, liability, owner's equity, revenue, and expenses
3. know the basic and expanded accounting equation
4. journalize and post transactions
5. prepare financial statements
6. complete the accounting cycle
7. understand basic banking activities for a business
8. understand basic payroll accounting and tax records
9. be able to prepare special journals (sales, cash receipts, purchases, and cash payments)
10. complete adjustments for a merchandising business
11. complete financial statements for a corporation

Accounting II

Text Used:

Glencoe Accounting: Real World Applications & Connections (McGraw Hill) 2000 – 5
copies plus teacher edition

Prerequisite:

Accounting I

Course Description:

Students enrolled in Accounting II will be able to understand advanced, general, cost, and managerial accounting principles and procedures. The class will cover accounting for assets, liabilities, and equity in a detailed manner. In addition, the class will understand business information and accounting for different types of businesses. The class will consist of both manual and computerized accounting and students will complete an accounting simulation. During the course, students are required to complete homework, quizzes, projects, and tests dealing with the information covered in class.

Learner Outcomes:

- A. Understand advanced general, cost, and managerial accounting principles and procedures.
 - a. Accounting for inventories
 - b. Short term assets and long term assets
 - c. Inventory accounting
 - d. Intangible assets
 - e. Notes Payable, current liabilities, long term liabilities and stockholders' equity.
- B. Understand the preparation and utilization of departmental records.
 - a. Statement of cash flow
 - b. Preparing financial statements.
 - c. Comparative Analysis
 - d. Cost-Volume-Profit Analysis
- C. Understand accounting for other forms of organizations
 - a. Not for profit
 - b. Partnerships

Computer Applications – Semester Class

Software Used:

Adobe Photoshop (CS4/CS5)/ Gimp
Adobe Premier-Pro
Adobe In-Design
Publisher 2007/2010
Google Sites

Prerequisite:

Information Technology 9

Course Description:

This course will address techniques required to produce various desktop publishing materials, including but not limited to: Business cards, Menus, Flyers, Posters, and Letterheads. Students will go through a 14 part simulation of a pizza company in creating all the documents needed for the business.

This course will also address techniques required to produce a marketable yearbook. Items that will be incorporated are computer layout skills, along with various beginning Photoshop editing techniques.

Students will be required to meet deadlines, take photographs, design and layout various assigned pages of the yearbook. The final product will be sold with a distribution date in the fall of the following school year.

This course will also address skills and techniques for editing and creating photographs via Adobe Photoshop. Students will attain the basic to intermediate skills that Photoshop has to offer. Students will use this program to assist with creating yearbook pages.

Finally, students will gain an opportunity to learn and understand web design. They will learn the layout and design in Google Sites. Students will understand what a creative and marketable web site looks like and stands for.

Advanced Media and Communications – Semester Class

Software Used:

Adobe Photoshop (CS4/CS5)/ Gimp
Adobe Premier-Pro/ Microsoft Movie Maker/Camtasia
Adobe Soundbooth
Microsoft PowerPoint
Blender

Prerequisite:

Information Technology 9

Course Description:

This course utilizes media software to edit photos, movies, music and create animations. The students will produce various types of media, including but not limited to: Graduation Announcements, Graduation PowerPoint, Edited Music, Beatles Submarine, Yearbooks, and Movies.

The students will use advanced Adobe Photoshop/Gimp techniques to create Graduation Announcements and pages in the Yearbooks. Adobe Premere-Pro/Microsoft Movie Maker/Camtasia will demonstrate intermediate skills to create a short video. Students will create mixed song and sound effects using Adobe Soundbooth. While exploring different media careers the students will utilize animation software (Blender, etc.) to create the Beatles Submarine.

This course will require students to take video, digital pictures, and follow tutorials to create the above tasks. The students will incorporate the software in real life situations and use several of the above programs to create various assignments.

Street Law

Text Used:

Street Law – A Course in Practice Law 5th Edition, (West Publishing Co.) 1994 – 18
copies
Various outside materials and community resources

Prerequisite:

None

Course Description:

The course will address practical laws in everyday life. The course is designed to provide students the ability to analyze, evaluate, and in some situations, resolve legal disputes. The text covers problems dealing with the most current law related issues such as guns, gangs, hate crimes, etc.

The class should provide practical information and problem solving opportunities that develop the student's knowledge and skills necessary for survival in our law-saturated society.

Personal Finance

Text Used:

Managing Your Personal Finances 4th Edition, 2002 – 10 copies plus teacher edition
NEFE High School Financial Planning Program
Various Materials

Prerequisite:

None

Course Description:

The Personal Finance course will feature skills that will assist the student to succeed financially. The students will learn, but not be limited to: Checkbook Writing, Goal Setting, Financial Planning, and Banking.

Each student is required to take careful notes on a daily basis, recording them in a special notebook for this class only. Notes must be organized in an orderly fashion along with handouts and other materials. Students will be responsible for all assigned reading from the text book and other sources. Finally the course requires the student to be able to balance a checkbook and have intermediate understanding of financial literacy.

German 7/8

Text Used:

Deutsch Wird Hier Gesprochen (Allen) 2000

Prerequisite:

None

Course Description:

This course, consisting of one semester during the 7th grade year and one semester during the 8th grade year, intends to serve as an introductory survey of German language and world cultures. During each semester, students will learn basic speaking skills, with emphasis placed on introductory grammar. Students will also be introduced to cultures and societies worldwide, which utilize German as a first or official language. In order to achieve academically in German 7-8, students must participate fully.

German I

Text Used:

Komm Mit Level 1 (Holt, Rinehart and Winston) 1995 – 13 copies

Prerequisite:

None

Course Description:

This course, consisting of two consecutive semesters, intends to serve as an introductory survey of the German language, and also addresses German world cultures. During each semester, students will learn and practice basic speaking skills, with emphasis placed on German grammar rules. As the first semester progresses, both the instructor and the students will use German frequently to communicate in class. By the end of the second semester, students will be able to write and speak German at a beginning conversational level, utilizing simply structured subject/verb/direct object sentences in past, present, and future tenses. In order to achieve academically in this course, students must participate fully.

German II

Text Used:

Komm Mit Level 2 (Holt, Rinehart and Winston) 1995 – 5 copies

Prerequisite:

German I

Course Description:

This course, consisting of two consecutive semesters, intends to serve as an advanced survey of German Language. The course will continue to address German world cultures. During each semester, students will learn and practice intermediate speaking skills with emphasis placed on intermediate grammar and vocabulary. Grammar lessons will be based on German grammar rules. During each semester, both the instructor and the students will use German frequently to communicate in class. By the end of the second semester, students will be able to write and speak German at an intermediate level, utilizing subject/verb/direct object sentences in past, present, future, and conditional tenses. In order to achieve academically in this course, students must participate fully.

English 7

Text Used:

Heath Grammar and Composition, 7th Grade (D.C. Heath) 1986
The Language of Literature 7

Prerequisite:

None

Course Description:

This course intends to serve as an introductory survey of secondary language arts, with emphasis placed on English grammar (usage, punctuation) and writing skills (mechanics). During the course of each semester, various novels, short stories, and poetry will be introduced in combination with rhetorical and critical analysis. Students will be required to read in class and at home in order to fulfill the literature component of 7th grade English.

English 8

Text Used:

Heath Grammar and Composition, 8th Grade (D.C Heath) 1986
The Language of Literature 8

Prerequisite:

English 7

Course Description:

This course intends to serve as a continuation of the 7th grade introductory survey of secondary language arts. Emphasis will again be placed on English grammar (usage, punctuation) and writing skills (mechanics). During the course of each semester, various novels, short stories, and poetry will be introduced in combination with rhetorical and critical analysis. Students will be required to read in class and at home in order to fulfill the literature component of 8th grade English.

English 9

Text Used:

Elements of Writing: 2nd Course (Holt, Rinehart, Winston) 1987 – 15 copies
Heath Grammar and Composition, 9th grade
Patterns in Lit (Scott Foresman) 1989 – 20 copies

Prerequisite:

None

Course Description:

The course includes language usage, vocabulary, spelling, reading and writing. The language and grammar usage will emphasize correct mechanics, such as punctuation, correct sentence, paragraph and composition structures. These will be applied as they relate to student compositions, many of which will be based on literature read in class.

English 10

Text Used:

Elements of Writing: Third Course (Holt, Rinehart, Winston) 1986 – 17 copies
Heath Grammar and Composition, 10th grade
Traditions In Lit (Scott, Foresman) 1989 – 21 copies

Prerequisite:

English 9

Course Description:

The course includes language usage, vocabulary, spelling, reading and writing. The language and grammar usage will emphasize correct mechanics, such as punctuation, correct sentence, paragraph and composition structures. These will be applied as they relate to student compositions, many of which will be based on literature read in class.

English 11

Text Used:

Elements of Writing, Grade 11 (Holt, Rinehart, Winston) 1998 – 18 copies
Heath Grammar and Composition, 4th Course (D.C. Heath 1986) – 21 copies
Elements of Literature, 5th Course (Holt, Rinehart, Winston) 1997 – 17 copies
Novels: The Crucible, The Scarlet Letter, Grapes of Wrath, Huck Finn

Prerequisite:

English 10

Course Description:

This course intends to serve as a survey of secondary language arts, grammar and literature. Students will develop writing skills, critical analysis and thinking skills.

Rhetorical skill – the ability to successfully write, revise and edit one’s work, will be addressed. During each semester, students will read a variety of American literature including poetry, short stories, plays and novels, and will learn to analyze literature. Students will be expected to read assigned novels and possibly novels of their own choosing approved by the instructor

English 12

Text Used:

Elements of Writing (Holt, Rinehart, Winston) 1998 – 17 copies

The Language of Literature: British Literature

Heath Grammar and Composition, 5th Course (D.C. Heath 1986) – 20 copies

Novels: Beowulf/Sir Gawain and the Green Knight, Jane Eyre, Great Expectations, Pride and Prejudice

Prerequisite:

English 11

Course Description:

This course intends to serve as an advanced survey of secondary language arts, grammar and literature, with emphasis placed on English literature. Students will continue to develop research and writing skills, critical analysis and thinking skills. Again, rhetorical skill – the ability to successfully write, revise and edit one’s work, will be addressed at the post-secondary level. During each semester, students will read a variety of literature including poetry, short stories, plays and novels, and will analyze literature. Students will be expected to read assigned novels and possibly novels of their choosing approved by the instructor

Advanced Literature 11/12

Text Used:

Novels, short stories, poems and non-fiction pieces will vary dependent upon availability and approach

Prerequisite:

English 10

Course Description:

This course is intended to supplement and enhance the reading done in the regular English classes. An attempt will be made to acquaint the students with authors and styles outside of traditional scope as well as experiencing classic readings. Reading comprehension and literary analysis will accompany the selections.

Mathematics 7

Text Used:

Math Connects Course 3 (Glencoe McGraw-Hill) – 13 copies plus teacher edition

Prerequisite:

Math Connects Course 2

Course Description:

Students will use appropriate operations and strategies to solve problems. Students will solve problems using proportional relationships. Students will investigate the geometry and measurement of two- and three-dimensional figures. Students will analyze and represent linear and nonlinear functions and solve linear equations. Students will use statistical procedures and probability to analyze data and make predictions.

Algebra I (Mathematics 8)

Text Used:

Algebra I (Glencoe McGraw-Hill) – 13 copies plus teacher edition

Prerequisite:

Math Connects Course 3

Course Description:

Students will use symbols to express relationships and solve real-world problems. Students will use linear functions and inequalities to represent and model real-world situations. Students will use quadratic and other nonlinear functions to represent and model problem situations and to analyze and interpret relationships. Students will use a variety of representations, tools, and technology to model mathematical situations to solve meaningful problems.

Geometry

Text Used:

Geometry (Glencoe McGraw-Hill) – 15 copies plus teacher edition

Prerequisite:

Algebra I

Course Description:

Students will understand basic geometric terms, such as lines, planes, and angles and how they can be used to prove theorems. Students will use a variety of representations, tools, and technology to solve meaningful problems by representing and transforming figures and analyzing relationships. Students will explore proportional relationships between similar triangles, the relationships among the angles and sides of right triangles, and transformations in to coordinate plane. Students will calculate measures in two- and three-dimensions and use the properties of circles.

Algebra II

Text Used:

Algebra II (Glencoe McGraw-Hill) – 20 copies plus teacher edition

Prerequisite:

Algebra I

Course Description:

Students will use algebraic concepts and the relationships among them to better understand the structure of algebra. Students use functions and equations as means for analyzing and understanding a broad variety of relationships. Students will use a variety of representations, tools, and technology to model mathematical situations to solve meaningful problems. Students will learn about trigonometric functions, graphs, and identities.

Advanced Math/Pre-Calculus 11/12

Text Used:

Algebra II (Glencoe McGraw-Hill) – 20 copies plus teacher edition

Advanced Mathematical Concepts (Glencoe McGraw-Hill) – 8 copies plus teacher edition

Prerequisite:

Algebra I and Algebra II

Course Description:

Students will use multiple representations, technology, applications and modeling, and numerical fluency in discrete problem-solving contexts. Students will use trigonometry in navigation, physics, and construction, among other fields. Students will learn about trigonometric functions, graphs, and identities. Students will learn about logarithms, polar graph system, and statistical analysis.

Applied Trigonometry 11/12

Text Used:

Algebra II (Glencoe McGraw-Hill) – 20 copies plus teacher edition

Analytic Trigonometry with Applications (Barnett-Ziegler-Byleen) – 15 copies plus teacher edition

Prerequisite:

Algebra I and Algebra II

Course Description:

Students will learn about trigonometric functions, graphs, and identities. Students will use trigonometric principles to explore, design, and solve real world problems. Students will use trigonometry in physics, engineering, music, and statistical analysis.

Statistics and Probability 11/12

Text Used:

Algebra II (Glencoe McGraw-Hill) – 20 copies plus teacher edition

Introductory Statistics and Probability (Blakeslee, Chinn) – 5 copies plus teacher edition

Prerequisite:

Algebra I and Algebra II

Course Description:

Students will discover and apply concepts of Statistics and Probability such as conditional probability, numerical data, random variables, functions, binomial and continuous distribution. Students will discover sampling methods and errors. Students will utilize estimation in their random sampling and decision making.

Physical Education & Health 7/8

Text Used:

Current Health Magazine (Weekly Reader)

Prerequisite:

None

Course Description:

This course is taught three days per week for one semester and activities taught will include Frisbee, folf, football, flicker ball, soccer, gator ball, eclipse ball, volleyball, basketball, exercise circuit training, softball, lacrosse, floor hockey, badminton, mat ball and dodge ball.

Two days a week are spent on discussing health topics such as prevention, nutrition, exercise, mental health, drugs, alcohol, tobacco, disease and disorders, and environmental issues which pertain to this age group.

Physical Education 9

Text Used:

None

Prerequisite:

None

Course Description:

Activities taught in Freshman Physical Education include: Frisbee, folf, football, flicker ball, soccer, gator ball, eclipse ball, volleyball, basketball, exercise, circuit training, softball, lacrosse, floor hockey, badminton, mat ball, dodge ball, pickle ball, and a dance unit.

Grades are determined by points for daily participation, skills testing and written testing.

Physical Education 10

Text Used:

None

Prerequisite:

Physical Education 9

Course Description:

Activities taught in Sophomore Physical Education include: Frisbee, folf, football, flicker ball, soccer, gator ball, eclipse ball, volleyball, basketball, exercise circuit training, softball, lacrosse, floor hockey, badminton, mat ball, pickle ball, dance unit and dodge ball.

Grades are determined by points for daily participation, skills testing and written testing.

Advanced Physical Education/Health 10-12

Text Used:

Health – A Guide to Wellness (Glencoe)

Prerequisite:

None

Course Description:

One day per week, talk about various health topics, such as nutrition, exercise, mental health, drugs alcohol, tobacco, diseases, disorders and environmental issues. 1 day per week physical activity folf, Frisbee, golf, eclipse ball, badminton, basketball, volleyball, various card games. Two days per week, individual workout as determined by the teacher and student.

Life Science 7/8

Text Used:

Interactive Science Series: Ecology and the Environment, Cells and Heredity, The Diversity of Life, and Human Body Systems (Pearson) 2011

Prerequisite:

None

Course Description:

The purpose of the 7th grade science curriculum is to introduce students to science processing skills through hands-on laboratory activities, problem-solving situations, open-ended investigations, and cooperative/collaborative work. Students will explore ecology and environment, cells and heredity, the diversity of life, and the human body systems. This curriculum is interactive with the student book utilized as not only a text but also an interactive work book. Concepts are reinforced with class discussions, review questions, lab activities, and unit tests.

Earth Science 7/8

Text Used:

Interactive Science Series: Earth's Structure, Earth's Surface, Water and the Atmosphere, and Astronomy and Space Science (Pearson) 2011

Prerequisite:

None

Course Description:

This class is an interactive study of Earth Science. Topics in this course include in depth studies of plate tectonics, Earthquakes, volcanoes, general geology, weather and climate, earth chemistry, weathering and erosion, paleontology, oceanography and astronomy. Concepts are reinforced with class discussions, review questions, lab activities and unit tests.

Physical Science 9/10

Text Used:

Glencoe Physical Science (McGraw Hill) 2012

Prerequisite:

None

Course Description:

This is an introductory course to the physical sciences of Physics and Chemistry. Topics include the study of matter, measurement, forces, motion, heat, energy, work, power, waves, light and basic chemistry. The first half of the year we cover basic concepts in chemistry. The second half of the year, we cover basic concepts in physics. Concepts are reinforced with class discussion, review questions, lab activities and unit tests.

Biology 9/10

Text Used:

Biology Today (Prentice Hall) 2002 – 24 copies plus teacher edition

Prerequisite:

None

Course Description:

This class is an intensive study of life and their interrelationships with each other. Topics covered in the course include in-depth studies of scientific method, cellular function, genetics, evolution, biochemistry, chemistry of living things, classification and diversity of life. Biology concepts are reinforced with class discussions and review questions, activities are carried out as they relate to the lessons. Dissection of preserved specimens is included in the later part of the school year.

Physics 11/12

Text Used:

Physics (Prentice Hall) 2002

Physics (Glenco) 1992 – 17 copies plus teachers edition

Prerequisite:

Algebra I, Algebra II and Geometry

Course Description:

This class deals with an introduction to Physics. It includes units on matter and measurement, motion, forces, vectors, universal gravitation, work, energy, simple machines, thermal energy, states of matter, wave energy and sound, light, electricity, magnetism, electronics and nuclear physics. Concepts are reinforced with class discussions, experiments, demonstrations, review questions and unit tests. This course is designed for college preparation.

Chemistry 11/12

Text Used:

Glencoe Chemistry: Matter and Change (McGraw Hill) 2013

Prerequisite:

Physical Science, Algebra I, familiarity with metric system, and use of the scientific calculator

Course Description:

This class deals with an introduction to general Chemistry. It includes units on matter, measurement and calculations, elements, atoms and ions, nomenclature, chemical composition, chemical reactions, chemical quantities, atomic theory, chemical bonding, phases of matter, solutions, acids, bases and salts, oxidation-reduction reactions and organic chemistry. Concepts are reinforced with class discussions, labs, demonstrations, review questions and unit tests. Problem solving skills will be developed and enhanced. Mathematical relationships are emphasized as well as modern scientific theory. This course is designed for college preparation.

Environmental Science 11/12

Text Used:

Environmental Science (Holt, Rinehart, and Winston) 1996

Prerequisite:

Biology, Earth Science, Physical Science

Course Description:

This class is designed for students to learn about ecosystems and the organisms that live within them. This course is designed to immerse students in the physical, biological, and earth systems sciences that shape our environment. Students learn how important it is to protect the species diversity on Earth and study ways to achieve that goal. In addition, students explore how their own habits affect the environment. By the end of the course, students will have developed scientific literacy in order to participate effectively in a democratic society. Concepts are reinforced with class discussion, review questions, lab activities, and unit tests or projects.

Anatomy and Physiology 11/12

Text Used:

Online Textbook

Prerequisite:

Physical Science and Biology

Course Description:

Anatomy is the study of structures of the human body; physiology deals with the functions of these structures. Students will acquire an appreciation and understanding of how structures and functions are related in major body systems. The study will range from molecules, cells, body systems, and processes. They will engage in lab work, hands-on activities, research projects, fieldwork and presentations with emphasis on the development of critical thinking and science inquiry skill. The course is for those interested in science-related fields. This course is designed for college preparation, especially for biology and health career majors. Concepts are reinforced with class discussion, review questions, lab activities and unit tests.

United States and World Geography 7/8

Text Used:

World Cultures and Geography (McDougal Littell, 2008) – 19 copies plus teacher edition
Teacher created map quiz booklets of US and World
Daily Geography Practice, 6th Grade (Evan-Moor, 2004) resource booklet

Prerequisite:

None

Course Description:

This is an introductory geography course. Students will study physical and human geography first quarter, US geography second quarter and World geography the second semester. Included in the course will be map quizzes of the United States and of the World, map reading skills, homework, projects, and testing.

United States History 7/8

Text Used:

American History beginnings through Reconstruction (McDougal Littell) – 20 copies
plus 3 teacher editions

Prerequisite:

None

Course Description:

This course begins with the first migration of people to North America to the end of the Reconstruction following the Civil War. Historical aspects of America's growth will be analyzed economically, politically, and socially. Reading and note-taking skills are required. Students will be assessed through homework, projects, quizzes and exams.

Montana History 9/10 – One Semester

Text Used:

Montana: Stories of the Land (Krys Holmes) 2008 – 15 copies

Prerequisite:

None

Course Description:

This course is designed as an in-depth look at Montana. Included will be the geography, significant past events, and present day life in Montana.

Native American Studies 9/10 – One Semester

Text Used:

Various OPI designated resources

Prerequisite:

None

Class Description:

Focus on Western Hemisphere Native Americans from prehistory to present for first quarter. Second quarter will be divided between Montana Native American history and contemporary issues in the United States with regards to Native Americans.

World History 9/10

Text Used:

History of the World (Prentice Hall) 2008 – 19 copies plus teacher edition.

Prerequisite:

None

Course Description:

This course is a basic overview of mankind's history from our earliest origins to the Age of Discovery. Reading the text and various supplemental handouts is expected to meet the requirements of this course. Additionally, students are expected to participate in daily activities, complete homework assignments and pass quizzes and exams.

United States History 11/12

Text Used:

The Americans: Reconstruction to the 21st Century (McDougal Littell, 2009) – 22 copies plus teacher edition

Prerequisite:

None

Course Description:

This course begins with a review of early American history and fully begins following the Reconstruction Era and concludes in the current era. Historical aspects of America's growth will be analyzed economically, politically, and socially. Students are required to read the text and various supplemental handouts, as well as keep notes from class lectures.

American Government 11/12

Text Used:

United States Government: Principles in Practice (Holt McDougal) 2010 – 15 copies plus teacher edition

Prerequisite:

None

Course Description:

This course is designed to provide an understanding of the structure and function of how our governmental system works and the problems surrounding it. Essential to the course is the study of current events both domestically and abroad. Students are expected to participate in debates and other current issue discussions. The goal of the course is to educate students to be active and educated voters and citizens within American society. Students are required to read the text and various supplemental handouts, as well as keep notes from class lectures.

Economics

Text Used:

Economics: Principles and Practices (Glencoe, 2008) – 5 copies

Prerequisite:

None

Course Description:

This course is designed to provide an understanding of the basics of economics. Essential to the course is the study of current events both domestically and abroad. Students will learn the basic fundamentals of economics, and then focus on microeconomics and macroeconomics. Students will spend time working on a computer simulation program to learn about the aspect of opportunity choice. Students will also have an opportunity to learn how the stock market works and participate in a mock stock market simulation. Homework and tests are required of the course.

Chinese Language and Culture

Text Used:

Julian Wheatley's Learning Chinese: A Foundation Course in Mandarin

Selected readings on pre-modern and contemporary Chinese history

Prerequisite:

None

Course Description:

Chinese language and culture is designed as an introductory course to the history and culture of the increasingly important Asian nation. The language portion of the course will be an introduction to the Mandarin dialect of Chinese, Putonghua, and will emphasize basic conversational abilities along with basic reading and writing skills. The historical portion of the course will focus on the modern era, with an emphasis on reform movements from the mid-19th century, to the rise of Mao, through China's "opening up and reform," and culminating in the present day.