



Capital Area Online Learning Association

Online Course Catalog High School 2018-2019



CORE COURSES & ELECTIVES

EdisonLearning

ENGLISH LANGUAGE ARTS

English 1

English 2

English 3

English 4

SAT© Critical Reading and Writing

MATHEMATICS

Algebra 1

Algebra 2

Calculus

Finite Math

General Mathematics

Geometry

Integrated Mathematics 1

Integrated Mathematics 2

Integrated Mathematics 3

Integrated Mathematics 4

Pre-Algebra

Pre-Calculus

Probability

SAT©Mathematics

Statistics

Trigonometry

SCIENCE

Anatomy and Physiology

Astronomy

Biology

Biotechnology

Chemistry

Earth Science

Environmental Science

Epidemiology

Forensics

Genetics

Introduction to Technological Sciences

Life Science

Natural Disasters

Physical Science

Physics

Science of Computing

Sports Medicine

Sports Science

Stem Cells

Superstars of Science

SOCIAL STUDIES

American History
Early American History
Early World History
Economics
Macroeconomics
Microeconomics
Psychology
Sociology
US Government
World Geography
World History

ELECTIVES

Advanced Music Theory
Art History and Appreciation
Career Explorations
Chemical Engineering
Computer Engineering
Electrical Engineering
Fitness
Health
Internet Safety
Life Skills
Mechanical Engineering
Music Theory and Appreciation
Personal Finance

WORLD LANGUAGES

French 1
French 2
French 3
French 4
German 1
German 2
Spanish 1
Spanish 2
Spanish 3
Spanish 4

KEYSTONE

Keystone Biology
Keystone Literature
Keystone Mathematics

CREDIT RECOVERY

Algebra 1

Algebra 2

American History

Anatomy and Physiology

Biology

Calculus

Chemistry

Integrated Mathematics 1

Integrated Mathematics 2

Integrated Mathematics 3

Integrated Mathematics 4

Earth Science

English 1

English 2

English 3

English 4

General Math

Geometry

Physics

Physical Science

Pre-Algebra

Pre-Calculus

Spanish 1

Spanish 2

US Government

World Geography

World History

HONORS

Algebra 1 Honors

Algebra 2 Honors

American History Honors

Biology Honors

Chemistry Honors

English 1 Honors

English 2 Honors

English 3 Honors

English 4 Honors

CORE COURSES

APEX Learning

ADVANCED PLACEMENT

AP Biology

AP Calculus AB

AP Chemistry

AP English Language & Composition

AP English Literature & Composition

AP Environmental Science

AP Macroeconomics

AP Microeconomics

AP Psychology

AP Spanish Language

AP Statistics

AP U.S. Government & Politics

AP U.S. History

CORE COURSES & ELECTIVES

Accelerate Education

ENGLISH LANGUAGE ARTS

Language Arts 9
Language Arts 10
Language Arts 11
Language Arts 12
Creative Writing
Contemporary Novels

MATHEMATICS

Accounting
Algebra 1
Algebra 2
Consumer Math
Geometry
Integrated Math 1
Integrated Math 2
Integrated Math 3
Pre-Calculus

SCIENCE

Biology
Chemistry
Earth Science
Marine Science
Paleontology
Physical Science
Physics
Renewable Energy
Space Exploration

SOCIAL STUDIES

American Government
American History
Civics
Economics
World Geography and Cultures
World History

ADVANCED PLACEMENT

AP Biology AB

AP Calculus AB

AP Calculus BC

AP Chemistry AB

AP English Language and Composition AB

AP English Literature AB

AP European History AB

AP French Language & Culture AB

AP Government & Politics AB

AP Physics

AP Spanish Language AB

AP US History AB

AP World History AB

ELECTIVES

Art Appreciation

Art Careers

Art History

Basic Web Design

Business Law

Buzz Orientation

Career Planning

Character Education

Child Development

Digital Media

Digital Photography

Film and Television

Financial Literacy

Graphic Design

Health Careers

Internet Safety

Introduction to Business

Introduction to Java Programming

Introduction to Nursing

JavaScript

Journalism

Media and Communication

Medicine

Music Appreciation

Photojournalism

Psychology

Sociology

Study Skills and Strategies

Theater Studies

World of STEAM

HEALTH & PHYSICAL EDUCATION

First Aid & Safety

Flexibility Training

Health

Individual and Team Sports

Nutrition

Physical Education

Running

Strength Training

Walking Fitness

WORLD LANGUAGES

Spanish 1

Spanish 2

Spanish 3

Chinese 1

Chinese 2

French 1

French 2

French 3

German 1

German 2

Latin 1

Latin 2

HONORS

Honors Algebra 1-2

Honors American Government

Honors American History

Honors Biology

Honors Chemistry

Honors Economics

Honors Geometry

Honors Language Arts 9-12

Honors Physics

Honors World History

CREDIT RECOVERY

Language Arts 9-12*

Algebra 1- 2*

Consumer Math

Geometry*

Integrated Math 1-2*

Pre-Algebra

Pre-Calculus

American Government*

American History*

Civics*

Economics*

World Geography & Cultures*

World History*

Biology*

Chemistry*

Earth Science*

Physical Science*

Physics*

Spanish 1-3

French 1-2

German 1-2

Health

Physical Education

Art Appreciation

Art History

Character Education

Child Development

Marine Science

Paleontology

Psychology

Renewable Energy

Sociology

Space Exploration

Study Skills and Strategies

Theater Studies

***Course has an Optional Adaptive Assessment Model**

CORE COURSES & ELECTIVES

Odysseyware

ADVANCED PLACEMENT

Calculus AP
Comparative Government and Politics AP
English Language and Composition AP
Human Geography AP
Macroeconomics AP
US Government and Politics AP

ASSESSMENT & DIAGNOSTIC

ACT Test Prep
Essentials of Language Arts
Essentials of Mathematics
GED Test Prep
TASC Test Prep

BUSINESS

Business Computer Information Systems
Essentials of Business
Essentials of Communication
Personal Financial Literacy
Technology and Research

CTE AGRICULTURE FOOD & NATURAL RESOURCES

Animal Systems
Environmental Service Systems
Introduction to Agriculture, Food, and Natural Resources
Natural Resources Systems

CTE BUSINESS MANAGEMENT AND ADMIN

Business Law
Career Management
Office 2010 Applications I
Office 2010 Applications II
Office 2013 Applications I
Office 2013 Applications II
Principles of Business and Finance
Small Business Entrepreneurship
Technology and Business

CTE EDUCATION & TRAINING

Introduction to Careers in Education and Training
Teaching and Training Careers

CTE HEALTH SCIENCE

Careers in Allied Health

Forensics: Using Science to Solve a Mystery

Introduction to Careers in the Health Sciences

Public Health: Discovering the Big Picture in Health Care

Scientific Discovery and Development

Therapeutics: The Art Of Restoring and Maintaining Wellness

CTE HOSPITALITY & TOURISM

Marketing and Sales for Tourism and Hospitality

CTE HUMAN SERVICES

Early Childhood Development and Services

Family and Community Services

Introduction to Consumer Services

Introduction to Human Growth and Development

Introduction to Human Services

Personal Care Services

CTE INFORMATION TECH

Fundamentals of Computer Systems

Fundamentals of Digital Media

Introduction to Information Technology

CTE MANUFACTURING

Careers in Marketing Research

Introduction to Careers in Marketing Research

CTE SCIENCE TECH ENGINEERING & MATH

Principles of Technology and Engineering

Science and Mathematics in the Real World

STEM and Problem Solving

ENGLISH LANGUAGE ARTS

English I Comprehensive

English I Foundations

English II Comprehensive

English II Foundations

English III Comprehensive

English III Foundations

English IV Comprehensive

English IV Foundations

FINE ARTS

Art History

Digital Arts

Media Studies

Music Appreciation

Music Theory

HEALTH & PHYSICAL EDUCATION

Health Education

Personal and Family Living

Physical Education

Physical Fitness

MATHEMATICS

Advanced Algebra

Algebra I Comprehensive

Algebra I Foundations

Algebra II Comprehensive

Algebra II Foundations

Analytic Geometry

Consumer Math

Coordinate Algebra

Geometry Comprehensive

Geometry Foundations

Pre-Calculus Comprehensive

Trigonometry

SCIENCE

Biology

Chemistry

Earth Science

Environmental Science

Integrated Physics and Chemistry

Keystone Biology

Physics

SOCIAL STUDIES

Civil War

Economics

Government

Psychology

20th Century American History

US History: Foundations to Present

US History: Reconstruction to Present

Vietnam Era

World Geography

World History

WORLD LANGUAGES

French I

French II

Spanish I

Spanish II

Spanish III

CORE COURSES & ELECTIVES

EDynamic Learning

AGRICULTURE, FOOD & NATURAL RESOURCES

Agriscience 1: Introduction
Agriscience 2: Sustaining Human Life
Forestry and Natural Resources
Principles of Agriculture, Food and Natural Resources
Renewable Technologies
Veterinary Science: The Care of Animals

ARTS, A/V TECHNOLOGY & COMMUNICATIONS

3D Modeling
Animation
Art in World Cultures
Coding 1a: Introduction to Programming
Cybersecurity 1a: Foundations
Digital Photography 1a: Introduction
Digital Photography 1b: Creating Images with Impact!
Digital Photography 2: Discovering Your Creative Potential
Fashion and Interior Design
Game Design 1a: Introduction
Journalism 1a: Introduction
Journalism 1b: Investigating the Truth
Public Speaking 1a: Introduction
Public Speaking 1b: Finding Your Voice
Introduction to Social Media: Our Connected World
Theatre, Cinema, and Film Production

BUSINESS MANAGEMENT & ADMINISTRATION

Entrepreneurship: Starting Your Business
International Business: Global Commerce in the 21st Century

EDUCATION & TRAINING

Early Childhood Education 1a: Introduction
Early Childhood Education 1b: Developing Early Learners

FINANCE

Personal and Family Finance

GOVERNMENT & PUBLIC ADMINISTRATION

Introduction to Military Careers
National Security
Principles of Public Service: To Serve and Protect

HEALTH SCIENCES

Health 1: Life Management Skills

Health Science 1: The Whole Individual

Health Science 2: Patient Care and Medical Services

Health Science: Nursing

Health Science: Public Health

Nutrition and Wellness

HOSPITALITY & TOURISM

Culinary Arts 1a: Introduction

Culinary Arts 1b: Exploring Careers in Culinary Arts

Hospitality and Tourism 1: Traveling the Globe

Hospitality and Tourism 2a: Hotel and Restaurant Management

Restaurant Management

HUMAN SERVICES

Cosmetology 1: Cutting Edge Styles

Cosmetology 2: The Business of Skin and Nail Care

Human and Social Services 1

Peer Counseling

Personal Fitness

Personal Psychology 1: The Road to Self-Discovery

Personal Psychology 2: Living in a Complex World

Real World Parenting

Social Problems 1: A World In Crisis

Social Problems 2: Crisis, Conflicts and Challenges

Sociology 1: The Study of Human Relationships

Sociology 2: Your Social Life

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

Careers in Criminal Justice

Criminology: Inside the Criminal Mind

Forensic Science 1: Secrets of the Dead

Forensic Science 2: More Secrets of the Dead

Forensics: The Science of Crime

Law and Order: Introduction to Legal Studies

MARKETING

Advertising and Sales Promotion

Sports and Entertainment Marketing

SCIENCE, TECHNOLOGY, ENGINEERING & MATH

Anthropology 1: Uncovering Human Mysteries
Anthropology 2: More Human Mysteries Uncovered
Archaeology: Detectives of the Past
Astronomy: Exploring the Universe
Biotechnology 1a: Introduction
Biotechnology 1b: Unlocking Nature's Secrets
Concepts of Engineering and Technology
Great Minds in Science: Ideas for a New Generation
Marine Science 1a: Introduction
Marine Science 1b: Secrets of the Blue
Renewable Technologies
Veterinary Science: The Care of Animals

ELECTIVE - ARTS & BUSINESS

African American History
American Sign Language 1a: Introduction
American Sign Language 1b: Learning to Sign
Creative Writing
Gothic Literature: Monster Stories
History of the Holocaust
Human Geography: Our Global Identity
Learning in a Digital World: Strategies for Success
Life Skills: Navigating Adulthood
Music Appreciation: The Enjoyment of Listening
Mythology and Folklore: Legendary Tales
Introduction to Philosophy: The Big Picture
The Lord of the Rings: An Exploration of the Films and Their Literary Influences
Introduction to Women's Studies: A Personal Journey Through Film
World Religions: Exploring Diversity

MANUFACTURING

Introduction to Manufacturing: Product Design and Innovation



High School Course Types

- **Competency-Based** – Students must demonstrate mastery of the concepts of a lesson before they are able to progress to the next lesson. These courses provide a self-remediating performance monitoring system. Competency-Based courses are self-paced and are available for all high school courses.
- **Credit Recovery** – In this course type, students are able to recover credit for a course they have previously taken, but not been successful in. Credit Recovery eCourses™ are developed as truncated versions of their corresponding Competency Based eCourses™. Students must still demonstrate mastery of the concepts addressed in a lesson before progressing to the next set of objectives. Comprehensive quizzes and unit exams ensure that students are rigorously assessed on all concepts in the course.
- **Foundation** – Each course is designed to ensure that students master the foundational skills and knowledge that are critical building blocks for upper-level courses. Foundation eCourses™ contain fewer lessons than both the Traditional and Competency-Based eCourses™. There are over 30 Foundation eCourse™ offerings in the core subject areas of English Language Arts, Math, Science, and Social Studies. This type of course prepares students to control their own learning.
- **Honors** – In this course type, students are pushed to apply their understanding of the concepts in each lesson to rigorous performance-based assessments, projects, and conceptual activities. These courses are the perfect fit for students wishing to extend their understanding of a particular subject.
- **Project-Based** – This course type combines the engaging and interactive content of our Mastery Projects with our rigorous and competency-based learning objects and assessments. These courses enable students to make connections between the foundational and conceptual objectives of each course to their communities and the world. In each course, students will complete one major project per course part, including the creation of blogs, podcasts, presentations, and other multimedia.

High School Course Options

- **Diagnostics** – A diagnostic test can be assigned during a course enrollment to allow the student to test out of lessons so that they will only be required to complete the portions of the curriculum they have not yet mastered. Diagnostics are available for all high school core courses except English Language Arts.
- **Progress Tests** – Students can be assigned a progress test at the beginning and end of each part. The test scores can be monitored and evaluated for student knowledge growth, or they can be used to determine if a student has not fully grasped the content of a specific course part. Based on this knowledge, a student can be moved on to the next eCourse™ part, or interventions or remediation can be put in place to assist the student.
- **Adaptations** – eCourse™ assessments can be automatically modified on a per-course enrollment basis so that multiple-choice answers can be reduced by half (answer adaptation), or the number of questions can be reduced by half (question adaptation). These adaptations abilities exist for all eCourses™, including middle school.

English Language Arts

English 1 (Project Based)

Students will engage with texts from around the world throughout English 1 Project Based. Their worldwide journey through literature will take them from Greece to England, from Spain to Japan, from Russia to the United States, and beyond. In addition to reading and studying great works of literature, students will also learn to write in a variety of styles, including persuasive, expository, and narrative. The project component of this course will allow students to explore the universal themes and concepts they study in the context of real-world examples and issues.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

English 2 (Project Based)

In English 2 Project Based, students explore the evolution of language, assess rhetorical and narrative strategies, practice a variety of writing styles, and employ vocabulary and comprehension strategies to aid their understanding of a range of texts. Throughout this course, students will read a range of both fiction and nonfiction texts, including epic poems, famous speeches, and novels by William Golding and George Orwell. In each part, students will also complete a project component designed to explore the concepts and themes they study throughout the course.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

English 3 (Project Based)

Students will discover different genres of literature – including poetry, short stories, plays, novels, and essays – throughout their coursework in English 3 [Project Based]. By engaging with the literature, students will learn how to analyze and evaluate literary devices, style, and structure. Throughout the course, students will demonstrate their learning by writing about the texts they read. They will also practice a variety of skills, including the writing of research, analytic, and narrative essays. In each part of the course, students will also complete a project component designed to explore the concepts and themes they study throughout the course.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

English 4 (Project Based)

How do writers manipulate language to suit context, audience, and purpose? What kinds of texts lend themselves to multiple interpretations? Why is it important to understand shades of meaning in words, phrases, and whole texts? This course requires students to engage with a variety of fiction and nonfiction texts, including works by William Shakespeare, Charlotte Brontë, Geoffrey Chaucer, John Donne, and Virginia Woolf. In addition to reading, analyzing, and evaluating these texts, students will also hone their writing skills through a range of assignments and build on previously learned concepts to begin generating their own paper topics and research questions. The project component of this course will allow students to explore the concepts they study in the context of real-world examples and issues.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

SAT© Critical Reading and Writing

This course is designed to help students prepare for the critical reading and writing portions of the SAT. In addition to test-taking strategies, students learn reading comprehension strategies, including inferring ideas, understanding tone and intention, and identifying the meaning and crucial elements in a piece of writing. Students also learn about comma usage, case, identifying and creating complete sentences, and writing concise sentences with subject-verb agreement. Finally, students learn how to apply correct grammatical structure to sentences, recognize and understand modifiers and idioms, and develop a piece of writing in response to an essay question.

Prerequisite: None

Length: One Part

Mathematics

Algebra 1 (Project Based)

What are algebraic expressions? How are they structured, and how can they be combined to create equations and inequalities? How do you know that the solutions you find are correct? In Algebra 1, students create expressions from verbal descriptions, manipulate and transform them, and create visual models. Students will develop understanding of mathematical processes by explaining each step. Students will then explore functions, sequences, and their corresponding graphs to determine the best ways to represent each. Students will examine functions graphically, numerically, symbolically, and verbally, and learn how to translate between these different forms. Depth of understanding increases as students complete proofs and describe data, fitting functions to their data. Students then extend their knowledge of linear and exponential relationships and apply their new understanding to create quadratic and exponential expressions as models of real-life phenomena. In the project based portion of this course, students complete a project unique to each course part. The projects tie key topics from a part to real-world examples and applications. Project topics include potable water, fuel and resource consumption, the impact of large amounts of waste on our planet, and the spread of epidemics.

Prerequisite: None

Length: Four Parts

Required Materials: Graphing Calculator

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

Algebra 2 (Project Based)

Extending their knowledge of linear, exponential, and quadratic functions to polynomial, rational, and radical functions, students in Algebra 2 model situations and solve equations as they discover how the rules they learned in arithmetic continue to apply as they work with polynomials. Students will focus on the properties and factors of polynomials, learning to find the zeros of a polynomial and graph it as a function. Students will also use complex numbers to solve quadratic equations and exponential expressions, and learn how to rewrite rational expressions in different forms and solve simple rational and radical equations. The trigonometric concepts students learned previously are expanded as they focus on the unit circle and apply these concepts to models of periodic phenomena. Students will then extend their knowledge of function families to model functions defined as square roots or cube roots, as well as piecewise-defined functions. A detailed look at exponential and logarithmic functions is applied to showing intercepts and end behavior. Students will calculate probabilities of various events and continue their statistical studies by exploring normally distributed data. In the project based portion of this course, students complete a project unique to each course part. The projects tie key topics from a part to real-world examples and applications. Project topics include a personal nutritional analysis, an acceleration study, a comparison of populations, and the intricacies of designing a game.

Prerequisite: Algebra I

Length: Four Parts

Required Materials: Graphing Calculator

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

Calculus

Students examine the foundational components of limits, derivatives, integrals, and series and apply this knowledge to problems in economics and physics. Derivatives are used to find lines tangent to curves and integrals. Students learn specific rules of differentiation and explore real-world applications including related rates and optimization. Students explore the graphs of functions and their first and second derivatives to determine relationships. Functions increase in complexity to include logarithmic and exponential components. Various methods of finding the area under a curve are examined and applied, and each method is supported graphically. Integration is used to revolve solids about an axis. The course ends with an exploration of series and parametric and polar scenarios. Students relate these concepts to problems in other disciplines. At the conclusion of the course, students are able to apply their knowledge to physics problems related to speed, velocity, acceleration, and jerk, and find the volume of an object with curved sides, such as a barrel.

Also available to students is a 45-lesson course designed to prepare them for advanced standardized assessments in calculus. Units 1 and 2 provide a review of derivatives and a number of application problems. Students take the first and second derivatives of functions and work with graphs, examining domain, range, extrema, and concavity as they relate to differentiation. Students look at different types of limits. As they review integration, students find areas under curves, areas between curves, and volumes of solids, and apply integration to physics problems. Unit 3 examines integration by parts, partial fractions, and improper integrals. Students also complete problems working with polar coordinates. The end of this course focuses on specific series and sequences as they relate to previously learned calculus concepts.

Prerequisite: Pre-Calculus

Length: Four Parts

Required Materials: Graphing Calculator

Course Types: Competency Based, Credit Recovery

+NCAA Eligibility for Competency Based

Finite Math

This course is designed to provide an introductory, application-oriented experience for students that anticipate majoring in business, management, economics, or life or social sciences. The course has a prerequisite of two years of high school Algebra. College courses in Finite Mathematics typically contain a variety of topics focused on applications in the areas listed above. This course is divided into four distinct parts, each consisting of three units. Each of the units is based around a concept as outlined below. Students will find graded assessments after each lesson and an exam at the end of each unit of the course. The course is organized as a journey through algebraic concepts and the applications of algebra. The focus is on linear equations, inequalities, systems of equations, matrices, probability, and statistics. Throughout this journey, students will build critical thinking skills and problem-solving techniques that are required to help students address application-oriented challenges related to the college majors referenced above.

Prerequisite: None

Length: Four Parts

General Mathematics

The goal of this course is to motivate students while helping them establish a strong foundation for success in developmental and consumer mathematics. The course leads students through basic mathematics and its applications, focusing on whole numbers, integers, decimals, and percentages. Students make sense of the mathematics they encounter each day, including wages, banking, interest, credit, and consumer costs. At the end of this course, students have a knowledge and appreciation for mathematics and problem-solving that prepares them for the future.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Credit Recovery

Geometry

Through real-world examples and problems, this course encourages students to see how geometry is useful in everyday life. The course focuses on parallel lines, perpendicular lines, triangles, circles, polygons, area, volume, similarity, trigonometry, geometric reasoning, and proofs. This course also highlights building critical thinking skills and problem-solving techniques required to help students grasp geometric concepts. By the end of this course, students have knowledge of and appreciation for geometry and problem-solving that prepares them for future mathematics courses.

Prerequisite: Algebra I

Length: Four Parts

Required Materials: Graphing Calculator

Course Types: Competency Based, Foundation, Credit Recovery

+NCAA Eligibility for Competency Based

Integrated Mathematics 1

What are the differences between linear and exponential relationships? What are the components of mathematical expressions? What happens when one value in a data set is vastly different from the rest of the data? Students extend their understanding of linear relationships by contrasting them with exponential models and modeling linear data. As they create equations and inequalities in one or more variables, students represent the constraints of these expressions and rearrange the equations to solve for particular variables. In their comprehensive study of functions, students focus on notation, domain and range, and sequences. They also interpret the key features of the graph of a function, and build new functions or use existing functions to model relationships between quantities. Using their knowledge of relationships, students construct and compare linear, quadratic, and exponential models and use these models to solve various problems. Students learn that solving equations is a reasoning process, and are asked to explain their reasoning in solving them. As they explore descriptive statistics, students compare measures of center and spread and determine the most appropriate ways to represent data. Students also identify and interpret outliers in a data set. Finally, they prove simple geometric theorems algebraically.

Prerequisite: None

Length: Four Parts

Required Materials: Graphing Calculator

Course Types: Competency Based, Credit Recovery

Integrated Mathematics 2

Mathematics II focuses on quadratic expressions, equations, and functions and compares their characteristics and behavior to previously learned linear and exponential relationships. The course covers real and complex numbers to give students the background they need to solve all forms of quadratic equations. Students explore the structure of expressions and rewrite them to highlight pieces of the relationship. Creating and solving equations and inequalities leads to solving systems of equations involving quadratic or exponential equations. Students compute and interpret theoretical and experimental probabilities, making informed decisions as they apply their knowledge of probability. Similarity transformations give students another perspective on similarity and allow them to prove related theorems. Students prove and use geometric theorems and learn about right triangles and their related trigonometry. They then move to theorems of circles and study ways to find arc lengths and areas of sectors, and to write equations for circles and parabolas. Finally, students examine area, circumference, and volume formulas for different geometric forms.

Prerequisite: Integrated Mathematics I

Length: Four Parts

Required Materials: Graphing Calculator

Course Types: Competency Based, Credit Recovery

Integrated Mathematics 3

Mathematics III challenges students to gather and apply all of the concepts they have learned in previous courses. Students apply their knowledge of probability and statistics to both given data and data they collect through sample surveys, experiments, and simulations. Students look at polynomials and operations on them, examining the relationship between zeros and factors of polynomials, and use polynomial identities to solve various problems. Students learn that the arithmetic of rational expressions follows the same rules as arithmetic with rational numbers. Students deepen their understanding of trigonometry as they develop and apply the laws of sines and cosines to find missing measures of right and other triangles, determine how many triangles can be formed from a set of side measures, and use the unit circle and model periodic phenomena using trigonometric functions. Pulling together all they have learned about function families, students analyze functions, build functions to model relationships, and build new functions from existing functions. They can also construct and compare linear, quadratic, and exponential models; use geometric shapes, their measures, and their properties to describe objects; and apply geometric concepts in modeling situations.

Prerequisite: Integrated Mathematics II

Length: Four Parts

Required Materials: Graphing Calculator

Course Types: Competency Based, Credit Recovery

Integrated Mathematics 4

Mathematics IV is a culmination of all the math concepts students have learned up to this point. In this capstone course, students perform operations with and find conjugates of complex numbers and represent them on the complex plane. Work with vectors includes recognizing the magnitude and direction of vectors and performing operations on vectors. Students also represent and manipulate data in and perform operations on matrices, applying the knowledge they gain as they represent and solve systems of linear equations. Students then analyze linear and exponential functions to show intercepts and end behavior, and delve into trigonometric functions showing period, midline, and amplitude. The course then moves to inverse functions, in which students find inverse functions and produce invertible functions from non invertible functions by limiting the domain. Special triangles form the basis for students to geometrically determine values for sine, cosine, and tangent. Students also learn how to prove and utilize the addition and subtraction formulas for sine, cosine, and tangent and derive the equations of ellipses and hyperbolas. Cavalieri's principle is used to explain the formulas for the volume of a sphere and other solid figures. Finally, students calculate expected values and employ them to solve problems, and use probability to evaluate outcomes of decisions.

Prerequisite: Integrated Mathematics III

Length: Four Parts

Course Types: Competency Based, Credit Recovery

Pre-Algebra

Pre-Algebra helps students make a successful transition from arithmetic to algebra by focusing on basic concepts of arithmetic and the applications of mathematics. Students learn about integers, fractions, decimals, expressions, equations, ratios, proportions and percentages, inequalities, graphing, probability and statistics, and geometry. The course highlights the math skills needed to be successful in everyday life and prepares students for future mathematics courses.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery

Pre-Calculus

Pre-Calculus helps students gain the knowledge they need for success in calculus and other high school math courses. The course focuses on linear, rational, polynomial, exponential, and logarithmic functions; systems of equations; systems of inequalities; matrices; trigonometry; series; sequence; probability; vectors; and analytical geometry. Throughout the course, students work to improve their critical-thinking skills and problem-solving techniques. By the end of this course, students gain knowledge of and appreciation for calculus and its applications.

Prerequisite: Algebra II

Length: Four Parts

Required Materials: Graphing Calculator

Course Types: Competency Based, Credit Recovery

+NCAA Eligibility for Competency Based

Probability

In this course, students take a comprehensive and engaging look at the field of probability. They begin by learning the basic terms, types, theories and rules of probability. Next, the course covers random outcomes and normal distributions, as well as binomial probabilities. Finally, students learn about geometric probability, sampling distribution, how to understand populations, and the central limit theorem. By the end of this course, students gain a knowledge of and appreciation for the field of probability and how it is used in everyday life.

Prerequisite: None

Length: One Part

Required Materials: Graphing Calculator

Course Types: Competency Based

+NCAA Eligibility for Competency Based

SAT© Mathematics

This course helps students prepare for the mathematics portion of the SAT® by equipping them with the knowledge and strategies needed to succeed. Students learn about basic mathematical theories and operations, including rational numbers, integers, methods to solve counting problems, and the characteristics of sequences and series of numbers. Students then learn how to use algebra for solving problems, including polynomial functions, linear equations and inequalities, and variation. The final unit covers geometric shapes and how to calculate the area and perimeter of polygons and the circumference of circles. Students also learn how to solve for missing angles and sides of triangles, and understand lines, similar figures, and ratios.

Prerequisite: None

Length: One Part

Course Types: Competency Based

Statistics

This course opens students' eyes to the many uses of statistics in the real world—from sports and the weather to health and politics. Students learn basic concepts, how to use graphs to represent data, and ways to analyze data. They explore statistical relationships, including the use of correlations, residuals and residual plots, and scatter plots. Finally, students learn how to model nonlinear relationships using exponential and logarithmic functions and how to design a sample to produce the correct type of data (observational vs. experimental). By the end of this course, students gain a knowledge of and appreciation for the field of statistics and its application in the real world.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Trigonometry

This course explores trigonometric functions and practical applications of trigonometry, such as solving real-life problems through engineering, physics, construction, and design. Students investigate graphs, linear functions, quadratic functions, trigonometric functions, analytical trigonometry, analytical geometry, vectors, and advanced functions. Students develop critical-thinking skills and problem-solving techniques to help them succeed in understanding and applying trigonometric principles. By the end of this course, students gain knowledge of and appreciation for trigonometry and problem-solving that will prepare them for future mathematics courses.

Prerequisite: Algebra II

Length: Two Parts

Required Materials: Graphing Calculator

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Science

Anatomy and Physiology

Why is the human body so complex? How do all the different structures of the body work together? In Anatomy and Physiology, students survey the different systems of the human body, with an emphasis on the relationship between structure and function. The course begins by teaching the language of anatomy and familiarizing students with the building blocks of the human body: cells and tissues that combine to create the complex organs and support structures of the body. Students get to know their bodies inside and out, from the skin that covers and protects the entire body to the skeleton and the attached muscles that provide support and create movement. Moving deeper inside, students explore the cardiovascular, respiratory, urinary, and digestive systems, which work together to supply the body with nutrients and rid it of wastes. Students also learn how the nervous and endocrine systems respond to the environment and maintain a state of balance. Students study the reproductive system as they follow the development of a human from a single-celled zygote to a mature adult. Interwoven throughout many lessons is information about genetic diseases, dysfunctions, and ailments such as diabetes, HIV, and arthritis. By the end of this course, students will feel as if they have read the owner's manual for their bodies.

Prerequisite: Biology

Length: Four Parts

Course Types: Competency Based, Credit Recovery

+NCAA Eligibility for Competency Based

Astronomy

In this course, students take a fascinating journey through the cosmos and learn basic concepts in the study of astronomy. The course begins with the celestial objects closest to home, scanning the solar system to provide students with an overview of the planets, moons, asteroids, and comets that revolve around the Sun. The course then moves beyond the solar system to cover the characteristics of our galaxy – the Milky Way. Students are amazed to learn the sheer size of this system and of other galaxies nearby, and about the formation and death of stars, supernovas, black holes, and even theoretical wormholes. Finally, the course reaches to the edges of time and space to investigate the properties of the universe as a whole, when students learn about theories explaining the very beginnings of existence and the expansion of the universe. Students also learn about Einstein’s theory of relativity, time travel, and the search for extrasolar planets.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Biology (Project Based)

Biology is the study of life. In this course, students will study life’s processes, looking at organisms from tiny single-celled organisms to large multicellular organisms. Students will also explore the ways organisms interact with one another and their environments. In addition, they will examine how traits are passed down through generations and how the traits of a species can change over time. The project component of this course will allow students to explore biological concepts in the context of real-world examples and issues.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

Biotechnology

This course provides students with a comprehensive and engaging look at the field of biotechnology. Students explore the history of biotechnology and advances in the field, as well as basic information about biotechnology laboratories and careers. Students learn about chemistry and the units of measurement used in biotechnology, and the basic biology of the cell, DNA, RNA, and proteins. The course concludes with a survey of the applications of biotechnology in the research lab and in industry, including enzymes, techniques, and plasmids.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Chemistry

Chemistry is an important science that challenges students to apply their studies in previous sciences to new theories, models, and problems. The course begins with a discussion of the history and importance of chemical principles; moves through the various models of the atom and chemical reactions; explores relationships among liquids, gases, and solids; and investigates the role of energy in these relationships. The course ends with a unit on organic chemistry, a branch of the science that focuses on the molecules that are important to living things. Lab activities throughout the course reinforce the material and provide an opportunity for students to apply their knowledge through hands-on experiments and activities.

Prerequisite: Algebra I

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

Earth Science (Project Based)

Earth Science course explores the structure of Earth and its place in the universe. Earth Science can be divided into several categories: oceanography, geology, astronomy, meteorology, and environmental science. Oceanography covers the structure, composition, and patterns that occur in the world's oceans. Geology studies the composition and processes of the solid portions of Earth. Astronomy examines the parts of the universe beyond the surface and atmosphere of Earth. Meteorology tracks the conditions in Earth's atmosphere and predicts the changes in the weather and climate around the world. Environmental science looks at how humans impact the Earth's processes and how changes can be made to protect Earth. Periodically throughout the course, the different aspects of Earth Science will be presented through projects. These projects will show real-world applications of the principles of the science.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery

+NCAA Eligibility for Competency Based

Environmental Science

Environmental Science, sometimes referred to as Ecology, is the study of the relationships and interdependence of organisms and their connection to the nonliving, or abiotic, factors in the natural world. This course provides students with a profile of the living relationships, abiotic factors, human influences, and current state of Earth's ecosystems. The course begins with a review of science as a process and the general components of Earth's structure that impact life. It then progresses through a study of the living groups and their relationships to one another, focusing on the balance achieved by nature through these relationships. The course explores populations and provides examples of unchecked growth and rapid extinction in the context of their effect on ecosystems. The course dedicates a unit to aquatic ecosystems and organisms, and the results of human impact. After covering the influence of energy extraction, production, and use, the course ends by examining the positive influence humans can have on the environment through conservation and sound management practices.

Prerequisite: None

Length: Two Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Epidemiology

Epidemiologists investigate the causes of disease and other public health problems in an effort to prevent them from spreading. This course introduces students to the field of epidemiology, including the basic concepts related to infectious disease, specializations in epidemiology, and study design. Students learn about the specific parts of an epidemiology study and why they are important, including types of sampling, selection bias, standardization, confidence intervals, and evidence-based research.

Prerequisite: None

Length: One Part

Course Types: Competency Based

Forensics

This engaging course introduces students to the field of forensics through a comprehensive look at related careers, laboratories, crime scene processing, evidence, and the impact of media on criminal investigations and trials. Students learn about specific techniques used in crime scene investigations, including autopsy, fingerprint analysis, DNA fingerprinting, and other types of evidence and analysis important to solving crimes. At the end of the course, students are introduced to a variety of specialized forensic sciences, analyze specific case studies, and learn about the Innocence Project and Freedom Project.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Genetics

Through this introduction to the field of genetics, students learn about the theories of Darwin and Wallace; the concepts of adaptation, genotype, and phenotype; and basic concepts related to cells, DNA, and RNA. Students study Gregor Mendel's pioneering work in genetic variation, and the basic concepts that have been developed since. Finally, students explore applications of genetics, including metagenomics, genetically modified organisms, DNA technologies, genetic testing, and other clinical and nonclinical applications of genetics.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Introduction to Technological Sciences

In this course, students learn about three main fields of technological science: engineering, biotechnology, and information technology. The first unit of the course surveys 15 distinct sub-fields of engineering, exploring the science background, real-world applications, and career opportunities in fields including aerospace, nuclear, and software engineering. In the second unit, students study cutting-edge biotechnology topics such as gene therapy, bioengineering crops, and biodegradation. The final unit focuses on the study of informational technology, covering computer networking, data storage, and data encryption for secure communications.

Prerequisite: None

Length: One Part

Course Types: Competency Based

Life Science

This survey of the biological sciences introduces students to the structure and function of living things and the natural relationships that exist on Earth. The course begins with the definition of life and a discussion of how living things are classified and organized by scientists. Students then work through material that presents the molecular building blocks of organisms, both microscopic and macroscopic views of life, the diversity and universality of species, and the characteristics of various groups of life. The course culminates with a unit on evolution, asking students to apply what they learned about the natural world to the complex relationships and environmental factors that have shaped the ever-changing species sharing the world today.

Prerequisite: None

Length: Two Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Natural Disasters

Around the globe, natural disasters are a seemingly daily occurrence. This course provides an overview of the different types of catastrophic forces of nature and their impact on the populations that they strike. The course gives students a greater understanding of the causes and effects of natural disasters; students also investigate what can be done to prevent such disasters. The first unit covers land-based events, detailing how scientists predict and react to avalanches, earthquakes, volcanic eruptions, mudslides, and fires. The second unit focuses on catastrophic events that begin in the ocean and atmosphere, describing the impact of flooding, hurricanes, blizzards, and droughts. In the third unit, students learn how disease spreads and how quickly it can impact the world's population. The final unit looks skyward for potential catastrophic impacts from comets and asteroids.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Physical Science

Physical Science is an interactive and engaging course that covers the sciences of chemistry and physics. The course begins with a unit on the nature of science and a review of measurement and its importance. The course proceeds with the study of chemical principles, exposing students to topics such as the properties of matter, the structure of the atom, the formation of bonds, and the properties of solutions. The course then moves to the science of physics, describing the topics of motion, force, work, and energy. Students apply their knowledge of these topics through problems, explanations, graphs and virtual lab activities.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery

+NCAA Eligibility for Competency Based

Physics (Project Based)

Physics is the study of how matter interacts with energy. Energy comes in many forms and is often related to movement, so much of the course examines how matter moves in response to energy, including the ways science defines and describes motion and how objects are set in motion. Motion is defined by the laws first set down by Isaac Newton and explored through the continuing work of other scientists. By understanding these laws, how things move in the world can be understood. The course demonstrates the nature of energy in the forms of electricity, heat, light, and sound. People interact with these types of energy every day. The course provides an understanding of how these forms of energy are used to carry out tasks. The project based component of the course will explore the concepts of physics on a deeper and more personal level as solutions to real-world problems are developed.

Prerequisite: Algebra II

Length: Four Parts

Course Types: Competency Based, Credit Recovery

+NCAA Eligibility for Competency Based

Science of Computing

This course is a survey of the past, present, and future of computer technology. Students explore fascinating and enlightening topics, such as how Stonehenge may actually have been used as a type of computer, and how inventions such as the abacus and the microprocessor have made today's technology possible. Students also learn about the science behind the hardware and software used today. Topics like algorithms, operating systems, and networks are described in detail and placed into context as tools for human innovation. Finally, the course looks to the future, introducing students to foreseeable improvements to current technology and visionary breakthroughs like artificial intelligence, quantum security, and biological processors.

Prerequisite: None

Length: One Part

Sports Medicine

In this course, students explore how to keep "the human machine" in optimal condition. They learn about various aspects of sports medicine, including careers, basic concepts, and techniques. Students also learn about sports injuries and how they are treated so athletes can continue to compete. At the end of this course, students have a knowledge of and appreciation for the field of sports medicine and its applications.

Prerequisite: None

Length: One Part

Course Types: Competency Based

Sports Science

Modern-day sports and the world-class athletes who excel at them take center stage in this journey through sports science. This course provides students with a survey of the impact of physics, biomechanics, and physiology on 14 modern sports. The first unit describes the role physics plays in a variety of sports, from the aerodynamics involved in auto racing to the force behind a boxer's right hook. The next unit investigates the biomechanics of these sports, discussing concepts like the contortion of a gymnast's body and the cause of tennis elbow. The last unit focuses on the limits of the human body, describing the energy used by cyclists during a mountain climb through the Alps and the reaction time required to hit a fastball traveling at 90 miles per hour. Overall, the course presents engaging information that will forever change how students perceive world-class athletes and competition.

Prerequisite: None

Length: One Part

Course Types: Competency Based

Stem Cells

In this course, the diverse and rapidly changing field of stem cell research comes alive for students. Students learn about the different types of stem cells, how stem cells were discovered, their importance to research, and the goals, challenges, and controversies in the field. Students explore human and mouse embryonic stem cells and a variety of stem cells found in different parts of the body, as well as the potential clinical applications of these cells to human medicine. Finally, students study stem cell research models.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Superstars of Science

Superstars of Science helps students appreciate the accomplishments and impact of the most influential scientists upon today's society, from scientists who lived in ancient Greece to those who are still alive and working today. The timeline structure allows students to see how science is cumulative in nature and how the discoveries and inventions of every scientist are influenced by past breakthroughs. It is commonly said that every great scientist stands on the shoulders of those in the past; this course explores that concept. The biography of each scientist, one per lesson, includes not only their contributions to their field, but the context of their work at the time and the world's reaction to their groundbreaking ideas.

Prerequisite: None

Length: One Part

Course Types: Competency Based

Social Studies

American History

This course takes students on a journey through the key events that have shaped America as a nation, from the end of the Civil War in 1865 to the height of the Cold War in 1980. The journey begins with the Reconstruction, a period of great transition and opportunity to heal a broken nation. Students witness the great migration westward and explore how the Industrial Revolution and waves of immigration fueled the flames of the American spirit today. The course details the challenges America faced and how equality was elusive for populations of American Indians, African Americans, immigrants, and women. Students learn how the core values of the founding fathers eventually prevailed and led to the Women's Suffrage and Civil Rights Movements. The course closely examines the impact of war, with units covering the role of the United States in World War I, World War II, the Korean War, and the Vietnam War. Throughout their journey, students encounter the great political, industrial, military, and human rights leaders who shaped America into a beacon of hope.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery, Honors

+NCAA Eligibility for Competency Based, Honors

Early American History

This course provides students with a comprehensive and engaging look at early American history from the impact of the early Spanish explorers through the Civil War. Students learn about key events of European exploration and colonization of the Americas. Students learn about the establishment of the United States as an independent country, the importance of the US Constitution, and the impact of the Constitution on the continued development of the country. At the completion of this course, students have both a knowledge of and appreciation for the early history of the United States.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Early World History

Starting at the dawn of civilization and arriving at the doorstep of the Renaissance, Early World History introduces students to the major events that laid the foundations of the modern world. This course exposes students to the development of the world's early civilizations and the cultures that created them. Students experience the rituals of the Aztecs, the might of the Roman Legions, and the building of the Great Wall of China. From these ancient beginnings, students trace the development of empires, the emergence of the world's major religions, and the mechanisms of trade and conflict that brought cultures together. Thematically, the course focuses on how empires have interacted to spread goods, ideas, and technological innovations such as silk and gunpowder. The course traces major events from ancient Mesopotamia through the Black Death of the fourteenth century, preparing students to explore more recent world history in future courses.

Prerequisite: None

Length: One Part

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Economics (Project Based)

In Economics, students combine concepts from Microeconomics and Macroeconomics courses in a comprehensive survey of economics. From a microeconomics perspective, students will learn how regional and national economies function and compare to one another by exploring gross domestic product (GDP), unemployment rates, and price indices. In studying the principles of macroeconomics, students learn about the structure of economics and how it affects world events and people's everyday lives. This includes themes such as taxation, investment, supply and demand, and global economic systems and trends throughout history. In the project based component of the course, students analyze data related to taxation, currency, opportunity cost, and personal financial investment through the creation of research-based projects.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Macroeconomics

In this course students study macroeconomics, which deals with the economies of nations and regions. Students will learn how these economies function and measure up against one another by exploring concepts including gross domestic product (GDP), unemployment rates, and price indices. At the end of this course, students will be able to understand the world economy and recognize the events and people who have contributed to our understanding of macroeconomics.

Prerequisite: None

Length: Two Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Microeconomics

In Microeconomics, students learn about the basic structure of economics and how it affects world events and people's everyday lives. Upon completing this course, students have a better understanding of personal finance, the role and process of taxation, and the risks and rewards of investment. The course discusses the need for economic systems, examines the concepts of supply and demand and consumer theory, and evaluates past and present occupation trends. Students compare the mixed economies of various nations; learn about traditional, command, and market economies; and examine the role of government in regulating the economy.

Prerequisite: None

Length: Two Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Psychology

In this course students learn how their senses, perceptions, emotions, and intelligence influence the way they think, feel, and learn. In this course, students learn about the field of psychology, including the concepts and tools used to assess intelligence, sensation and perception, memory, motivation and emotion, and learning. At the end of this course, students gain both knowledge of and appreciation for psychology and how it affects everyone.

Prerequisite: None

Length: Two Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Sociology

The field of sociology explores the development, dynamics, and structure of societies, and society's connections to human behavior. Sociology examines the ways in which groups, organizations, communities, social categories (such as class, sex, age, or race), and various social institutions (such as kinship, economic, political, or religious) affect human attitudes, actions, and opportunities. In this course, students learn about the concepts and tools used to understand individuality, social structure, inequality, family structure, education, economics, politics, and social change.

Prerequisite: None

Length: Two Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

US Government (Project Based)

US Government focuses on the purpose and responsibilities of government, as well as the interactions between the government and the governed. As students progress through the course, they will uncover the history of the American system of government, starting with the establishment of the country as a democracy during the eighteenth century. The course explores the relationship between the political parties and lobbyists, as well as the process of monitoring and funding federal elections. Students will come to understand the roles of state and local governments and their impact on their daily lives. At the end of this course, students will have a knowledge of and appreciation for the workings and history of the US government and its impact on American society. The project component of US Government will allow students to apply their skills to become informed and active citizens of the United States.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery

+NCAA Eligibility for Competency Based

World Geography

This course explores the world's geographical divisions and the differences between Earth and the other planets in our solar system. In addition to Earth's geographical divide, the course explores how the cultural divide between countries impacts international relations. Through the study of geography, students analyze energy usage and explore ways to make the most of our planet without abusing its resources. The study of world geography through historical, cultural, physical, and economic lenses offers students a different perspective and understanding of our world.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Credit Recovery

+NCAA Eligibility for Competency Based

World History (Project Based)

In World History, students will explore the changes created by the events and people of the past, and understand how these changes impacted modern life. The material is organized sequentially, exploring history from 1400 CE to the present day. Starting with the Renaissance and Reformation, the course will highlight the cultural, economic, political, and social impact of innovation and intellectual thought. Students will follow these threads of change and development through the French Revolution, the Industrial Revolution, and the rise of imperialism and nationalism. Closing topics emphasize global conflicts and diplomacy, as seen in World War I, World War II, and the Cold War. Upon completion of the course, students have an appreciation for the patterns of historical change and their impact on modern society. In the project based component of this course, students create research-driven materials related to historical events and real-world concepts.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery

+NCAA Eligibility for Competency Based

Electives

Advanced Music Theory

In this course, students with more experience in playing an instrument or singing will be immersed in a detailed study of the structure of music for both composition and performance. The course is designed to provide a comprehensive and engaging look at musical notation and tendencies for tonal harmony. Students learn about various aspects of music theory, including music written on multiple lines or parts, in multiple clefs, and in challenging key and time signatures. Students use their command of ‘functional harmony’ to not only provide Roman numeral analysis for a wide range of musical examples but will also be able to enlist new skills to re-harmonize and transpose melodies and accompaniments. At the completion of this course, students will have mastered challenging compositional concepts and skills and have gained a deeper knowledge of and for music theory.

Prerequisite: None

Length: Two parts

Art History and Appreciation

Where do artists find their inspiration? How can you tell a Rembrandt from a Renoir? Art History and Appreciation surveys artwork and architecture from different periods in human history. Students learn how artists use their abilities to observe and interpret reality and create unique artistic styles and works. Part 1 focuses on the art and architecture in Europe, Africa, and the Americas, while Part 2 moves east to Asia and Oceania. In each part of the course, students note the development of different art movements, the variation in artistic techniques, and the influence of significant artists and designers. Lessons explain the tools, skills, and techniques artists use to create their works. Students also learn how to differentiate between art movements in significant periods of history. At the end of this course, students can recognize different artistic styles, movements, and techniques, and identify specific pieces of artwork by period and origin.

Prerequisite: None

Length: Two parts

Career Explorations

How do you decide what type of career to pursue? What steps can you take to get a job in your desired field? Career Explorations provides students with employment data and career resources to analyze job opportunities and prepare for their careers. Students learn about careers and the relationships between education, career, and earning potential. Students then match their interests with career opportunities and build a career map. The course defines essential professional skills such as communication, teamwork, organization, and leadership. Lessons also include explanations of personal attributes including flexibility, responsibility, and dependability. At the end of the course, students explore networking, résumés, using social media, and how to apply for jobs and prepare for interviews.

Prerequisite: None

Length: One Part

Chemical Engineering

This course offers students a comprehensive and engaging look at the field of chemical engineering. Students learn the basic concepts used in chemical engineering, including systems of units, the periodic table of the elements, molecules, compounds, bonding, temperature, and pressure. Students explore chemical systems and reactions, including stoichiometry, open and closed systems, multiple-component systems, and chemical reactions. Finally, students study gases and gas laws, pressure, systems, energy, and enthalpy. At the end of this course, students have gained a knowledge of and appreciation for chemical engineering and its growing importance in today's society.

Prerequisite: None

Length: One Part

Computer Engineering

In this course, students learn the basic concepts used in computer engineering, including the basic parts of a computer, how information is quantified, organized, and used, and different types of information. Students learn about information compression and information theory, the different types of coding, the theory of sound, and how sound is converted into a signal. Finally, students learn about applications of computer engineering, including digital telephones, real-time data transmission, band limits, different types of systems, and information security.

Prerequisite: None

Length: One Part

Electrical Engineering

In this introduction to electrical engineering, students learn about basic electrical engineering concepts including an introduction to electricity, circuits, energy, work, power, the components of circuits, and some simple applications of electricity. Students explore basic circuit concepts, including series and parallel circuits, laws of electricity, and how circuits are used. At the end of this course, students have a knowledge of and appreciation for the field of electrical engineering and its many applications.

Prerequisite: Algebra I

Length: One Part

Fitness

This Fitness course is all about the latest ways to lead an active, healthy life. The course provides up-to-date information to help students establish healthier lifestyles and a better understanding of the close relationship between physical activity, nutrition, and overall health. This course supports and encourages students to develop an individual optimum level of physical fitness, acquire knowledge of physical fitness concepts, and understand the importance of a healthy lifestyle. At the end of this course, students have a knowledge of and appreciation for fitness and its impact on everyone.

Prerequisite: None

Length: Two Parts

Health

This course is organized as a journey through health and wellness today. Today, health no longer means just the absence of illness; health also refers to the overall well-being of your body, your mind, and your relationships with others. The course shows students how to lead healthy lives, and includes such topics as disease, mental health, drug use, and reproductive health. At the end of this course, students have a knowledge of and appreciation for health and wellness and its impact on everyone.

Prerequisite: None

Length: Two Parts

Internet Safety

Keeping yourself safe when you're using the Internet should be a high priority. Have you ever provided information to a website that you didn't know or trust? Do you know who is able to view the personal information that you post about yourself on social media sites? Have you ever shopped online? Heard of someone who has experienced identity theft? Are you able to determine the best places to acquire accurate, reliable information to use in a research paper? In Internet Safety, you'll learn how to keep yourself safe in these and many other situations that may arise online. You will learn how to think critically about what constitutes appropriate behavior online and expand the range of your online interactions. In the beginning of the course, you will identify safety precautions for online communication, learn about ways to share content responsibly, and discover how to keep your accounts safe from identity theft and viruses. The course addresses virtual citizenship, defines cyberbullying, and encourages you to consider the consequences of your online interactions. Lessons also address reporting online abuse, phishing, plagiarism, copyright, and fair use. The course ends by explaining how to recognize quality websites for research, safely use social networking sites, and buy and sell items online.

Prerequisite: None

Length: One Part

Life Skills

Life Skills is a comprehensive career-development course for high school students making the transition to life after high school. The course shows students the steps for choosing a career, conducting a job search, selecting the right college, applying to college, and getting financial aid. This course prepares young adults for a successful life after high school, from maintaining a healthy body and a safe home to finding and keeping a job. At the end of this course, students have a knowledge of and appreciation for these important life skills.

Prerequisite: None

Length: Two Parts

Mechanical Engineering

This course introduces students to the field of mechanical engineering and its many applications in the world today. Students learn basic mechanical engineering concepts, including systems of units, vectors, forces, moments, force systems, couples, and equilibrium problems. Students explore the methods of joints and sections, define centroids, explain distributed loads and center of mass and axes, and state the Pappus-Guldinus theorems. The course concludes with lessons on dry friction, beams, cables, load distribution, pressure, and potential energy. At the end of this course, students have a knowledge of and appreciation for the field of mechanical engineering and its importance in today's society.

Prerequisite: Algebra I

Length: One Part

Music Theory and Appreciation

Are you a beginning musician? Are you someone who once upon a time learned to play an instrument or sung in a chorus or church choir? Maybe you just enjoy watching YouTube videos and listening to your favorite songs. In Music Theory and Appreciation you will immerse yourself in the study of how music works. Students will develop their functional understanding of music through listening exercises, drawing and identifying notation, creating basic compositions, and analyzing music samples. In the second part of the course, students shift their focus to a more historical analysis of Western music. They survey the development of music beginning in ancient Greece and end with modern western music. Students learn to distinguish music from a vast collection of musical time periods, composers, and contrasting musical styles and genres. By the completion of this course, students have earned a strong foundational understanding of music, preparing them to learn how to play an instrument or continue to more advanced music studies.

Prerequisite: None

Length: Two parts

Personal Finance

Introduction to Personal Finance provides students with a foundation for understanding personal budgeting and long-term financial planning. Students compare and contrast types of financial institutions, learn how to open a bank account and reconcile a monthly bank statement, and understand the importance of establishing a savings account. Students explore investments, taxes, and debt, and complete activities to develop and balance a budget. Lessons also explain credit scores and suggest ways to maintain a healthy credit score. The course also looks to the future with information about long-term financial planning and planning for large expenditures such as houses, cars, and higher education.

Prerequisite: None

Length: One part

World Languages

French I

French I is a comprehensive and engaging introduction to French language and culture. After mastering the French alphabet and numbers, students study French culture, events, and people. By the end of the course, students have a foundation in the study of French, are able to engage in French conversation, and have built a solid foundation for further French language study.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

French II

In French II, students continue their virtual tour through France and other French-speaking countries and regions. This second-level French course takes a historical perspective in teaching the language, covering historical events and historical figures. By the end of this course, students have gained a deeper knowledge of and appreciation for the French culture and language.

Prerequisite: French I

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

French III

This course continues to build students' vocabulary, grammar, and communication skills with the objective of improving student achievement in reading, writing, and speaking French. Students apply what they have learned in previous French courses to French conversation. At the end of this course, students are able to express themselves in French.

Prerequisite: French II

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

French IV

In this level four French course, students apply the knowledge they gained in previous French courses to become true Francophones. Students explore exciting eras of French history, from the Crusades to the Renaissance to the modern day, learning about famous authors and historical figures along the way. The course provides students with an advanced knowledge and deep appreciation of the French language and culture. At the end of this course, students are able to speak, read, and write in French with basic fluency.

Prerequisite: French III

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

German I

German I is a comprehensive and engaging look at the German language and culture and focuses on the most essential information needed to communicate in German. After mastering the German alphabet and numbers, students study German culture, events, and people. By the end of the course, students have a foundation in the study of German and can engage in conversational German.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

German II

Building upon the content learned in German I, students are immersed in the language, while learning cultural aspects of German-speaking countries. The course emphasizes increasing students' skills in understanding spoken German, and writing, reading, and speaking in German. German II provides a comprehensive review of German grammar while improving students' vocabulary skills. At the end of this course, students have a knowledge of and appreciation for the German people and language.

Prerequisite: German I

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Spanish I

This introductory course provides a solid foundation for students to build proficiency in listening, speaking, reading and writing in Spanish, and provides students with basic skills and contextual information for using Spanish. Each unit presents new information including useful vocabulary and grammatical structures, and introduces relevant cultural information. At the then end of this course, students have the basic skills and contextual information required for using Spanish in their professional and daily lives, and when traveling abroad.

Prerequisite: None

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery

+NCAA Eligibility for Competency Based

Spanish II

In Spanish II, students are immersed in the Spanish language and in the cultural aspects of Spanish-speaking countries. Students build on what they learned in Spanish I, with a study of Spanish grammar and emphasis on increasing their skills in listening, writing, reading, and speaking in Spanish. At the end of this course, in addition to improving their Spanish language skills, students have a knowledge of and appreciation for the culture of Spanish-speaking countries, including the events and people that have impacted its growth.

Prerequisite: Spanish I

Length: Four Parts

Course Types: Competency Based, Foundation, Credit Recovery

+NCAA Eligibility for Competency Based

Spanish III

In this level three Spanish course, students apply what they learned in previous courses to conversational Spanish. Students explore cultural aspects of Spanish-speaking countries ranging from schools and careers to sports and authors. At the end of this course, students have improved Spanish language skills, and can express themselves in Spanish conversation.

Prerequisite: Spanish II

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Spanish IV

From the Caribbean to South America, and Mexico to Spain, students continue their exploration of Spanish and Latin American language and culture. The course provides students with an advanced knowledge and deep appreciation of the

many Spanish-speaking peoples and countries around the world. At the completion of this course, students will have gained the knowledge and skills to speak, read, and write in the Spanish language with basic fluency.

Prerequisite: Spanish III

Length: Four Parts

Course Types: Competency Based

+NCAA Eligibility for Competency Based

Health and Physical Education

Fitness

This Fitness course is all about the latest ways to lead an active, healthy life. The course provides up-to-date information to help students establish healthier lifestyles and a better understanding of the close relationship between physical activity, nutrition, and overall health. This course supports and encourages students to develop an individual optimum level of physical fitness, acquire knowledge of physical fitness concepts, and understand the importance of a healthy lifestyle. At the end of this course, students have a knowledge of and appreciation for fitness and its impact on everyone.

Prerequisite: None

Length: Two Parts

Health

This course is organized as a journey through health and wellness today. Today, health no longer means just the absence of illness; health also refers to the overall well-being of your body, your mind, and your relationships with others. The course shows students how to lead healthy lives, and includes such topics as disease, mental health, drug use, and reproductive health. At the end of this course, students have a knowledge of and appreciation for health and wellness and its impact on everyone.

Prerequisite: None

Length: Two Parts

Pennsylvania HS Physical Education

What does it mean to be healthy and fit? How can physical activity help an individual to become healthy and fit? This course allows students to become acquainted with different types of movements, and enables them to understand how they're used within different instances of physical activity, while working toward their own, personal, physical activity goals. The course will encourage students to reach out into the community for examples of physical activities, and try their luck with participating in these activities which will be used in an innovative, hands-on, assessment style. This course is personalized to the likes, dislikes, and performance of each individual student, and will encourage students to reflect on accomplishments and struggles as a method for improvement and success. On their journey, students will understand the connection between fitness and proper nutrition, and will get involved in group and team sports, as well as those that can be completed independently. How to practice good sportsmanship, methods used to help students with getting along with others, and different fitness components will also be addressed. The course touches upon health basics that affect physical activity, and address the sport science related principles that pertain. Creative "Show me" and "Tell me" assessments will require video and document submissions that test student's knowledge and understanding of the lessons, which will help them to make progress toward their current and future goals. The course closes by enabling students to take a look at their

own personal accomplishments, as it is encouraged for them to keep a fitness log, and the relationship between the value of physical activity and lifelong fitness is explained.

Prerequisite: None

Length: Four Parts

Keystone

Keystone Biology

Part One

This Keystone Biology Course gives students an overview and detailed information about the content covered in Module A of the Keystone Biology exam. The course, as well as the module, focuses on how life is structured and how the processes of life are carried out within the cell. The course begins with a discussion of what it means to be alive. Students will learn the characteristics shared by all living things, including single-celled organisms. Students learn to differentiate between the two types of cells (eukaryotic and prokaryotic) that make up all living things. The processes of life are all chemistry-based, and a number of specific chemicals make up all living things. Students will explore the structure and function of the major biochemical, including fats, lipids, and proteins. Just as the body has specific structures to carry out its functions, the cell has specialized structures that carry out life's processes. Students will learn about the structures and functions of the cell's organelles. Cells do not live in a vacuum; they must interact with the outside world. Students will discover the processes that cells use to bring new materials into the cell and transport other materials out. All of these processes take energy. The cell can either use photosynthesis to produce its own chemicals to store energy or consume other organisms to get those chemicals, but all cells must go through respiration to process those chemicals and release the energy. Students will learn the chemical processes that cells use to complete photosynthesis and cellular respiration. Through analysis and evaluation of these elements, students learn the concepts covered on the Keystone Exam.

Part Two

This Keystone Biology Course gives students an overview and detailed information about the content covered in Module B of the Keystone Biology exam. The first half of the course focuses on the way that the information of life is passed along. The second half of the course involves the interaction of life with the outside world. Before jumping into those meaty subjects, the students get an opportunity to explore what is meant by science and how the scientific process works. The information and blueprints of a cell are held in the cell's DNA. Students will learn how that information is organized into the genes and chromosomes and used to create specific proteins that drive the functions of the cells. This information must be passed along to other cells as the cells reproduce or multiply and the organism grows. Students will explore the processes of mitosis and meiosis, which help ensure that the DNA from one cell is copied and placed in the daughter cells. The DNA put into the cells will determine the traits of the new organism. Students will explore the subject of genetics, learn how traits are passed along, and learn why some traits are passed along more often than others. Students will learn how this leads to the permanent changes in the species that are the hallmark of evolution. The way an organism interacts with its environment and other organisms drive the evolutionary process. Students will explore the concepts of ecology, including species interaction and the natural cycles of the environment. Through analysis and evaluation of these elements, students learn the concepts covered on the Keystone Exam.

Keystone Literature

Part One

This course is designed to expose students to a variety of texts in order to practice reading comprehension, vocabulary strategies, and literary analysis. This work will help prepare students for the Keystone Exam. Part 1 of Keystone Literature focuses on elements of fiction. Throughout this part, students read a wide selection of fiction, including short stories, drama, and poetry – three types of literature covered on the Keystone Exam. The lessons in this part cover a variety of

literary elements, including plot, setting, characters, irony, dialect, figurative language, imagery, mood, and conventions of drama. Through analysis and evaluation of these elements, students practice necessary skills covered on the Keystone Exam.

Part Two

This course is designed to expose students to a variety of texts in order to practice reading comprehension, vocabulary strategies, and literary analysis. This work will help prepare students for the Keystone Exam. Part 2 of Keystone Literature focuses on the elements of nonfiction. Throughout this part, students read a wide selection of nonfiction, including newspaper articles, speeches, essays, and excerpts from an autobiography. The lessons in this part give students the opportunity to practice identifying and evaluating nonfiction texts. Students learn to identify main ideas and supporting details, examine rhetoric and language in a persuasive work, and evaluate an author's purpose in order to practice skills necessary for the Keystone Exam.

Keystone Mathematics

Part One

This course is designed to expose students to a variety of mathematical concepts in order to practice specific skills and problem-solving strategies and better prepare them for the Keystone Exam. This course may be used as preparatory or remediation material. Part 1 of Keystone Mathematics focuses on beginning Algebra concepts.

Throughout this part, students focus on skills aligned to Module 1 standards of the Keystone Exam. Topics covered include comparing and ordering numbers; simplifying and evaluating exponential expressions; operations with polynomials; and solving and graphing linear equations, inequalities, and systems. Through analysis and practice of these concepts, students practice necessary problem-solving skills covered on the Keystone Exam.

Part Two

This course is designed to expose students to a variety of mathematical concepts in order to practice specific skills and problem-solving strategies and better prepare them for the Keystone Exam. This course may be used as preparatory or remediation material. Part 2 of Keystone Mathematics focuses on continued Algebra concepts.

Throughout this part, students focus on skills aligned to Module 2 standards of the Keystone Exam. Topics covered include analyzing patterns and relations; exploring functions, domain, and range; working with linear functions and their characteristics; using displays to represent and analyze data; and calculating and applying probabilities of events. Through analysis and practice of these concepts, students practice necessary problem-solving skills covered on the Keystone Exam.

Credit Recovery

Algebra I

Students start this course by covering concepts in beginning algebra, including solving equations and inequalities and understanding the characteristics of linear equations. Students learn to understand algebraic expressions and equations so that they can use them to solve problems. Students explore solving inequalities and applying this knowledge. The third unit focuses on the graphs of linear equations, their slopes and intercepts, and different equation forms.

Part 2 of this course covers systems of equations, factoring, and quadratic equations. Students will extend their knowledge of linear equations by solving and applying systems of equations to applications. The second unit details the structure of polynomials and factoring. The third unit explains quadratic equations, including how to solve these types of equations and the characteristics of their graphs.

Algebra II

Students begin this course by covering linear functions and their graphs, linear systems of equations and inequalities, and matrices. Students learn to understand and apply linear functions. They then explore more complex systems of equations and inequalities. Finally, students use various methods to solve matrices and apply them to real-world situations.

Part 2 of this course covers quadratic functions and their graphs, exponential and logarithmic functions, probability, and distributions. Students learn multiple methods of solving quadratic functions, explore complex solutions, and determine the appearance of solutions on the coordinate plane. The second unit introduces students to new types of functions by

exploring the inverse relationship between exponential and logarithmic functions. The third unit focuses on probability concepts and ways that binomial and normal distributions are used to solve application problems.

American History

The American History course is designed to provide students with a comprehensive and engaging profile of the history of the United States of America from the end of the Civil War in 1865 to the height of the Cold War in 1980. The course is organized as a journey through the key events that have shaped America as a nation since the divisive and destructive Civil War. The journey begins with Reconstruction, a period of great transition that offered an opportunity to heal a broken nation. It passes through the great migration westward and explores how the Industrial Revolution and waves of immigration fueled the flames of the American spirit. The course details the challenges America faced and the difficulties in reaching equality faced by native-born populations, African Americans, immigrants, and women. Students will learn how the core values of the founding fathers eventually prevailed and led to the women's suffrage and civil rights movements. The impact of war is closely investigated in the course, with units covering the role of the United States in World War I, World War II, the Korean War, and the Vietnam War. Throughout this journey, the course highlights the great political, industrial, military, and human rights leaders who shaped America into a beacon of hope. At the completion of this course, students will have gained both a knowledge of and appreciation for the events and people who have impacted the growth of the nation.

Anatomy and Physiology

Anatomy and physiology are concerned with the body – in this case, the human body. Students will learn about both the structure of body (anatomy) and the functions of those structures (physiology). The course begins with an overview of the body, its various regions, and the terms used to discuss it. From there, the course covers the cellular structures that make up the body and help carry out its necessary functions. Students will learn about the different levels of organization from cells to organs and organ systems, and explore the interconnections between the organ systems. In particular, students will investigate the interconnections between the skeletal and muscular systems and the cardiovascular and respiratory systems.

In Part 2 of the course, students will learn about other body systems, including the digestive system, which takes in nutrients, and the urinary and excretory systems, which remove wastes from the body. They will learn how the body keeps itself running smoothly and under control. They will examine the lymphatic system, which aids the immune system, and the endocrine system, which produces the chemicals that send messages throughout the body. All of these systems, along with voluntary and involuntary actions, are under the control of the nervous system. The course concludes with a discussion of the structure of the reproductive system, which enables life to continue for future generations.

Biology

This course will provide students with a broad and interactive experience covering the main topics of biological science. Biology is a large, complex, and ever-changing topic. Students will be exposed to topics ranging from the process of science to cell reproduction to the diversity of life. Life has common characteristics, whether the subject of examination is single cells or complex organisms, such as humans. The course begins by introducing students to the definition of life and applying the scientific method to biological concepts. Scientific methodology is critical to the study of biology, because many life-forms and structures vital to life are too small to see in great detail with the naked eye. The course shows how scientific methodology was used to develop a classification system for living things. The course supports student learning by focusing on the latest scientific research.

For an organism to be considered alive, it must be able to perform a number of functions. Students will see how organisms carry out their various functions from respiration to reproduction. As organisms reproduce, their characteristics are passed on to the next generation. Students will see how this plays out as they explore genetics and evolution. A study of ecology raises student awareness of the many challenges and opportunities of the modern world. Currently, Earth is the only planet known to harbor life. Students will learn about the processes that allow Earth to support life and how life-forms interact with one another and the environment.

Calculus

Students begin this course by focusing on the building blocks that connect algebraic concepts to calculus, including the slopes of curves. Throughout this part, students focus on the fundamental ideas of calculus and how they apply to a variety of functions and their applications. Topics covered include limits, continuity, tangents to curves, derivative rules and notation, concavity, critical numbers, extrema, modeling, and optimization.

Part 2 of this course focuses on a variety of calculus concepts and their applications. Topics covered include approximation techniques for areas under curves, definite and indefinite integration, differential equations, volumes of solids, parametric and polar curves, convergence, divergence, and other series. Through analysis and practice of these concepts, students gain the skills necessary to succeed with calculus.

Chemistry

This course will provide students with an engaging and effective online experience in chemistry. Students will be challenged as they apply their studies in other sciences to new theories, models, and problems. Chemistry provides a way to apply the scientific method, explaining the activities of particles that are too small to see clearly even with powerful microscopes. The course begins by taking the students to the roots of chemistry, focusing on the early scientists who laid the foundations of this science. Students review the scientific method and learn how it was applied to develop both the theory of the atom and the periodic table. Chemistry also lays the foundation for other courses because it deals with the fundamental particles of matter. Students explore the structure of the atom, which is the building block of all matter, and the impact of that structure on the behavior of atoms of different elements. Students will then explore the properties and relationships of these particles in the various forms of matter: liquid, gas, and solid.

Matter does not exist in isolation. Different materials interact in a variety of ways. The course will show how these interactions occur in compounds and in mixtures. Students expand their understanding of that structure as they examine the ways that bonds form between atoms and the impact that these bonds have on the characteristics of the atoms involved. Students will explore how bonds are formed and broken in chemical reactions and the law of conservation of matter. The next part of the course will explore the laws that cover the behavior of gases, which is different from that of liquids and solids. Finally, students will explore the characteristics and behaviors of solutions and mixtures.

Integrated Mathematics 1

Students begin this course by focusing on the fundamental ideas of algebra. Throughout this part, students focus on essential algebraic concepts. The topics covered include numbers and quantities, expressions, equations, graphs of linear equations, systems of equations and inequalities, and the characteristics of functions.

Part 2 of this course focuses on advanced concepts in algebra, as well as data analysis and geometry. Throughout this part, students focus on a variety of mathematical concepts and their applications. The topics covered include graphs of trigonometric functions, the structure of polynomials, exponential and logarithmic relationships, data analysis, and geometric constructions and proofs.

Integrated Mathematics 2

Students begin this course by focusing on essential algebraic concepts. The topics covered include numbers and quantities, expressions, equations, graphs of linear equations, systems of equations and inequalities, and the characteristics of functions.

Part 2 of this course focuses on a variety of mathematical concepts and their applications. The topics covered include graphs of trigonometric functions, the structure of polynomials, exponential and logarithmic relationships, data analysis, and geometric constructions and proofs.

Integrated Mathematics 3

Students begin this course by focusing on essential algebraic and statistical concepts. The topics covered include data sampling methods, data distributions, rules and properties of exponents, sequences, polynomial structures, and rational expressions.

Part 2 of this course focuses on a variety of mathematical concepts and their applications. The topics covered include angle measurements, radians and the unit circle, the laws of sines and cosines, trigonometric functions and identities, function comparison, and geometric modeling.

Integrated Mathematics 4

Students begin this course by focusing on essential concepts in linear algebra. The topics covered include rectangular and polar forms of numbers, vector operations, matrices, and rational functions.

Part 2 of this course focuses on a variety of mathematical concepts and their applications. The topics covered include rational functions, function composition, trigonometric functions and graphs, and probability distributions.

Earth Science

Earth occupies a unique position in the solar system and in the universe as a whole. It is the only planet in this solar system that can support life, according to current knowledge. Only a handful of planets that could support life have been identified, but scientists believe that many more exist. This course will allow students to explore the characteristics of Earth that allow it to support life. Earth science is the combined study of geology, physics, chemistry, and biology as they impact the universe, Earth's internal processes, and the structure and relationships of the natural world. Included in this course is a study of Earth's air and water and the physical processes that shape the physical world. This course also focuses on ways that human civilization has impacted the balance of nature.

Students will learn how Earth is studied and mapped and are introduced to the different processes that repeat themselves in the cycles that allow life to exist on the planet. Students learn about geology, the study of Earth, as they explore components of Earth. They will learn about different types of rocks and how they are formed, minerals, and plate tectonics. Students will also learn how Earth and the Moon move in relation to each other and the Sun, and how those movements impact the seasons and the climate patterns around the planet. Students will learn how the moving Earth creates spectacular natural disasters, such as volcanic eruptions and earthquakes, and examine the awesome shape-changing power of glaciers. Finally, students will leave Earth behind to study astronomy as they virtually explore the objects that exist beyond this planet.

English 1

Students begin by reading Shakespeare's tragedy *Romeo and Juliet*. Throughout the lessons concerning this play, students learn about the conventions of drama and the elements of plot. They also discover how to make predictions and inferences while reading a work of literature. Students will read excerpts of Miguel de Cervantes's novel *Don Quixote* and learn how to analyze internal and external conflicts. Students will implement what they learn by writing short responses to works of literature as well as a longer expository essay.

Part 2 of this course builds on the skills introduced in Part 1. This part begins with an overview of poetry, poetic form, and poetic elements. To demonstrate understanding of this genre of literature, students write a compare-and-contrast essay that focuses on poetry analysis. Following this, students practice reading and responding to a longer work of literature, Mark Twain's novel *The Adventures of Huckleberry Finn*.

English 2

Students begin this course by reading a selection of famous speeches and documents. Throughout these lessons, students learn to summarize main ideas and key supporting details, analyze rhetoric and language, and employ vocabulary strategies to improve their reading comprehension. From there, students move on to reading and analyzing George Orwell's novel *Animal Farm*, an allegory of the Russian Revolution and Stalin's rise to power.

Part 2 of this course emphasizes the importance of the narrative form in both reading and writing. Throughout this course, students actively read and analyze both long and short works of literature, study the narrative form and elements of style, and write an original short story.

English 3

Students begin by reading a selection of poetry by renowned authors such as Carl Sandburg, Maya Angelou, Edgar Allan Poe, Langston Hughes, and Emily Dickinson. In the second half of Part 1, students read F. Scott Fitzgerald's classic novel *The Great Gatsby* and practice evaluating literary elements including plot, character, setting, and conflict. Throughout the course, students also employ vocabulary strategies to increase their reading comprehension, study elements of grammar, and study and practice characteristics of good writing.

In Part 2 of this course, students study various forms of literature, including short stories, dramas, and novels. This wide selection of reading encompasses works by Nathaniel Hawthorne, Mark Twain, William Faulkner, Henrik Ibsen, and Mary Shelley. Throughout the course students read, evaluate, and respond to these works of literature.

English 4

Students begin by reading a selection of nonfiction texts, including newspaper articles, speeches, and essays. As they evaluate these texts, students learn how to structure an argument, analyze rhetoric, and identify main ideas and supporting details in a text. Students employ these skills when they write their own persuasive essays on topics of their own choosing. In the latter half of Part 1, students study classic works of British literature, including selections from Geoffrey Chaucer's *The Canterbury Tales* and Shakespeare's classic tragedy *Hamlet*.

Part 2 of this course teaches students to evaluate the narrative form and key elements of literature in order to practice their analytical and critical thinking skills. Throughout this course, students read and analyze both long and short works of literature, study the narrative form and elements of style, and write an original short story.

General Math

The goal of this course is to motivate students while helping them establish a strong foundation for success in developmental and consumer mathematics. The course leads students through basic mathematics and its applications, focusing on whole numbers, integers, decimals, and percentages. Students make sense of the mathematics they encounter each day, including wages, banking, interest, credit, and consumer costs. At the end of this course, students have a knowledge and appreciation for mathematics and problem-solving that prepares them for the future.

Geometry

Students begin this course by covering concepts in beginning geometry, including triangles, polygons, area, and perimeter. First, students develop an understanding of triangle properties, postulates, and theorems and use them to solve problems. They then explore the properties of polygons and parallelograms, applying these properties to real-world problems. Finally, students focus on area and perimeter applications that involve a variety of shapes.

Part 2 of this course covers the concepts of trigonometric relationships, circles, surface areas, and volumes. First, students revisit the Pythagorean theorem and explore how special trigonometric ratios and laws help them to solve a variety of triangle problems. The second unit explores parts and measurements of circles, including tangent and secant theorems. Unit 3 extends students' knowledge of area as they apply surface area and volume formulas to a variety of shapes.

Physics

This course will provide students with an engaging and effective online experience in physics. Unlike chemistry and biology, which sometimes focus on objects too small to see, physics often deals with the motion of everyday objects. In that way, physics can be easier to visualize. Beginning with Newtonian mechanics, students will learn that every object is acted upon by multiple predictable forces that can be measured or calculated. Isaac Newton's impact on the study of motion was revolutionary; students study his laws and the mathematics of moving objects. Students will learn how to describe the causes and effects of the quantities that describe the motion of objects in straight lines, curved lines, and circles. Students also learn about different kinds of forces, some of which require objects to be in contact with one another, and others, such as gravity, which do not. Gravity is one of the fundamental forces holding the universe together. Through an examination of the work of Johannes Kepler, the students will see the laws that govern the motion of the universe.

Forces not only cause changes in motion; they can be used to do work. The ability to do work is energy, and the rate at which work is done is power. Students will examine the relationships between work, power, and energy. Energy exists in many forms and can change from one form to another; however, the total energy cannot change. Students explore the conservation of energy as it relates to the motion of an individual object and the collisions between two objects. Students will continue that exploration by studying periodic and harmonic motions, the forces of electrostatics between charged particles, periodic motion, and the transfer of energy.

Physical Science

This course is designed to cover the concepts in the field of physical science in an interactive and engaging way. Physical science encompasses both chemistry and physics. Both of these subjects involve quantitative analysis, giving students the opportunity to take and analyze measurements. The study of chemical principles exposes students to the structure and behavior of matter in its various forms. Physics is the study of motion, the forces that govern that motion, and the way energy is processed by matter. Students are asked to apply their knowledge of these topics through problems, explanations, and graphs. Activities and explorations help to keep students engaged with the material.

The physical science course begins with discussion of scientific methodology and measuring systems, which are imperative to the future discussion of the concepts in the course. Students apply the scientific method to exploring the structure of the atom, investigating the evidence that supports the various models used to characterize atoms and molecules. This structure leads to the properties of matter, such as structure, phase changes, and chemical and physical properties. The course then shifts to the physics side of physical science. Measuring systems are applied with a discussion of motion. Students will investigate the forces that cause changes in motion and the work of Isaac Newton, which is the foundation for physics. Students will learn about the work of two other giants of physics, Pascal and Archimedes. Though the study of motion begins with force, it also concerns energy, which is the ability to do work. The course concludes with an exploration of the relationship between force, work, power, and energy.

Pre-Algebra

Students begin this course by covering the concepts of integers, decimals, fractions, and one-variable equations. Students explore and review concepts related to integers and operations and use integers to solve problems. They explore the use of

operations for solving problems involving decimals and fractions. Finally, students gain a foundation in solving equations and learn how to represent sentences as equations.

Part 2 of this course covers the concepts of ratios, proportions, graphs of linear equations and inequalities, data displays, and probability. Students will use ratios, rates, and proportions to solve a variety of applications including measurement conversions, figures, and scales. In the second unit, students extend their knowledge of one-variable equations to linear equations and inequalities, exploring characteristics such as slope and intercept to graph and check solutions. The third unit introduces various types of data displays, including box plots and stem-and-leaf plots. Students end the unit by solving basic probability problems related to independent and dependent events.

Pre-Calculus

Students begin this course by focusing on a variety of functions and their applications. The topics covered include working with functions, complex numbers, solutions to polynomial equations, exponential and logarithmic properties, systems of equations, and matrices.

Part 2 of this course focuses on a variety of trigonometric concepts and their applications. The topics covered include angles and the unit circle, trigonometric graphs, functions, identities and equations, sequences and series, vectors, and conic sections.

Spanish 1

This course gives students the opportunity to learn the basics of the Spanish language. Students begin by learning the Spanish alphabet and understanding the difference between consonants and vowels. Students learn conversational phrases including greetings, farewells, and introductions, then progress to some more formal aspects of the language, including subject pronouns and the differences between *tú* and *usted*, the formal and informal forms of *you*. Students will learn how to communicate about names, feelings, and nationality. Lessons address many aspects of daily life including likes and dislikes, the weather, the seasons, the days of the week, the months of the year, and counting from 0 to 199. Students will also learn about the Aztec calendar. Part 1 ends with a study of Spanish noun articles equivalent to *a*, *an*, and *the* in English and regular verb conjugations for *-ar*, *-er*, and *-ir* verbs.

Part 2 of the course gives students the tools to describe the world around them. Students learn adjectives and the verb *ser*, one form of the verb *to be*. They will also learn how to ask questions and form sentences by using *if* and *when*. Students expand their vocabulary to talk about appearances, objects, and the rooms in a house. The verbs *haber* (similar to *there are*) and *necesitar* (*to need*) are introduced. Students will be able to ask questions about quantity and cost, talk about the time of day, discuss family members and relationships, indicate possession, and discuss household chores.

Spanish 2

This course allows students to expand their Spanish vocabulary to discuss subjects including locations, school, food, and clothing. Lessons address different places and the reasons people go there as well as the classes, objects, and people at school. Students will learn the verbs *faltar* (*to be missing*) and *estar* (another aspect of *to be*), and learn how to use both regular and irregular past participles. Students will also learn to distinguish between the verbs *tener* (*to have*) and *haber* (similar to *there are*).

Part 2 of the course introduces a variety of food-related vocabulary including the names of fruits, vegetables, proteins, fish and seafood, breads and grains, sweets, dairy products, snacks, and beverages. Students will use this vocabulary to learn how to discuss the food eaten at particular meals and how to order food at a restaurant. Students will learn the words for colors and use these to describe clothing items and accessories. They will be able to state what a person is wearing, describe the size and fit of clothing, and shop for clothing.

US Government

This stimulating course offers students a comprehensive examination of the US government. Students will explore the evolution of American democracy from its birth in the eighteenth century to the expansive roles of the federal, state, and local administrations of today. Topics including changes to the Constitution, the function of the Supreme Court, the structure of Congress, and the importance of the media are investigated in order to give students a well-supported understanding of the reasons for and responsibilities of government. The relationship between the political parties and lobbyists is detailed, as well as the processes of monitoring and funding federal elections. Finally, students will learn about the roles of state and local governments and the direct impact these organizations have on their lives.

World Geography

This course is designed to illustrate the world's geographical divisions, the documentation of the land and water masses by topographers and geographers, and the differences between Earth and the other planets in the solar system. The course not only discusses the planet's physical traits, but also highlights cultural differences between people in different countries. The different norms in each country have to be considered as nations interact with one another. Studying geography allows students to determine how to make the most of the planet without abusing its resources. The study of world geography includes historical, cultural, physical, and economic perspectives, offering students a broad understanding of the diverse world.

World History

This course provides students with a comprehensive, engaging profile of world history. This course is organized as a journey through the historical events that have shaped the modern world. The material is organized sequentially, exploring history from 1400 CE to the present day. The course focuses on the leaders of the world's most influential countries and the impact that their decisions and innovation have had on the populace. Topics covered include the Renaissance, the French Revolution, the Industrial Revolution, and both World Wars. The goal of this part is to enlighten students about the relationship between past historical events and the characteristics of the modern world.

Honors

Algebra 1 Honors

Throughout Algebra 1 Honors, students will study a range of topics that extend beyond the traditional framework of Algebra 1. This course begins with fundamental topics in algebra, including number classification, parts of expressions, linear equations, and proportionality. Students will extend these topics as they learn about the many characteristics and applications of linear functions. The course continues with an exploration of systems of equations and inequalities, the structure of polynomials, and an in-depth examination of quadratic functions. Students wrap up the course by analyzing data and probability concepts, inverses, radical functions, and rational expressions.

Prerequisite: None

Length: Four parts

+NCAA Eligibility for Honors

Algebra 2 Honors

In Algebra 2 Honors, students will be challenged with a variety of topics from algebra, geometry, trigonometry, and statistics. The course begins with linear functions and their applications, matrices, and characteristics of quadratic functions. Students will then explore the complex number system and its relationship to quadratics and polynomials. The course continues with an in-depth look at functions, including rational, exponential, logarithmic, and piecewise functions. Students will also study the concept of inverse functions, as well as the structure and applications of conic sections. The

course ends with a look at trigonometric functions and their applications, advanced probability concepts, and normal distributions.

Prerequisite: Geometry

Length: Four parts

+NCAA Eligibility for Honors

American History Honors

In American History Honors, students will study the framework of cultural, political, and social issues that have touched and impacted American society. Focusing on reading as a historian, students will begin by practicing the skills needed for reading primary and secondary resources. They will incorporate these skills as they delve into the course material. Picking up with Reconstruction and concluding with globalization in the twenty-first century, students will discover how cooperation, innovation, and spirit have shaped the United States into the country it is today.

Prerequisite: None

Length: Four parts

+NCAA Eligibility for Honors

Biology Honors

Biology is the study of life. In this course, students will study life's processes, looking at organisms from tiny single-celled organisms to large multicellular organisms. Students will also explore the ways organisms interact with one another and their environments. In addition, they will examine how traits are passed down through generations and how the traits of a species can change over time. In this honors-level course, students will have the opportunity to go beyond the traditional content of a biology course. The course will allow them to go deeper into the information, explore current research, and analyze public policy issues related to biology.

Prerequisite: None

Length: Four parts

+NCAA Eligibility for Honors

Chemistry Honors

In the simplest terms, chemistry is the study of matter. Nearly everything in the world is matter. Anything that can be touched, seen, heard, or smelled is matter. Even things that cannot be seen, such as atoms, are matter. In the Chemistry course, students will study the basic structure of matter and the ways different types of matter interact. They will explore how single atoms come together to make large complex molecules and mixtures. Anything that isn't matter is energy. Students will examine the ways matter interacts with energy. Students in the honors course will learn basic chemistry concepts, then explore them in greater detail. In addition, students will have the opportunity to examine cutting-edge research and learn about the latest advancements in chemistry.

Prerequisite: None

Length: Four parts

+NCAA Eligibility for Honors

English 1 Honors

The honors English track begins with English 1 Honors, a course which introduces students to great works of literature including Shakespeare's classic tragedy *Romeo and Juliet*, Mary Shelley's Gothic novel *Frankenstein*, and Voltaire's satire *Candide*. Throughout this course, students will learn to actively read, study, and analyze both fiction and nonfiction. Additionally, students will write essays and complete projects that meet a range of purposes in order to demonstrate their understanding of the concepts taught in the course.

Prerequisite: None

Length: Four parts

+NCAA Eligibility for Honors

English 2 Honors

Throughout English 2 Honors, students will complete a range of tasks that demonstrate their ability to write in different styles and increase their understanding of the texts they study throughout the course. Students will study and develop their speaking, listening, writing, and presentation skills as they complete their coursework. They will also read a variety of texts, including speeches by prominent figures such as Nelson Mandela and the Dalai Lama and books including *Lord of the Flies*, by William Golding, and *Animal Farm*, by George Orwell.

Prerequisite: None

Length: Four parts

+NCAA Eligibility for Honors

English 3 Honors

Students will discover different genres of literature, including poetry, short stories, plays, novels, and essays, throughout their coursework in English 3 Honors. By engaging with the literature, students will learn more about how to analyze and evaluate literary devices, style, and structure. Throughout the course, students will demonstrate their learning by writing about the texts they read. They will also practice a variety of skills, including writing research, analytic, persuasive, and narrative essays, and leading a group discussion.

Prerequisite: None

Length: Four parts

+NCAA Eligibility for Honors

English 4 Honors

The honors English track concludes with English 4 Honors. This course requires students to engage with a variety of fiction and nonfiction texts, including works by William Shakespeare, Charlotte Brontë, Geoffrey Chaucer, John Donne, Virginia Woolf, and Henry David Thoreau. In addition to reading, analyzing, and evaluating these texts, students will also hone their writing skills through a range of assignments and build on previously learned concepts to begin generating their own paper topics and research questions.

Prerequisite: None

Length: Four parts

+NCAA Eligibility for Honors



Advanced Placement

Increase AP opportunities and improve outcomes

Whether your goal is to offer more Advanced Placement courses, provide an authorized AP curriculum to classroom teachers, or ensure students are well prepared for their AP exams, Apex Learning offers online courses authorized by the College Board AP Course Audit.

The flexibility of Apex Learning curriculum allows schools to address a range of needs that include:

- **Offering an AP program with instruction provided by certified Apex Learning Virtual School teachers**
- **Offering AP Exam Reviews that prepares students for success on AP exams**
 - **Diagnostic assessments identify each student's strengths and weaknesses**
 - **Personalized study plans direct students to the most relevant instructional material**
 - **Students receive opportunities for practice and tips on taking the exam**

Students enrolled in Apex Learning AP courses outpace their peers nationwide. During the 2016-2017 school year, 65 percent of Apex Learning VS Advanced Placement students scored a 3 or better on their AP exams, outpacing the national average by 5 percentage points.

AP Courses

AP Biology

AP Biology builds students' understanding of biology on both the micro and macro scales. After studying cell biology, students move on to understand how evolution drives the diversity and unity of life. Students will examine how living systems store, retrieve, transmit, and respond to information and how organisms utilize free energy. The equivalent of an introductory college-level biology course, AP Biology prepares students for the AP exam and for further study in science, health sciences, or engineering. The AP Biology course provides a learning experience focused on allowing students to develop their critical thinking skills and cognitive strategies. Frequent no- and low-stakes assessments allow students to measure their comprehension and improve their performance as they progress through each activity. Students regularly engage with primary sources, allowing them to practice the critical reading and analysis skills that they will need in order to pass the AP exam and succeed in a college biology course. Students perform hands-on labs that give them insight into the nature of science and help them understand biological concepts, as well as how evidence can be obtained to support those concepts. Students also complete several virtual lab studies in which they form hypotheses; collect, analyze, and manipulate data; and report their findings and conclusions. During both virtual and traditional lab investigations and research opportunities, students summarize their findings and analyze others' findings in summaries, using statistical and mathematical calculations when appropriate. Summative tests are offered at the end of each unit as well as at the end of each semester, and contain objective and constructed response items. Robust scaffolding, rigorous instruction, relevant material and regular active learning opportunities ensure that students can achieve mastery of the skills necessary to excel on the AP exam. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: Biology

Length: Two Semesters

Required Materials: AP Biology requires a college-level biology textbook. Students may use any college-level biology textbook to successfully complete the course. Resources are provided in the course to support students using texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf

AP Biology requires the completion of hands-on lab activities and has been approved by the College Board as meeting all requirements for a laboratory science course. For a list of hands-on lab materials, go to:

<https://support.apexlearning.com/materials>

AP Calculus

In AP Calculus AB, students learn to understand change geometrically and visually (by studying graphs of curves), analytically (by studying and working with mathematical formulas), numerically (by seeing patterns in sets of numbers), and verbally. Instead of simply getting the right answer, students learn to evaluate the soundness of proposed solutions and to apply mathematical reasoning to real-world models. Calculus helps scientists, engineers, and financial analysts understand the complex relationships behind real-world phenomena. The equivalent of an introductory college-level calculus course, AP Calculus AB prepares students for the AP exam and further studies in science, engineering, and mathematics. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: Algebra II, Geometry, Precalculus with Trigonometry

Length: Two Semesters

Required Materials: TI-84 Plus, TI-83, or TI-83 Plus Calculator. Read “Getting Started” and Chapter 1 in the TI Guidebook before the course starts. AP Calculus AB requires a college-level calculus textbook. Students may use any college-level calculus textbook to successfully complete the course. Resources are provided in the course to support students using texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf

AP Chemistry

AP Chemistry builds students' understanding of the nature and reactivity of matter. After studying chemical reactions and electrochemistry, students move on to understand how the chemical and physical properties of materials can be explained by the structure and arrangements of the molecules and the forces between those molecules. Students will examine the laws of thermodynamics, molecular collisions, and the reorganization of matter in order to understand how changes in matter take place. Finally, students will explore chemical equilibria, including acid-base equilibria. The equivalent of an introductory college-level chemistry course, AP Chemistry prepares students for the AP exam and for further study in science, health sciences, or engineering. The AP Chemistry course provides a learning experience focused on allowing students to develop their critical thinking skills and cognitive strategies. Frequent no- and low-stakes assessments allow students to measure their comprehension and improve their performance as they progress through each activity. Students regularly engage with primary source materials, allowing them to practice the critical reading and analysis skills that they will need in order to pass the AP exam and succeed in a college chemistry course. Students perform hands-on labs that give them insight into the nature of science and help them understand chemical concepts, as well as how evidence can be obtained to support those concepts. Students also complete several virtual lab studies in which they form hypotheses; collect, analyze, and manipulate data; and report their findings and conclusions. During both virtual and traditional lab investigations and research opportunities, students summarize their findings and analyze others' findings in summaries, using statistical and mathematical calculations when appropriate. Summative tests are offered at the end of each unit as well as at the end of each semester, and contain objective and constructed response items. Robust scaffolding, rigorous instruction, relevant material, and regular active learning opportunities ensure that students can achieve mastery of the skills necessary to excel on the AP exam. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: Chemistry

Length: Two Semesters

Required Materials: AP Chemistry requires a college-level chemistry textbook. Students may use any college-level chemistry textbook to successfully complete the course. Though students may use any college-level textbook, resources such as page references and scaffolded reading guides are provided in the course to support students who use the texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf

Students using other college-level chemistry textbooks or older editions will need to identify the appropriate sections of their text to complete each reading assignment.

AP Chemistry requires the completion of hands-on lab activities and has been approved by the College Board as meeting all requirements for a laboratory science course. For a list of hands-on lab materials, go to:

<https://support.apexlearning.com/materials>

AP English Language and Composition

In AP English Language and Composition, students investigate rhetoric and its impact on culture through analysis of notable fiction and nonfiction texts, from pamphlets to speeches to personal essays. The equivalent of an introductory college-level survey class, this course prepares students for the AP exam and for further study in communications, creative writing, journalism, literature, and composition. Students explore a variety of textual forms, styles, and genres. By examining all texts through a rhetorical lens, students become skilled readers and analytical thinkers. Focusing specifically on language, purpose, and audience gives them a broad view of the effect of text and its cultural role. Students write expository and narrative texts to hone the effectiveness of their own use of language, and they develop varied, informed arguments through research. Throughout the course, students are evaluated with assessments specifically designed to prepare them for the content, form, and depth of the AP Exam. AP English Language and Composition is recommended for 11th and 12th grade students. This course fulfills 11th grade requirements. Consequently, we recommend that students take only one of the following courses: English 11, Texas English III, and AP English Language and Composition. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: Complete/Pass English 10

Length: Two Semesters

Required Materials: AP English Language and Composition requires a college-level English textbook. Students may use any college-level English textbook to successfully complete the course. Resources are provided in the course to support students using texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf

AP English Literature & Composition

AP English Literature and Composition immerses students in novels, plays, poems, and short stories from various periods. Students will read and write daily, using a variety of multimedia and interactive activities, interpretive writing assignments, and class discussions to assess and improve their skills and knowledge. The course places special emphasis on reading comprehension, structural and critical analysis of written works, literary vocabulary, and recognizing and understanding literary devices. The equivalent of an introductory college-level survey class, this course prepares students for the AP exam and for further study in creative writing, communications, journalism, literature, and composition. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: At least a B-grade in most recent English course

Length: Two Semesters

Required Materials: AP English Literature and Composition requires a college-level English textbook. Students may use any college-level English textbook to successfully complete the course. Resources are provided in the course to support students using texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf

AP Environmental Science

AP Environmental Science provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course draws upon various disciplines, including geology, biology, environmental studies, environmental science, chemistry, and geography in order to explore a variety of environmental topics. Topics explored include natural systems on Earth; biogeochemical cycles; the nature of matter and energy; the flow of matter and energy through living systems; populations; communities; ecosystems; ecological pyramids; renewable and nonrenewable resources; land use; biodiversity; pollution; conservation; sustainability; and human impacts on the environment. The equivalent of an introductory college-level science course, AP Environmental Science prepares students for the AP exam and for further study in science, health sciences, or engineering.

The AP Environmental Science course provides a learning experience focused on allowing students to develop their critical thinking skills and cognitive strategies. Scientific inquiry skills are embedded in the direct instruction, wherein students learn to ask scientific questions, deconstruct claims, form and test hypotheses, and use logic and evidence to draw conclusions about the concepts. Frequent no- and low-stakes assessments allow students to measure their comprehension and improve their performance as they progress through each activity. Students perform hands-on labs and projects that give them insight into the nature of science and help them understand environmental concepts, as well as how evidence can be obtained to support those concepts. Virtual lab activities enable students to engage in investigations that would otherwise require long periods of observation at remote locations and to explore simulations that enable environmental scientists to test predictions. During both hands-on and virtual labs, students form hypotheses; collect, analyze, and manipulate data; and report their findings and conclusions. Throughout this course, students are given an opportunity to understand how biology, earth science, and physical science are applied to the study of the environment and how technology and engineering are contributing solutions for studying and creating a sustainable biosphere.

Prerequisite: Two years of high school laboratory science (one year of life science and one year of physical science), and one year of algebra

Length: Two Semesters

Required Materials: AP Environmental Science requires a college-level Environmental Science textbook. Students may use any college-level Environmental Science textbook to successfully complete the course. Resources are provided in the course to support students using texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf

AP Environmental Science requires the completion of hands-on lab activities and has been approved by the College Board as meeting all requirements for a laboratory science course. For a list of hands-on lab materials, go to:

<https://support.apexlearning.com/materials>

AP Macroeconomics

AP Macroeconomics students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. They'll also examine how individuals, institutions, and influences affect people, and how those factors can impact everyone's life through employment rates, government spending, inflation, taxes, and production. The equivalent of a 100-level college-level class, this course prepares students for the AP exam and for further study in business, political

science and history. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: Algebra II (or Math Analysis)

Length: One Semester

AP Microeconomics

AP Microeconomics studies the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students will learn why the same product costs different amounts at different stores, in different cities, at different times. They'll also learn to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behavior under various conditions. Microeconomics studies the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. The equivalent of a 100-level college course, AP Microeconomics prepares students for the AP exam and for further study in business, history, and political science. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: Algebra I

Length: One Semester

AP Psychology

AP Psychology provides an overview of current psychological research methods and theories. Students will explore the therapies used by professional counselors and clinical psychologists and examine the reasons for normal human reactions: how people learn and think, the process of human development and human aggression, altruism, intimacy, and self-reflection. They will study core psychological concepts, such as the brain and sense functions, and learn to gauge human reactions, gather information, and form meaningful syntheses. Along the way, students will also investigate relevant concepts like study skills and information retention. The equivalent of an introductory college-level survey course, AP Psychology prepares students for the AP exam and for further studies in psychology or life sciences. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: Biology

Length: One Semester

Required Materials: AP Psychology requires a college-level Psychology textbook. Students may use any college-level Psychology textbook to successfully complete the course. Resources are provided in the course to support students using texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf

AP Spanish Language

AP Spanish Language students practice perfecting their Spanish speaking, listening, reading, and writing skills. They study vocabulary, grammar, and cultural aspects of the language, and then apply what they learn in extensive written and spoken exercises. The course addresses the broad themes of Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. By the end of the course, students will have an expansive vocabulary, a solid, working knowledge of all verb forms and tenses, strong command of other language structures, and an ability to use language in many different contexts and for varied purposes. The

equivalent of a college-level language course, AP Spanish Language prepares students for the AP exam and for further study of Spanish language, culture, or literature.

This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board

Prerequisite: 3-4 years of Spanish or equivalent native fluency

Length: Two Semesters

Required Materials: Any Spanish-English, English-Spanish Dictionary and a Microphone

AP Statistics

AP Statistics gives students hands-on experience collecting, analyzing, graphing, and interpreting real-world data. They will learn to effectively design and analyze research studies by reviewing and evaluating real research examples taken from daily life. The next time they hear the results of a poll or study, they will know whether the results are valid. As the art of drawing conclusions from imperfect data and the science of real-world uncertainties, statistics plays an important role in many fields. The equivalent of an introductory college-level course, AP Statistics prepares students for the AP exam and for further study in science, sociology, medicine, engineering, political science, geography, and business. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: Algebra II or Math Analysis

Length: Two Semesters

Required Materials: TI-89, TI-84 Plus, TI-83, or TI-83 Plus Calculator, Read "Getting Started" and chapter 1 in the TI Guidebook before the course starts.

AP U.S. Government and Politics

AP U.S. Government and Politics studies the operations and structure of the U.S. government and the behavior of the electorate and politicians. Students will gain the analytic perspective necessary to critically evaluate political data, hypotheses, concepts, opinions, and processes. Along the way, they'll learn how to gather data about political behavior and develop their own theoretical analysis of American politics. They'll also build the skills they need to examine general propositions about government and politics, and to analyze the specific relationships between political, social, and economic institutions. The equivalent of an introductory college-level course, AP U.S. Government and Politics prepares students for the AP exam and for further study in political science, law, education, business, and history.

This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: U.S. History

Length: One Semester

Required Materials: AP U.S. Government and Politics requires a college-level U.S. history textbook. Students may use any college-level U.S. history textbook to successfully complete the course. Though students may use any college-level textbook, resources such as page references and scaffolded reading guides are provided in the course to support students who use any of the texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf

AP U.S. History

In AP U.S. History, students investigate the development of American economics, politics, and culture through historical analysis grounded in primary sources, research, and writing. The equivalent of an introductory college-level course, AP U.S. History prepares students for the AP exam and for further study in history, political science, economics, sociology, and law. Through the examination of historical themes and the application of historical thinking skills, students learn to connect specific people, places, events, and ideas to the larger trends of U.S. history. Critical-reading activities, feedback-rich instruction, and application-oriented assignments hone students' ability to reason chronologically, to interpret historical sources, and to construct well-supported historical arguments. Students write throughout the course, responding to primary and secondary sources through journal entries, essays, and visual presentations of historical content. In discussion activities, students respond to the positions of others while staking and defending claims of their own. Robust scaffolding, rigorous instruction, relevant material, and regular opportunities for active learning ensure that students can achieve mastery of the skills necessary to excel on the AP exam. This course has been authorized by the College Board to use the AP designation. *AP is a registered trademark of the College Board.

Prerequisite: None

Length: Two Semesters

Required Materials: AP U.S. History requires a college-level U.S. history textbook. Students may use any college-level U.S. history textbook to successfully complete the course. Though students may use any college-level textbook, resources such as page references and scaffolded reading guides are provided in the course to support students who use any of the texts found in the link below:

http://cdn.apexlearning.com/documents/ALVS_Materials.pdf



Course Features

- **Skills and Objectives** – Lessons introduce skills that students will be honing and objectives that are being covered.
- **The Page Two Video** – Certain topics can cause affect in students – they may seem so difficult that a learner may turn off. Accelerate videos connect topics with real-world application or builds on prior knowledge. In this way students connect with something they know and feel comfortable with.
- **Many Times, Many Ways** – When teaching a new skill, it will be presented multiple times and in different ways. That could mean the student encounters the skill in a video, through practice, textually, via audio or in confirmation learning exercises. Learning theory suggests that a new concept or skill needs to be encountered a least a dozen time before transfer occurs.
- **Formative Support** – Accelerate believes in building student confidence. One important way to do this is to provide immediate feedback both instructionally and in quizzes. Frequently students will be given questions based on direct instruction, which they are encouraged to answer. These are ungraded and are designed to show the student essential learning along with an explanation of how an answer was derived. All quizzes have formative feedback based on student answers.
- **On-Page Note Taking Tool** – Students can take notes on any page and save them to a module accompanying the instruction. This can help students prepare for assessment. Moreover, teachers can see these nots as well.
- **Instructional Videos** – Any given lesson may have one to four videos created by certified teachers. Careful consideration is given to length, tone, and pace of videos.
- **Supplemental resources** – Teachers may access three resource libraries. There is the Ideal Library which links to all Accelerate K-12 lessons. This is a terrific resource for remediation. Further the courses like to Khan Academy videos and Open Educational Resources (OER) which can provide new ways of teaching.
- **SpeechStream Toolbar** – This allows students to listen to any page in English or have it translated with text and audio into thirty different languages
- **Assessment** – Each lesson contains at least one written assessment. Lessons are followed by quizzes. Each unit is followed by a comprehensive exam.

Course Types

- **Original Credit** – Standards aligned courses that take between 70-90 hours to complete per semester. Courses contain content, assessment, and teacher guides.
- **Honors Courses** – Come with more reading and assignments than Original Credit courses. The will taka between 90 to 110 hours per semester and are designed for the accelerated student.
- **Credit Recovery** – Accelerate offers two types of credit recovery. The Adaptive Prescriptive model presents students with a diagnostic wherein they can test out of certain areas. The Independent Study model allows for

students to move more quickly through a course as all assessment is computer scored. This is an excellent summer school or just-in-time learning resource.

- **AP-** There are 12 College Board approved AP courses in the catalog.
- **Personalized Learning Catalog** – Nearly 100 courses designed to be used in a blended environment.

English

Language Arts 9

English for grade 9 is an integrated curriculum. Each unit contains thematically related lessons in five domains: reading and the study of literature, reading informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. Topics are presented in ways that help young adolescents relate literacy skills to other aspects of their lives. Writing assignments include narrative, expository, and persuasive/argumentative modes and emphasize the use of and details and reasoning to support ideas. Speaking and listening lessons in Semester A emphasize collaborative discussion skills and peer review. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Semester A; Major Concepts:

- Reading skills and strategies
- Literary elements and devices
- Reading informational text
- Text structures
- Writing narratives and information
- Collaborative discussion
- Peer review
- Word attack skills

Like semester A, semester B consists of integrated units focused on a theme or mode of study. Literature study in semester B focuses on the analysis of different forms of literature and on comparative studies of world literature and literature delivered in different media. Writing and informational text lessons guide students through the stages of research and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

Semester B; Major Concepts:

- Literary Forms
- Comparative literature
- Literary analysis
- Evaluating arguments
- Research process and skills
- Forms of media and multimedia

Prerequisite: None

Length: Two Semesters

Required Materials: Required Novels (Choose one per semester): Romeo and Juliet (Semester A). To Kill a Mockingbird (Semester B). Optional Novels (Choose one per semester): The Old Man and the Sea. House on Mango Street. Fahrenheit 451. The Odyssey. Ender's Game. Speak of Mice and Men.

Course Types: Original Credit, Credit Recovery

Language Arts 10

English for grade 10 is an integrated curriculum, with each unit consisting of thematically related lessons in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. The skills that students practice for this course are similar to the skills in English 9 but require more independence and depth of thought. An introductory lesson at the start of each unit helps students identify any areas of weakness and review those topics before starting the more challenging grade 10 lessons. Writing assignments required in Semester A of this course include fiction, expository, and persuasive, and analytical models, emphasizing the use of details, evidence, and reasoning to support ideas. Speaking and listening lessons in Semester A cover collaborative discussion skills, the peer review process, and how to plan and deliver informative speeches and presentations. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Like semester A, semester B consists of integrated units focused on a theme or mode of study. Literature study in semester B focuses on the analysis of different forms of literature and as well as the evaluation of various modes and forms of writing. Writing and informational text lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

Prerequisite: Language Arts 9

Length: Two Semesters

Required Materials: Required Novels: *Animal Farm* (Semester A), *Night* (Semester B). Optional Novels (Choose one per semester): *The Catcher in the Rye*. *The Bean Trees*. *All Quiet on the Western Front*. *Lord of the Flies*. *Twelfth Night*. *Farewell to Manzanar*. *Antigone*.

Course Types: Original Credit, Credit Recovery

Language Arts 11

English for grade 11 is an American Literature course, with units organized chronologically according to periods in literary history. As students read foundation works of literature and other historical documents written between 1600 and 1900, they'll review and extend skills in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. Each module or unit begins with a lesson that provides historical context for the era and introduces themes that emerged in the literature of that era. Each lesson provides students with an opportunity to review basic analysis skills before applying those skills to works of literature or key historical documents. Lessons focused on more difficult historical documents include activities that help students comprehend the complex ideas in these works.

Writing modes addressed in Semester A of this course include narrative, reflective, persuasive, and analytical modes. Assignments emphasize the use of details, evidence, and reasoning to support ideas; writing lessons include model essays that demonstrate key features of each mode. The speaking and listening lessons in Semester A cover rhetoric, the peer review or writing workshop process, and performance skills. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Semester B of English 11 consists of units focused on historical eras and literary movements of the 20th and 21st century, such as Naturalism, Imagism, the Harlem Renaissance, and Postmodernism. Literature analysis lessons in semester B focus on the forms of literature that were most commonly written during the Twentieth Century and how the forms, styles, and techniques of that century inform literature written today. Students will also evaluate various modes and forms of language expression, including single media and multimedia messages. Writing and informational text lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

Prerequisite: Language Arts 9, 10

Length: Two Semesters

Required Materials: Required Novels: *The Scarlet Letter* (Semester A). *The Great Gatsby* (Semester B). Optional Novels (Choose one per semester): *Death of a Salesman*. *A Farewell to Arms*. *My Antonia*. *A Lesson Before Dying*. *Black Boy*. *The Island*. *Adventures of Huckleberry Finn*.

Course Types: Original Credit, Credit Recovery

Language Arts 12

English 12A focuses on learning to write with confidence and mastery. Emphasis is placed on building language flexibility, improving sentence structure, and mastering the writing process. Students create, revise, and edit six writing projects that are designed to help them take their writing to the next level. As an Honors course, emphasis is placed on project-based instruction and increased reading and writing opportunities. In this thought-provoking writing course, students prepare themselves for the demands of college and/or the job market by developing their writing skills. Through text readings, videos, interactive PowerPoint presentations, practice activities, workbook questions, interactive skills challenges, discussions, writing projects, and other activities students demonstrate their mastery of the writing process. Students will integrate the 6-Traits of Writing (i.e., ideas and content, organization, voice, word choice, sentence fluency, and conventions) to all of their writing. In the English 12A course, emphasis will be placed on additional reading and writing project-based instruction. Students will create projects including a short story, expository essay, functional document, persuasive essay, literary analysis, and research paper. Through the engaging activities in English 12A, students become more mature and accomplished writers.

Semester A; Major Concepts:

- Vocabulary
- Writing Mechanics
- Writing Process
- Writing Components
- Writing Applications
- Reading Comprehension

In English 12B, students experience the evolution of British culture and literature by reading the ancient epic poem Beowulf, Shakespearean sonnets, and other classics that span 1,500 years of English writings. Engaging videos, interesting readings, and interactive activities provide students with pragmatic opportunities to apply reading comprehension and writing skills to their lives. Students work through interactive lessons, completing several self-check activities and quizzes, participating in daily online discussions, and working on their writing skills. Students will apply the 6-Traits of Writing (i.e., Ideas and Content, Organization, Voice, Word Choice, Sentence Fluency, and Conventions) to all of their writing. Engaging course projects will include a personal narrative, descriptive essay, functional document, literary analysis, persuasive essay, and research paper. Teacher feedback is provided throughout the course.

Semester B; Major Concepts:

- Vocabulary
- Writing Mechanics
- Writing Process

Prerequisite: Language Arts 9, 10, 11

Length: Two Semesters

Required Materials: In this course, you are required to read **two** novels from the You-Choose list in addition to the works that are listed as required reading below. Required Novels: Jane Eyre (Semester A). The Grapes of Wrath (Semester B). The Alchemist (Semester B). The Metamorphosis (Semester B). Hamlet (Semester B). Optional Novels: 1984. Wuthering Heights. Brave New World. Othello. One Hundred Years of Solitude. A Tale of Two Cities. Cry, the Beloved Country. Frankenstein.

Course Types: Original Credit, Credit Recovery

Creative Writing

This creative writing class is about you – and all the characters, voices, and stories in your head. In this introductory class, you will explore poetry, drama, and short stories as a way to express, explore, and connect with yourself and the world around you. Writing will be examined as a process that reflects thinking. You will begin with brainstorming and pre-writing skills and move forward to various writing genres culminating in a short story at the end of the course. Poetry, plays, and short stories will be studied both as a reader and as a writer. Time will be spent developing characters and using dialogue productively. Come write and enjoy!

Major Concepts:

- Writing is a means of documenting thinking.
- Focus, content, organization, style, and conventions work together to impact writing quality.
- Writing is a recursive process that conveys ideas, thoughts and feelings.
- Purpose, topic and audience guide types of writing.
- Writing voice as it is conveyed through style.
- The application, purpose, function, and execution of three major genres of writing: poetry, drama, and short story.
- The purposeful use of life experiences as foundations for the construction of original texts.
- The use of existing texts as models for the production of original texts.

Prerequisite: Language Arts 9

Length: One Semester

Contemporary Novels

For this course, students will read a set of novels and novellas that were written during the twentieth century and reflect themes common to contemporary literature, such as the ability of the human spirit to rise above seemingly-impossible circumstances. Through creative projects and writing assignments, students will identify and analyze each novel's themes and also compare and contrast the novels' treatment of common themes. Please note that, like most contemporary literature, the novels assigned for this course contain realistic situations and language. In addition to the novels listed, each student will read another contemporary novel of his or her choosing that the instructor must approve. MLA (Modern Language Association) documentation is required on all papers submitted.

Prerequisite: Language Arts 9

Length: One Semester

Required Materials: Picture Bride: Yoshiko Uchida, Night: Elie Weisel, To Kill a Mockingbird: Harper Lee, Fallen Angels: Walter Dean Myers, The Old Man and The Sea: Ernest Hemingway, Rita Hayworth and Shawshank Redemption: Stephen King.

Mathematics

Accounting

In this course, you will explore accounting, including investigating accounting careers. You will learn basic accounting skills and procedures both with and without a computer for general journals, general ledgers, cash payments journals, cash receipts journals, sales journals, accounts payable ledgers, and accounts receivable ledgers. You will also learn how to reconcile a bank statement and to prepare payroll records. This course covers the basic principles of financial accounting for individuals and for companies with attention to both the mathematical formulas and to the ethical side of accounting. Each unit has practical exercises including a project at the end of the unit.

Major Concepts:

- Accounting is the universal language of business careers.
- The accounting equation provides a detailed description of the financial condition of a business entity.
- It is important to keep up-to-date accounting balances to provide information for reports used by people both inside and outside the business.
- Payroll is important to everyone.
- When you are paid at your job, you want to be sure the amounts are correct.
- The business also wants to be sure that all employees be paid in a legal and correct manner.

Prerequisite: None

Length: One Semester

Algebra 1

Algebra 1 (semester A) introduces students to the world of Algebra through expressions and equations. Students will evaluate algebraic expressions, solve linear equations and graph them. This course also steers students through various real-world scenarios with the emphasis on using basic statistics to interpret the information given and found. Students learn through online lesson materials, videos and interactive activities. The end of each unit tests students' understanding with a self-check quiz with feedback. Also included is a unit exam and project for students to apply what they have learned. Teacher feedback is provided throughout the semester.

Semester A; Major Concepts:

- Algebraic Expressions
- Operations with Real Numbers
- Properties of Real Numbers
- Basic Statistics Measures
- Solving Simple and Multi-Step Equations
- Linear Functions and Graphs
- Solving Inequality Equations

Algebra 1 (semester B) builds on the concepts learned in the first semester by providing a strong foundation in solving problems. Students will work with problems and applications that involve exponents, quadratic equations, polynomials and factoring methods, rational and radical equations, data analysis and probability. Students will interact with course materials through online lessons, videos, interactive questions and real-world applications. Each unit ends with a self-check quiz to confirm knowledge of the concepts learned. There is also a unit exam and project. Teacher feedback is given throughout the course.

Semester B; Major Concepts:

- Exponents and Scientific Notation
- Arithmetic and Geometric Sequences
- Operations with Polynomials
- Systems of Equations
- Factoring Polynomials
- Quadratic Functions and Graphs
- Higher-Order Polynomials
- Data Analysis and Probability
- Exponential and Radical Equations
- Rational Functions and Equations

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Algebra 2

This course further extends the learner's understanding of major algebra concepts, and prepares them with the building blocks needed to dive deeper into trigonometry, pre-calculus and advanced probability and statistics. Topics include radicals, quadratic functions and equations, polynomials, rationals, systems of equations and inequalities, exponents and logarithms, sequences and series, probability and statistics and trigonometry.

Semester A; Major Concepts:

- Interpret key features of linear functions and their graphs in a context, solving linear equations when necessary.
- Explain the connection between rational exponents and radicals, and become fluent with complex numbers.
- Sketch, transform and solve maximizing or minimizing problems with quadratic functions, using the technique of completing the square.
- Solve quadratic equations using many different techniques.
- Use and explain the remainder theorem and factor theorem to analyze polynomial functions.
- Sketch and dissect rational functions, examining end behavior and exploring applications.

Semester B; Major Concepts:

- Use linear and nonlinear inequalities to represent solution sets algebraically and graphically.
- Model real world situations using exponential and logarithmic functions and explore by graphing and solving.
- Work with geometric and arithmetic sequences and series.
- Explore and apply probability in a variety of contexts.
- Make inferences using statistical analyses.
- Explore, apply, graph and transform trigonometric functions.

Prerequisite: Algebra 1

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Consumer Math

This course focuses on the mathematics involved in making wise consumer decisions. Students explore the many ways in which mathematics affects their daily lives. The first semester will cover paychecks and wages, taxes, insurance, budgets, bank accounts, credit cards, interest calculations, and comparison-shopping. Second semester topics include vehicle and home purchasing, investing, and business and employee management.

Semester A; Major Concepts:

- Solve basic arithmetic problems that require addition, subtraction, multiplication, and division of whole numbers, fractions and decimals.
- Estimate and round numbers.
- Calculate your earned income along with deductions and fringe benefits.
- Compute percentages, ratios, and proportions.
- Keep accurate banking and checking account records.
- Formulate a personal budget which includes expenses (utilities, insurance, taxes) incurred with home ownership.
- Identify the cost of buying on credit.
- Point out the importance of wise consumer buying, saving and investing.

Semester B; Major Concepts:

- Use customary and metric units of length, volume, and weight to estimate measures and to convert from one system to another.
- Construct and read bar, line, circle, and pictographs as well as interpret information on a map.
- Compute the cost of remodeling a room such as area, number and cost of tile, amount and cost of carpeting, and amount and cost of painting.
- Compute net pay, deductions, federal and state income taxes.
- Compute premiums for life insurance and health insurance and understand Social Security benefits.
- Compute sticker price, financing, insurance, depreciation, and maintenance for an automobile.
- Read and interpret bus and airline schedules.
- Determine the cost of a trip including gasoline, meals, and hotels and use a mileage chart to calculate travel distances.
- Use unit prices, calorie charts, and cost of preparing a meal when grocery shopping.
- Compute the retail price of an item as well as the cost of renting an item.
- Explore methods of dividing profits/losses in a business partnership.
- Compute profit and loss on a stock transaction.

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Geometry

Geometry is the study of the measurement of the world. What makes Geometry so engaging is the relationship of figures and measures to each other, and how these relationships can predict results in the world around us. Through practical applications, the student sees how geometric reasoning provides insight into everyday life. The course begins with the tools needed in Geometry. From these foundations, the student explores the measure of line segments, angles, and two-dimensional figures. Students will learn about similarity, triangles and trigonometric ratios. Geometry A consists of six modules. Each module comprises ten lessons for a total of 60 lessons in the course.

Semester A; Major Concepts:

- Geometry Tools
- Logic and Proofs
- Angles and Lines
- Congruence and Similarity
- Triangles
- Trigonometric Ratios

This course builds on the foundation of the first terms in Geometry. As in previous courses, deductive and inductive reasoning are emphasized, while applying problem-solving techniques to real-world problems. Students explore quadrilaterals and circles, and learn how an object is transformed, as well as how to represent that transformation algebraically and geometrically. Students calculate area and volume of 2-dimensional and 3-dimensional objects. Geometry B consists of six modules. Each module comprises ten lessons for a total of 60 lessons in the course.

Semester B; Major Concepts:

- Quadrilaterals
- Transformations
- Circles
- Area
- Volume
- Probability

Prerequisite: Algebra 1

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Integrated Math 1

In Integrated Math 1, students use arithmetic properties of subsets of integers and rational, irrational and real numbers by simplifying expressions, solving linear equations and inequalities, graphing equations, finding the equation of a line, working with monomials and polynomials, and factoring and completing the square. Students use properties of the number system to judge the validity of results, justifying each step of the procedure to prove or disprove statements. Students compute perimeter, circumference, area, volume and surface area of geometric figures. Students also use basic trigonometric functions defined by the angles of a right triangle.

Semester A; Major Concepts:

- Algebraic Expressions
- Operations with Real Numbers
- Properties of Real Numbers
- Basic Statistics Measures
- Solving Simple and Multi-Step Equations
- Linear Functions and Graphs
- Solving Inequality Equations

Semester B; Major Concepts:

- Exponents and Scientific Notation
- Arithmetic and Geometric Sequences
- Operations with Polynomials
- Systems of Equations
- Factoring Polynomials
- Quadratic Functions and Graphs
- Higher-Order Polynomials
- Data Analysis and Probability
- Exponential and Radical Equations
- Rational Functions and Equations

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Integrated Math 2

Students in Integrated Math 2A will focus on pulling together and applying the accumulation of learning that they have acquired from their previous math courses. They will apply methods from probability and statistics; expand their repertoire of functions to include polynomial, rational, and radical functions; and expand their study of right triangle trigonometry. In addition, they will bring together all of their experience with functions and geometry to create models and solve contextual problems.

Prerequisite: Integrated Math 1

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Integrated Math 3

Students in Integrated Math III will focus on pulling together and applying the accumulation of learning that they have from their previous courses. They will apply methods from probability and statistics. Students will expand their repertoire of functions to include polynomial, rational, and radical functions. They will expand their study of right triangle trigonometry. Students will use all of their experience with functions and geometry to create models and solve contextual problems.

Prerequisite: Integrated Math 2

Length: Two Semesters

Pre-Calculus

In this course, students will understand and apply concepts, graphs and applications of a variety of families of functions, including polynomial, exponential, logarithmic, logistic and trigonometric. An emphasis will be placed on use of appropriate functions to model real world situations and solve problems that arise from those situations. A focus is also on graphing functions by hand and understanding and identifying the parts of a graph. A scientific and/or graphics calculator is recommended for work on assignments, and on examinations.

Semester A; Major Concepts:

- Basic operations and transformations apply to all functions.
- Any type of equation can be reduced to a simply linear equation.
- There are many applications that can be solved by using linear and quadratic equations.
- There are many similarities between equations and inequalities.
- All common graphs can be transformed using the same basic transformations.
- There are several types of functions.
- All functions have graphical and algebraic applications.
- Functions can be used to solve real-life problems.
- Polynomial functions can be solved using techniques similar to those of other types of equations.
- There are numerous theorems that can be useful when solving polynomial equations.
- The graphs of rational functions involve the use of vertical, horizontal and slant asymptotes.
- There is a relationship between exponential and logarithmic equations.

Semester B; Major Concepts:

- Graphs of trigonometric functions model various real-world phenomena.
- Many situations that involve right triangles can be solved using trigonometric ratio and the Unit Circle is a tool that can help solve those problems.
- Numeric patterns can be modeled with explicit or recursive functions.
- Sums of numbers can be found using a variety of formulas.
- The similarities and differences between the equations of conic sections as well as their practical real-world uses.
- Limit and continuity is essential to the study of calculus.

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Science

Biology

Biology A introduces students to the scientific method and the major concepts of biology from an historical and practical viewpoint. The three major themes of this course are the cell, the molecular basis of heredity, and the interdependence of organisms. Students who take this class will have a deeper appreciation for the complexities of living organisms. Life on this planet, unlike anywhere else in the observable universe, is complex and highly organized. Whether examining life on the molecular or the planetary level, it exhibits a highly organized structure that inspires awe by its genius and complexity. In the last 50 years, discoveries have launched new branches of biology that have transformed the daily routine, from conception to death. New challenges await, such as the current crisis in ecology, global warming, and the resurgence in viral disease. To make rational choices in the 21st century, the citizen must have a basic understanding of biological concepts and the reasoning behind them. Biology A is presented in a multimedia format using interactive modules, labs, narrated animation, text, and videos to present the study of life on this planet. Students work through and complete several self-check activities and quizzes for practice, and participate in self-reflection. In each unit, students complete the unit exam and deliver a unit project. Teacher feedback is provided throughout the course.

Semester A; Major Concepts:

- Cellular Processes
- Molecular Basis of Heredity
- Interdependence of Organisms
- Contagious Diseases-Causes and Cures
- Human Populations and Their Impact on the Environment

Biology B is a continuation of the basic course in biology, Biology A. The major concepts covered are population dynamics and evolution. Students explore population dynamics through the study of mutualism, predation, parasitism, and competition. The theory of evolution is presented, along with the many evidences and details that make evolution the backbone of modern biology. From biochemistry to evolution, biology fascinates people. Biochemists first astounded the world by showing that life obeys the same chemical principles as all creation, but that life engineers chemistry to its own needs. Decades later, Darwin shocked the world by suggesting that life evolves according to the conditions of the environment it inhabits. Evolution, often debated and derided, has survived to become a key concept of biology. This second course in biology examines the wonder of life and its mechanisms. Students work through and complete several self-check activities and quizzes for practice, and participate in self-reflection. In each unit, students complete the unit exam and deliver a unit project. Teacher feedback is provided throughout the course.

Semester B; Major Concepts:

- Biochemistry of Nutrition
- Photosynthesis and Cellular Respiration
- Genetic Adaptability
- Taxonomy and Speciation
- Nutrient Cycles and Adaptations to the Environment
- Energy Flow and Ecosystems

Prerequisite: Algebra 1

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Chemistry

In this course, students will discover what chemistry is, and how it is used and found all around us. The importance of the scientific method to solve real world problems will be investigated. Knowledge will be gained in the following areas: types of matter, atomic structure, chemical periodicity, chemical formula writing and naming, chemical equations. This course will also stress the important relationship between math and science while studying measurement, metric system and stoichiometry. Students will use higher order thinking throughout the entire course. An algebra background is recommended because of the amount and type of math involved.

Semester A; Major Concepts:

- Chemistry is the study of matter and the changes that matter undergoes.
- Matter can be classified as substances (elements or compounds) or mixtures (homogeneous or heterogeneous).
- The position of an element on the periodic table is based on the number of protons and electrons for that element and allows chemists to see patterns in physical properties and chemical reactivity.
- The visual model of the atom evolved as advances in technology were discovered.
- Elements combine to form compounds.
- Elements and compounds undergo chemical reactions to form new substances.
- Defined measurement qualifiers known as units are needed to describe measurements in the physical world.
- Units can be interconverted via dimensional analysis.
- Chemical equations are quantified via the unit known as the mole.
- Theoretical yields can be computed for balanced, chemical equations.

In Chemistry 1 B, students will investigate chemical bonding, thermochemistry, and acids and bases. The importance of the scientific method to solve real world problems will be investigated. Knowledge will be gained in the following areas: organic chemistry, biochemistry, and nuclear chemistry. This course will also stress the important relationship between math and science. Students will use higher order thinking throughout the entire course. An algebra background is recommended because of the amount and type of math involved.

Semester B; Major Concepts:

- Atoms having great electronegativity differences will combine to form ionic bonds.
- Atoms that share electrons equally form covalent bonds.
- Water is a unique compound held together by strong hydrogen bonding.
- Chemists express the concentrations of solutions in various units.
- Heat flows from higher temperature to lower temperature.
- The specific heat of an object is related to its mass and temperature.
- Pressure, volume and temperature are factors that determine the behavior of a gas.
- At equilibrium, the rate of the forward and reverse reactions are equal.
- Many chemical reactions exhibit acid/base behavior.
- There is a systematic method for naming organic compounds.
- Life is based on chemical and physical principles.
- Many nuclear processes can be described by three types of particles released by the atom.
- Neutralization reactions involve an acid and a base and will react to form water and a salt.
- Oxidation-Reduction reactions are based upon the transfer of electrons.

Prerequisite: Algebra 1, Geometry

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Earth Science

The first three modules of Semester 1 cover Scientific Inquiry, the Structure and Composition of the Universe, and the Features of the Solar System. Students learn the importance of scientific inquiry and how to communicate the results of scientific investigations. They then have material on the formation of the universe, including the Big Bang Theory, the motions of celestial objects, and stellar evolution. The third module covers material related to the Solar System, including features of the Sun and the planets and the movements of Earth. The second three modules of Semester 1 cover Weather, Climate, and Earth's Water Cycle. Students first learn in Module 4 about the atmosphere and clouds, as well as the factors that influence local and global climate. In Module 5 they continue by learning about weather and air masses, meteorology and storms. Module 6 then discusses the water cycle, including groundwater and ocean features, as well as water scarcity and pollution.

Semester A; Major Concepts:

- Scientific Inquiry includes all the skills and characteristics that scientists need to develop new knowledge.
- The universe formed after expansion of very hot, very dense material.
- The universe is expanding.
- Stars are giant nuclear reactors that transform matter into energy.
- The bodies of the Solar System move in predictable ways under the influence of gravity.
- Temperature and pressure differences in the atmosphere create distinct global and local climate patterns.
- Warm fronts and cold fronts interact with air masses differently to produce predictable weather.
- Wind blows on a global scale in wind belts known as the easterlies, westerlies, and trade winds.
- Scientists help society predict and prepare for storm hazards.
- The water cycle moves Earth's water between land and the atmosphere.

The first three modules of Semester 2 cover the physical structure of the Earth and Earth's tectonic system, including the rock cycle, tectonic activity, and mountain building. It then covers weathering and erosion and soil formation. The next material in the course then addresses the concept of systems; it addresses the Earth as a system, feedback in systems, and Earth's major nutrient cycles. The second three modules of Semester 2 cover geologic history, including the evolution of Earth's atmosphere, the geologic time scale, and the fossil record. It then goes over natural resources and the effects of human population on natural resources. The course wraps up with a discussion of human society and its interconnectedness with the Earth's environment, how science and technology work together, and the technological design process in earth science applications.

Semester B; Major Concepts:

- The Earth formed 4.65 billion years ago.
- The fossil record provides evidence of an ancient Earth.
- Different types of rocks form in different environments, and they have predictable properties.
- Earth's tectonic system affects features of Earth's surface as well as earthquake and volcanic activity.
- Geologic history is divided into distinct chunks of time and organized in the geologic time scale.
- Fossil fuels are nonrenewable energy sources.
- Renewable energy sources include hydropower, wind power, solar power, and geothermal power.
- Urbanization is taking place at a higher rate than ever and will have impacts on the environment.
- Science and technology work together to advance our understanding and develop new knowledge.
- The technological design process is an orderly process of steps for applying technology to solve problems.

Prerequisite: Pre-Algebra, Physical Science 8

Length: Two Semesters

Required Materials: Uninflated round balloon, Permanent marker, 50 small candies that have letters on one side of them (like M&Ms or Skittles), A small zipper seal plastic bag, Two kitchen mixing bowls, Ice cubes, Water, A permanent marker, A block of wood, A pair of pliers, A pair of needle-nose tweezers, A slotted spoon, A drinking straw, Sunflower seeds in the shell, Colored water, A long narrow vase, Rice grains, Small block of Styrofoam, 3 or 4 large marshmallows, A teaspoon of herbs (any kind will do, like basil or parsley)

Course Types: Original Credit, Credit Recovery

Marine Science

About 70% of the Earth is covered by water. Even today, much of the world's oceans remain unexplored. Marine scientists make exciting new discoveries about marine life every day. In this course, students will discover the vast network of life that exists beneath the ocean's surface and study the impact that humans have on the oceans.

Major Concepts:

- Plankton, Plants, and Algae
- Humans and the Ocean
- Animals of the Sea
- Habitats and Ecology
- Life at Extremes
- Intelligence in the Sea
- Futures in Marine Science

Prerequisite: None

Length: One Semester

Paleontology

From Godzilla to Jurassic Park, dinosaurs continue to captivate us. In this course, students will learn about the fascinating creatures both large and small that roamed the earth before modern man. Watch interesting videos from experts at The Royal Tyrrell Museum, a leading paleontology research facility, and discover how the field of paleontology continues to provide amazing insight into early life on earth.

Major Concepts:

- The Foundation in Geology
- Life and Adaptation
- Natural Selection and Evolution
- Extinction and Fossils
- Taxonomy
- The Dinosaurs
- Prehistoric Creatures
- Paleontology: Past, Present, and Future

Prerequisite: None

Length: One Semester

Physical Science

This is an introduction to the Physical Sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom, and reinforced through homework reading, and interesting labs that relate to everyday life.

Semester A; Major Concepts:

- Energy
- Force
- Newton's Laws
- Machines
- Waves
- Light

This is an introduction to the Physical Sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom, and reinforced through homework reading, and interesting labs that relate to everyday life.

Semester B; Major Concepts:

- Lenses
- Electricity
- Matter
- Modern Machines
- Physical Science and the Environment

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Physics

Students begin their exploration of physics by reviewing the International System of Units (SI), scientific notation, and significant digits. They then learn to describe and analyze motion in one and two dimensions. Students learn about gravity and Newton's laws of motion before concluding the course with an examination of circular motion. Students apply mathematical concepts such as graphing and trigonometry in order to solve physics problems. Throughout the course, students apply their understanding of physics by playing roles like science museum curator and elementary teacher.

Semester A; Major Concepts:

- Physics uses a knowledge of physical properties to answer theoretical questions; technology is a method of solving practical problems.
- Measurement is a process that assigns appropriate numerical values to physical quantities.
- There are specific rules and guidelines that explain the motion of all objects in the universe.
- Forces cause a change in an object's motion.
- Force, work, and energy are directly related variables that describe basic natural phenomena.
- Momentum is inertia in motion.

Physics B continues the student's exploration of mechanics while also guiding them through some other important topics of physics. Students begin by exploring simple harmonic motion, wave properties, and optics. Students then learn the basics of thermodynamics and fluids. Afterwards, the students explore the principles of electricity and magnetism. Finally, students explore the area of physics known as Modern Physics, which includes topics such as the photoelectric effect, nuclear science, and relativity. This is a trig based course. It is assumed you know and can use trigonometry.

Semester B; Major Concepts:

- Waves are various disturbances that transfer energy without transferring matter.
- When the temperature of matter increases, the atoms in the matter speed up and increase the internal energy of the substance.
- A buoyant force, which is responsible for floating or sinking, is equal to the weight of the fluid displaced.
- The flow of electricity is determined by movement of electrons from one location to another, the rate at which the electrons move, and the resistive characteristics of the material carrying the electrons.
- Electrical charge can induce magnetism.
- Light is both a wave and a particle.
- An unstable nucleus will decay over time and emit radiation.

Prerequisite: Algebra 2

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Renewable Energy

The earth's population is growing rapidly, and we need to find new, innovative ways to ensure that we are able to provide for our global energy needs. Students will look at the reasons why sustainability is important, take a balanced and evidence-based look at climate change, and learn new ways that we can harness renewable resources.

Major Concepts:

- Renewable Energy and Sustainability: Overview
- Renewable Energy Options
- Assessing Renewable Energy Technologies
- The Future of Renewable Energy
- Aspects of Sustainability
- Sustainable Societies
- Biodiversity
- Smart Growth and the Built Environment

Prerequisite: None

Length: One Semester

Space Exploration

In 1961, Yuri Gagarin became the first human to go to space. In 1969, Neil Armstrong became the first human to step on the moon. This comprehensive course will examine the history and future of space travel. Find out how we have put people in space in the past, and what it will take for us to reach new frontiers, including Mars and beyond.

Major Concepts:

- The Space Race
- Launch and Landing Systems
- Spacecraft Systems
- Manned Spaceflight
- Unmanned Spaceflight
- Low Earth Orbit
- Beyond Earth Orbit

Prerequisite: None

Length: One Semester

Social Studies

American Government

The course will begin with foundations of our government in which both the principles and significant primary source documents will be studied. A novel unit on My Dearest Friend: The Letters of Abigail and John Adams will deepen student understanding of our second president and the contributions he made as one of our founders. The Constitution and linkage institutions (elections, campaigns, media, interest groups, public opinion, and political parties) will also be explored.

Major Concepts:

- There are different theories posited for the creation of the first governments and that John Locke's Social Contract theory is the most relevant to informing many of our founding principles.
- Our system of government, and our Constitution specifically, was strongly influenced by our English heritage and colonial experience.
- Historical interpretation involves an analysis of cause and result.
- Perspective helps to define the attributes of historical comprehension.
- The U.S. Constitution both outlines the powers of government and limits governmental power so that individual rights and liberties are protected.
- In American democracy, citizens' political ideology and behavior is influenced by a number of socializing influences.
- Linkage institutions in our democracy include political parties, interest groups, and the mass media. These function as intermediaries between the people and the government.
- Understanding the electoral process and the importance of exercising the franchise is an important civic duty.
- Suffrage has been extended to include previously discriminated groups through social movements, amendments, and legislation.

Prerequisite: None

Length: One semester

Course Types: Original Credit, Credit Recovery

American History

This course covers the discovery, development, and growth of the United States. Major topics include; American Indian cultures, European colonization of the Americas, and the causes and effects of the American Revolution. Geographical, economic, and political factors are explored as the key factors in the growth of the United States of America. American History I is a survey of the struggle to build the United States of America from the colonial period to the beginning of the twentieth century. By means of reading, analyzing, and applying historical data, students come to appreciate the forces that shaped our history and character as an American people. Not only are the topics of American history discussed, but students also explore research methods and determine accurate sources of data from the past. Knowing the facts and dates of history are just the beginning: each student must understand how history affects him or her.

Semester A; Major Concepts:

- Process of Independence
- Constitutional Government
- Industrialism and Slavery
- Civil War
- Westward Expansion
- Post-Civil War Issues

American History B begins with a study of American life before the 1929 Stock Market crash and how the Roaring Twenties influenced society in the late 19th through early 20th centuries. Students will examine the causes and consequences of the Great Depression and move on into a detailed study of World War II with an emphasis on America's role in the conflict. The course continues with an analysis of the Cold War struggle and America's rise as a superpower. The Civil Rights and Women's rights movements, pollution and the environment, and American domestic and foreign policy will be examined. The course wraps up with a summary of current events and issues, including a study of the Middle East. This course begins with an assessment of life in United States pre-World War I and ends with the conflicts of the new millennium. Students look at the nation in terms of economic, social, and political trends. The experiences of the last century are summarized, including a look into the civil rights issues that have embroiled the nation in conflict. The development of the United States of America into a superpower is explored within a global context.

Semester B; Major Concepts:

- Industrialization
- The Great Depression
- World War II
- Civil Rights
- American Domestic and Foreign Policy
- Global Issues
- Current Events

Prerequisite: World History

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Civics

In this course students will understand the significance of government, law, and politics. They will examine the United States foundational documents and how they shaped the United States government. Students will examine the purposes and functions of federal, state and local government, the justice system, political systems the environment, and the economy. Learners will evaluate their role and civic responsibility to their families, communities, and country including voting and being a productive member of society. Students will get to know leaders and influential people that have championed many causes including civil rights and the environment. Learners will also learn proper ways to interact in society including interpersonal skills and respecting differences in others including disabilities. Learners will follow a step-by-step approach for successfully completing each lesson, which includes textbook reading, interactive activities, supplemental reading, lecture, video clips, and PowerPoint presentations to enhance and reinforce learning. Learners receive frequent feedback from teacher and peers through discussions. By the end of the course students will have a deep understanding of their civic responsibilities as well as the difference one individual can make in society.

Major Concepts:

- Foundation of America's Political System
- American Citizenship
- Federal Government
- State Government
- The Justice System
- Local Government and the Community
- Civics and How it Relates to the Environment
- Civics and How it Relates to the Economy

Prerequisite: None

Length: One semester

Course Types: Original Credit, Credit Recovery

Economics

This course introduces the principles and the applications of economics in everyday life. Students develop an understanding of limited resources, and compare it with unlimited wants and needs. Students learn how individual and national economic decisions are made to allocate goods and services among competing users. Students apply economic principles to think and problem solve. The study of Economics uses the view of economic institutions and policies to explore the history, organization, and functions of the U.S. government in controlling our economy. It offers students learning opportunities that build one on another. A goal of the course is for the student to develop the critical skills of analysis, synthesis, and evaluation in a demanding and thoughtful academic setting. Students are encouraged to use their knowledge of the policies and institutions of economics to develop their own views on current economic and monetary issues. They are taught how to apply what they have learned into personal financial activities. The course looks closely at the economic knowledge and values of the country and gives students a look into the problems faced by presidents, and congressional representatives. It also covers the roles of political activists, political parties, interest groups, and the media in shaping the U. S. economy. The Supreme Court is presented as the *voice of reason* in the balance of powers. Students

are encouraged to perform at higher levels as they are presented with historical documents and additional readings, work with a set of facts arranged by theme, become skillful in note-taking, and join in student discussions. Students develop and demonstrate their writing skills by preparing extended research-based papers.

Prerequisite: None

Length: One semester

Course Types: Original Credit, Credit Recovery

World Geography & Cultures

The student will be taught to use the basic skills of map reading and development, geographic technology, and the recognition of geographic themes to make sense of the world. The course examines world regions including the nations, people, and cultures of the Americas and Western Europe.

Semester A; Major Concepts:

- Exploring Geography
- Climates and Ecosystems
- Population, Culture, Resources, and Land Use
- The U.S. and its Regions
- Canada
- Mexico
- Central America and the Caribbean
- Brazil
- Countries of South America
- The British Isles and Nordic Nation
- Central Western Europe
- Mediterranean Europe

This second-semester course continues to teach the basic skills of map reading and development, the use of geographic technology, and the recognition of geographic themes. The focus examines the world regions, including the nations, people, and cultures of Central Europe and Northern Eurasia, Central and Southwest Asia, South Asia, Africa, East Asia, and the Pacific.

Semester B; Major Concepts:

- Central and Eastern Europe
- Russia
- The Caucasus and Central Asia
- The Countries of SW Asia
- The Countries of South Asia
- North Africa
- West and Central Africa
- East and Southern Africa
- China
- Japan and the Koreas
- Southeast Asia
- The Pacific World and Antarctica

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

World History

World History begins with a focus on the skills needed to read, understand, and analyze history, also demonstrating how historians and social scientists arrive at their conclusions about human history. Semester A covers the history of civilization from hunter-gatherer societies through the characteristics of the earliest civilizations to the Enlightenment period in Western Europe. The second half of Semester A explores early intellectual, spiritual, and political movements and their impact on interactions among world cultures.

Semester A; Major Concepts:

- Foundations of Economics
- Microeconomics
- Macro Economics
- Global Economics
- Personal Finance

Semester B applies the reading and analytical strategies introduced in Semester A to the events and movements that created the modern world. In the second semester, World History emphasizes the effects of the Industrial Revolution and changing attitudes about science and religion as well as the impact of European colonization. Students are encouraged to make connections between World War I and II and events related to the Cold War and between 19th-century imperialism and modern independence movements.

Semester B; Major Concepts:

- The Scientific Revolution
- The Industrial Revolution
- Colonization and Imperialism
- 20th century political and social movements
- World Wars I and II
- The Cold War
- Modern independence movements
- Contemporary global conflicts
- Globalization

Prerequisite: None

Length: Two Semesters

Required Materials: Use of multimedia presentation software, Internet searches for research purposes

Course Types: Original Credit, Credit Recovery

AP Courses

AP Biology

This course is taught at the college level and designed to prepare students to take the Advanced Placement Examination and score high enough to earn college credit in those colleges that recognize the examination. College level textbooks are used. The course will cover all of the topics in the AP Biology Course Description. These include biochemistry, cell structure and function, cell energetics, cellular reproduction and communication, heredity, molecular genetics, evolution, ecology, diversity of organisms, structure and function of plants and animals, and comparative anatomy.

Semester A; Major Concepts:

- Change in the genetic makeup of a population over time is evolution.
- Organisms are linked by lines of descent from common ancestry.
- The origin of living systems is explained by natural processes.
- Growth, reproduction and maintenance of the organization of living systems require free energy and matter.
- Growth, reproduction and dynamic homeostasis require that cells create and maintain internal environments that are different from their external environments.
- Organisms use feedback mechanisms to regulate growth and reproduction, and to maintain dynamic homeostasis.
- Heritable information provides for continuity of life.
- Expression of genetic information involves cellular and molecular mechanisms.
- The processing of genetic information is imperfect and is a source of genetic variation.
- Cells communicate by generating, transmitting and receiving chemical signals.
- Transmission of information results in changes within and between biological systems.
- Interactions within biological systems lead to complex properties.
- Competition and cooperation are important aspects of biological systems.

Semester B; Major Concepts:

- Change in the genetic makeup of a population over time is evolution.
- Organisms are linked by lines of descent from common ancestry.
- Life continues to evolve within a changing environment.
- Growth, reproduction and maintenance of the organization of living systems require free energy and matter.
- Growth, reproduction and dynamic homeostasis require that cells create and maintain internal environments that are different from their external environments.
- Organisms use feedback mechanisms to regulate growth and reproduction, and to maintain dynamic homeostasis.
- Growth and dynamic homeostasis of a biological system are influenced by changes in the system's environment.
- Many biological processes involved in growth, reproduction and dynamic homeostasis include temporal regulation and coordination.
- Naturally occurring diversity among and between components within biological systems affects interactions with the environment.

Prerequisite: None

Length: Two Semesters

Required Materials:

Biology, AP Edition—Campbell, Neil A. and J Reece—8th Edition,

5 Steps to a 5 AP Biology

AP Biology Investigative Labs: An Inquiry-Based Approach Student Manual (2012)

AP Calculus AB

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

Students who are enrolled in AP Calculus AB are expected to:

- Work with functions represented in multiple ways: graphical, numerical, analytical, or verbal. They should understand the connections among these representations.
- Understand the meaning of the derivative in terms of a rate of change and local linear approximation and use derivatives to solve problems.
- Understand the meaning of the definite integral as a limit of Riemann sums and as the net accumulation of change and use integrals to solve problems.
- Understand the relationship between the derivative and the definite integral as expressed in both parts of the Fundamental Theorem of Calculus.
- Communicate mathematics and explain solutions to problems verbally and in writing.
- Model a written description of a physical situation with a function, a differential equation, or an integral.
- Use technology to solve problems, experiment, interpret results, and support conclusions.
- Determine the reasonableness of solutions, including sign, size, relative accuracy, and units of measurement.
- Develop an appreciation of calculus as a coherent body of knowledge and as a human accomplishment.

Major Concepts:

- Analysis of Graphs
- Limits of Functions (including one-sided limits)
- Asymptotic and Unbounded Behavior
- Continuity as a Property of Functions
- Concept of the Derivative
- Derivative at a Point
- Derivative as a Function
- Second Derivatives
- Applications and Computation of Derivatives
- Interpretations and Properties of Definite Integrals
- Applications of Integrals
- Fundamental Theorem of Calculus
- Techniques and Applications of Antidifferentiation
- Numerical Approximations to Definite Integrals

Prerequisite: Pre-Calculus

Length: Two Semesters

Required Materials: Graphing calculator; Additional test prep materials will be required to purchase for the second half of the course. Information will be provided at the start of the class.

Textbook required: ISBN-13: 978-1101919859, ISBN-10: 110191985X

https://www.amazon.com/Cracking-Calculus-Exam-College-Preparation/dp/110191985X/ref=sr_1_1?s=books&ie=UTF8&qid=1469715717&sr=1-1&keywords=ISBN-13%3A+978-1101919859

AP Calculus BC

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

Students who are enrolled in AP Calculus BC are expected to:

- Work with functions represented in multiple ways: graphical, numerical, analytical, or verbal. They should understand the connections among these representations.
- Understand the meaning of the derivative in terms of a rate of change and local linear approximation and use derivatives to solve problems.
- Understand the meaning of the definite integral as a limit of Riemann sums and as the net accumulation of change and use integrals to solve problems.
- Understand the relationship between the derivative and the definite integral as expressed in both parts of the Fundamental Theorem of Calculus.
- Communicate mathematics and explain solutions to problems verbally and in writing.
- Model a written description of a physical situation with a function, a differential equation, or an integral.
- Use technology to solve problems, experiment, interpret results, and support conclusions.
- Determine the reasonableness of solutions, including sign, size, relative accuracy, and units of measurement.
- Develop an appreciation of calculus as a coherent body of knowledge and as a human accomplishment.

Major Concepts:

- Analysis of Graphs
- Limits of Functions (including one-sided limits)
- Asymptotic and Unbounded Behavior
- Continuity as a Property of Functions
- Parametric, Polar, and Vector Functions
- Concept of the Derivative
- Derivative at a Point
- Derivative as a Function
- Second Derivatives
- Applications and Computation of Derivatives
- Interpretations and Properties of Definite Integrals
- Applications of Integrals
- Fundamental Theorem of Calculus
- Techniques and Applications of Antidifferentiation
- Numerical Approximations to Definite Integrals
- Concept of Series
- Series of constants

· Taylor Series

Prerequisite: Pre-Calculus

Length: Two Semesters

Required Materials: Graphing calculator; Additional test prep materials will be required to purchase for the second half of the course. Information will be provided at the start of the class.

Textbook required: ISBN-13: 978-1101919866, ISBN-10: 1101919868

https://www.amazon.com/Cracking-Calculus-Exam-College-Preparation/dp/1101919868/ref=sr_1_1?s=books&ie=UTF8&qid=1469715701&sr=1-1&keywords=ISBN-13%3A+978-1101919866

AP Chemistry AB

This course is taught at the college level and is designed to prepare students to take the Advanced Placement Examination and to score high enough to earn college credit in those colleges that recognize the examination. College level textbooks are used. The course will cover all of the topics in the AP Chemistry Course Description. These include an introduction to chemistry as the study of change, gases, thermochemistry, quantum theory, chemical bonding, crystals, phase changes, solutions, chemical kinetics, chemical equilibrium, acids and bases, entropy, electrochemistry, nuclear chemistry, metallurgy, alkali and alkaline metals, non metallic metals, transition metals, organic chemistry, and synthetic and natural organic polymers.

Semester A; Major Concepts:

- The chemical elements are fundamental materials of matter, and all matter can be understood in terms of arrangements of atoms. These atoms retain their identity in chemical reactions.
- Chemical and Physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.
- Changes in matter involve the rearrangement of atoms and/or the transfer of electrons.
- The laws of thermodynamics describe the essential role of energy and explain and predict the direction of changes in matter.
- Any bond or intermolecular attraction that can be formed can be broken. These two processes are a dynamic competition, sensitive to initial conditions and external perturbations.
- Chemical and Physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.
- Changes in matter involve the rearrangement of atoms and/or the transfer of electrons.
- Any bond or intermolecular attraction that can be formed can be broken. These two processes are a dynamic competition, sensitive to initial conditions and external perturbations.
- Chemical and Physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.

Semester B; Major Concepts:

- Chemical and Physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.
- The laws of thermodynamics describe the essential role of energy and explain and predict the direction of changes in matter.
- Chemical equilibrium plays an important role in acid-base chemistry and in solubility.
- The atoms of each element have unique structures arising from interactions between electrons and nuclei.
- Energy is neither created nor destroyed, but only transformed from one form to another.
- The chemical elements are fundamental materials of matter, and all matter can be understood in terms of arrangements of atoms. These atoms retain their identity in chemical reactions.
- Chemical and Physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.

Prerequisite: None

Length: Two Semesters

Required Materials: Advanced Microchem Kit (AP Chemistry Lab Kit by Quality Science Labs)

Textbook required: *Chemistry, AP Edition*—Chang R., Goldsby K.—11th Edition

AP English Language and Composition AB

This course is the first semester of a full credit course provides instruction on all the competencies needed to be successful on the Advanced Placement test from College Board. The course is designed to develop student awareness of how an author creates meaning through language use, genre conventions, and rhetorical choices. In addition, students are expected to write and analyze persuasive arguments. According to the English Language and Composition guidelines outlined on the AP website, the course “engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes” (English Language and Composition homepage, p.6). This course will help you to read with deeper understanding and write more powerfully and effectively. Our writing assignments include rhetorical analysis, personal essays, argumentative essays, expository essays, evaluation essays, journal entries, and more. You should plan on having an hour to devote to AP English homework every night. Access to a computer is essential as is regular attendance at class. The pace and level of work in this class is not easily made up just by getting the notes from someone.

Semester A; Major Concepts:

- Authors use a variety of rhetorical strategies and stylistic elements to convey a message, and successful academic reading and writing depends upon the ability to analyze these strategies and elements and incorporate them into your own writing.
- Analyzing and evaluating the effectiveness of an argument depends upon developing a knowledge of the tools of rhetoric, which in turn will enable you to write more effective arguments to support claims in an analysis of substantive topics.
- Strong arguments depend on logic and skillful use of credible evidence.
- Visual texts communicate meanings and messages just as written texts do, and understanding those messages is a vital skill in today’s media-saturated environment.

Semester B; Major Concepts:

- Authors use a wealth of rhetorical strategies to convey their messages.
- Authors use a variety of stylistic elements like diction, imagery, syntax, structure, tone and detail to convey their feelings and opinions.
- Strong arguments depend on logic and skillful use of credible evidence.
- The persuasive and argumentative writing skills developed in this course will be helpful in college and the real world.
- An effective persuasive essay must be fully developed to convince a reader of one’s position.
- To prove and support a position, a writer must include well-integrated supporting facts. Efficient research includes proper gathering, analysis and synthesis of sources.
- Proper citation is essential for a research paper to be valid and credible.
- Satire is a vehicle for bringing understanding if not always changes to the human condition and society.
- Satire, in its many forms and uses, can help us be more civically engaged and responsible.

Prerequisite: None

Length: Two Semesters

Required Materials: Analysis, Argument, and Synthesis (AP Honors)/Patterns for College Writing: A Rhetorical Reader and Guide

AP English Literature and Composition AB

Both semesters of *AP English Literature and Composition* have been designed to challenge students to read and interpret a wide range of literary works. This course allows students to explore a variety of genres and literary periods and to write clearly about the literature that they encounter. By the end of the second semester, the student will be well prepared for the AP examination and will have acquired analytical skills that will be used throughout life. The first semester of this course focuses on the elements of fiction. The student will spend a considerable amount of time reading and analyzing a variety of short stories and novels. The student will evaluate how the elements of plot analysis, characterization, theme, point of view, symbolism, allegory, irony, and humor work together to create a story or novel that is worthy of literary acclaim. In addition to reading, the student will complete a wide variety of writing pieces in order to develop better writing skills in the following areas: narrative, explanatory, expository, and argumentative.

Major Concepts:

- Analyze and interpret samples of good writing in a variety of genres, identifying and explaining an author's use of rhetorical strategies and techniques.
- Apply effective strategies and techniques in his or her own writing.
- Create and sustain arguments based on readings, research, and/or personal experience.
- Demonstrate an understanding and a mastery of standard written English as well as stylistic maturity by using:
 - a wide-ranging vocabulary with denotative accuracy and connotative resourcefulness.
 - a variety of sentence structures, including appropriate use of subordinate and coordinate constructions.
 - logical organization, enhanced by specific techniques of coherence such as repetition, transition, and emphasis.
 - a balance of generalization with specific illustrative detail.
 - effective rhetoric, consistent voice, and emphasis through parallelism, and antithesis.
- Write in a variety of genres and contexts, both formal and informal, employing the appropriate conventions.
- Produce expository and argumentative compositions that introduce a complex central idea and develop it with appropriate, specific evidence, convincing explanations, and clear transitions.
- Move effectively through the stages of the writing process with careful attention to inquiry and research, drafting, revising, editing, and review.

Prerequisite: Successful completion of ELA 11 and a teacher's recommendation

Length: Two Semesters

Required Materials: *Perrine's Literature: Structure, Sound, and Sense 13th Edition, 2017* – Greg Johnson, Thomas Arp (ISBN-13: 978-1305971035, ISBN-10: 1305971035). *Crime and Punishment* by Fyodor Dostovsky. (Students are required to read this novel before the start of the course.) Additional Novels: *Native Son* by Richard Wright, *The Color Purple* by Alice Walker, *One Hundred Years of Solitude* by Gabriel Garcia Marquez, *Orlando* by Virginia Woolf.

*Materials listed should be acquired by the student prior to beginning work in the course.

AP European History AB

This AP study of European history since 1300 introduces students to economic, cultural, social and political developments. These developments played a fundamental role in shaping the world in which they live.

Second Semester will introduce students to the birth of modern political thought, Great Depression and World War II. They will study the Cold War and the collapse of communism and wrap up with the dawn of the 21st Century. Students will complete a project at the end of each unit with the final project being a critical analysis.

Prerequisite: None

Length: Two Semesters

Required Materials: Western Heritage, since 1300 (16th Edition) by Donald Kagan. (ISBN-13: 978-0134050225, ISBN-10: 134050223). Cracking the AP European History Exam, 2019 Edition (ISBN-13: 978-0525567509, ISBN-10: 052556750X)

AP French Language and Culture AB

The AP* French Language and Culture course is an advanced language course in which students are directly prepared for the AP* French Language and Culture test. It uses as its foundation the three modes of communication: interpersonal, interpretive and presentational. The course is conducted almost exclusively in French. The course is based on the six themes required by the College Board: (1) global challenges, (2) science and technology, (3) contemporary life, (4) personal and public identities, (5) families and communities, and (6) beauty and aesthetics. The course teaches language structures in context and focuses on the development of fluency to convey meaning. Students explore culture in both contemporary and historical contexts to develop an awareness and appreciation of cultural products, practices, and perspectives. Students should expect to listen to, read, and understand a wide-variety of authentic French-language materials and sources, demonstrate proficiency in interpersonal, interpretive, and presentational communication using French, gain knowledge and understanding of the cultures of the Francophone world, use French to connect with other disciplines and expand knowledge in a wide-variety of contexts, develop insight into the nature of the French language and its culture, and use French to participate in communities at home and around the world. The AP* French Language and Culture course is a college level course. The intensity, quality, and amount of course material can be compared to that of a third-year college course.

Major Concepts:

- Listen, read, understand, and interpret a wide-variety of authentic French-language materials and sources.
- Demonstrate proficiency in interpersonal, interpretive, and presentational communication using French.
- Gain knowledge and understanding of the cultures of the Francophone world.
- Use French to connect with other disciplines and expand knowledge in a wide-variety of contexts.
- Develop insight into the nature of the French language and its culture.
- Use French to participate in communities at home and around the world.

Prerequisite: French III (or equivalent) and a teacher/counselor recommendation

Length: Two Semesters

Required Materials: ISBN-13: 978-1438076034, ISBN-10: 1438076037

https://www.amazon.com/Barrons-French-Language-Culture-MP3/dp/1438076037/ref=sr_1_1?s=books&ie=UTF8&qid=1469715472&sr=1-1&keywords=ap+french+language+and+culture+2017

AP Government & Politics AB

This course examines the U.S. political system. Students in this course will discuss political ideology, the development of the political system and democratic institutions. Students should, according to the College Board, gain an “analytical perspective on government and politics in the United States.” Furthermore, students will study “both the general concepts used to interpret U.S. politics and the analysis of specific examples” throughout history. The class discussion will require that students acquire a “familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics.” The main emphasis of the course, however, is to be able to apply a basic comprehension of the U.S. political system to contemporary events.

Semester A; Major Concepts:

- Understanding both the historical and theoretical underpinnings of our system of government is useful in helping citizens understand its contemporary workings.
- Federalism involves the division and sharing of powers and responsibilities between and among national, state, and local governments. Federalism has evolved over time due to court decisions, social and economic concerns, and political actions.
- Civil liberties and civil rights have both limited and expanded the scope of government.
- Linkage institutions in our democracy include public opinion and the mass media. Political socialization determines the level and character of participation in the American political system.
- Linkage institutions in our democracy include political parties, elections, and the mass media. These function as intermediaries between the people and the government and impact the policy agenda.

Semester B; Major Concepts:

- Analysis and evaluation of the structure and organization of the United States Congress by considering membership, leadership, qualifications, and powers of both houses is critical to an informed citizenry.
- While the Constitution grants the president a few national security, legislative, administrative, and judicial powers, the president’s power has increased over time.
- Bureaucrats shape policy as administrators, implementers, and regulators.
- The courts play a vital role in our system of checks and balances through the exercise of judicial review. Many Supreme Court decisions have had far-reaching effects on public policy throughout American history.
- The central function of government is to make and implement public policy.
- Entitlement programs are a formidable barrier to a balanced budget.

Prerequisite: None

Length: Two Semesters

Required Materials: American Democracy Now, Fifth Edition, AP Edition (ISBN-13: 978-0076788279, ISBN-10: 007678827X), Cracking the AP U.S. Government & Politics Exam 2019 (ISBN-13: 978-0525567608, ISBN-10: 0525567607)

AP Physics 1

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Twenty-five percent of instructional time is devoted to hands-on laboratory work with an emphasis on inquiry-based investigations. Investigations will require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress.

Students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world.

Semester A; Major Concepts:

- Objects and systems have properties such as mass and charge. Systems may have internal structure.
- Fields existing in space can be used to explain interactions.
- The interactions of an object with other objects can be described by forces.
- Interactions between systems can result in changes in those systems.
- Changes that occur as a result of interactions are constrained by conservation laws.
- Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for the description of other phenomena.

Students establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Focusing on these disciplinary practices enables teachers to use the principles of scientific inquiry to promote a more engaging and rigorous experience for AP Physics students. Such practices require that students:

Semester B; Major Concepts:

- Use representations and models to communicate scientific phenomena and solve scientific problems;
- Use mathematics appropriately;
- Engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course;
- Plan and implement data collection strategies in relation to a particular scientific question;
- Perform data analysis and evaluation of evidence;
- Work with scientific explanations and theories; and
- Connect and relate knowledge across various scales, concepts, and representations in and across domains.

Prerequisite: Algebra 2

Length: Two Semesters

Required Materials: Graphing Calculator, Cracking the AP Physics 1 Exam, 2019 (ISBN-13:978-1524758080, ISBN-10: 1524758086)

AP Spanish Language AB

The AP* Spanish Language and Culture course is an advanced language course in which students are directly prepared for the AP* Spanish Language and Culture test. It uses as its foundation the three modes of communication: interpersonal, interpretive and presentational. The course is conducted almost exclusively in Spanish. The course is based on the six themes required by the College Board: (1) global challenges, (2) science and technology, (3) contemporary life, (4) personal and public identities, (5) families and communities, and (6) beauty and aesthetics. The course teaches language structures in context and focuses on the development of fluency to convey meaning. Students explore culture in both contemporary and historical contexts to develop an awareness and appreciation of cultural products, practices, and perspectives. Students should expect to listen to, read, and understand a wide-variety of authentic Spanish-language materials and sources, demonstrate proficiency in interpersonal, interpretive, and presentational communication using Spanish, gain knowledge and understanding of the cultures of Spanish speaking areas of the world, use Spanish to connect with other disciplines and expand knowledge in a wide-variety of contexts, develop insight into the nature of the Spanish language and its culture, and use Spanish to participate in communities at home and around the world. The AP* Spanish Language and Culture course is a college level course. The intensity, quality, and amount of course material can be compared to that of a third-year college course.

Major Concepts:

- Listen, read, understand, and interpret a wide-variety of authentic Spanish-language materials and sources.
- Demonstrate proficiency in interpersonal, interpretive, and presentational communication using Spanish.
- Gain knowledge and understanding of the cultures of the Spanish-speaking world.
- Use Spanish to connect with other disciplines and expand knowledge in a wide-variety of contexts.
- Develop insight into the nature of the Spanish language and its culture.
- Use Spanish to participate in communities at home and around the world.

Prerequisite: Spanish III (or equivalent) and a teacher/counselor recommendation

Length: Two Semesters

Required Materials: ISBN-13: 978-1101919996, ISBN-10: 110191999X

https://www.amazon.com/Cracking-Spanish-Language-Culture-Preparation/dp/110191999X/ref=sr_1_1?s=books&ie=UTF8&qid=1469715652&sr=1-1&keywords=ISBN-13%3A+978-1101919996

AP US History AB

AP United States History is an intensive full year course divided into two semesters. The course focuses on exploring and analyzing American historical events, individuals and cultural trends. You will be prepared with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. This first semester course covers the time frame of 1492 to 1877, and the second semester course covers the time frame 1878 to present. This course is designed to prepare students for the Advanced Placement exam in United States History that is administered by the College Board Educational testing center. The class satisfies the United States History requirement for graduation.

Semester A; Major Concepts:

- Master a broad body of historical knowledge from the founding of the first colonies to the present.
- Demonstrate an understanding of our historical chronology.
- Use and interpret historical documents including graphs, maps, charts, letters, and other primary resources to support an argument or point of view.
- Use critical thinking and analysis in discussions and assignments that demonstrate their understanding of major developments, events, and people in our history.
- Create an awareness of the role the United States plays in world economic, political and cultural influence.
- Prepare for the AP exam.

Semester B; Major Concepts:

- How economic depression dominated the era and reshaped political alignments and attitudes as the nation became less an isolationist and more a foreign diplomat as tragedy embroiled the United States more deeply in the European crisis, and despite Wilson's commitment to peace and neutrality, America went to war in 1917.
- How economic boom of the Post World War I era turned a society from prosperity to depression and reshaped society as the transition of the United States to the modern era begins. Despite the prosperity and progress of the era, the foundation was unstable and America went to war again 1942.
- How the United States grew from an isolationist nation to a nation of world power as Soviet-American tensions escalate due to the war.
- How the power of the American influence created an opportunity for the United States to emerge through the turbulence of the 1960s and crisis of confidence of the 1970s to a nation that ends the Cold War with increased prosperity in the 1980s with a growing economy in the 1990s.

Prerequisite: None

Length: Two Semesters

Required Materials: The American Pageant 16th Edition, David M. Kennedy, Lizabeth Cohen (ISBN-13: 978-1305075900, ISBN-10: 1305075900), Cracking the AP U.S. History Exam, 2019 (ISBN-13: 978-1524758165, ISBN-10: 1524758167)

AP World History AB

AP World History is a challenging course that focuses on the interaction between diverse human societies primarily over the past one thousand years. The objective is for students to develop a greater comparative understanding of the causes and effects of such interactions upon different classes of peoples in different areas.

Students will be assigned a college level text and numerous primary documents and scholastic articles to read. They will be expected to take extensive notes, be prepared to participate in discussions, and write a number of analytical, comparative, evolutionary, and document based essays. Students will learn how to write thesis statements as well as organized essays in order to prepare them for the Advanced Placement Test in May.

Semester A: Major Concepts:

- Hunting and gathering economies dominated human history until 9,000 B.C.E. and helped propel migration over most of the lands on earth.
- The Neolithic Revolution between 8,500 and 3,500 B.C.E. introduced domestication of animals and agriculture, which led to population increases.
- Agriculture generated some surplus that could support other specialist labor.
- The emergence and standardization of key cultural and religious traditions from 600 BCE to 600 CE
- This was a development of state and empires 600 BCE to 600 CE.
- The contact that developed among different regions spurred trade.
- Trans-regional communication and exchange networks expanded with important new routes.
- Forms of state organizations diversified with centralized empires instead of a variety of looser political structures.
- Several societies headed by China increased their productive capacity with social consequences.
- The dissolution of global empires through colonization
- Global wars and conflicts and their effects
- How new global institutions emerge in business, politics, finance and culture.
- Policies and new forms of globalization are fueled by new technologies.

Semester B: Major Concepts:

- A radically new kind of technology and economy arose in a few parts of the world in what became known as the Industrial Revolution.
- Industrial countries gained power advantages over the rest of the world.
- Dramatic political changes in the Atlantic competed for attention.
- The dissolution of global empires through decolonization created new levels of nationalism and regional assertion.
- Global institutions such as business, politics and culture emerged.
- Globalization fueled by new technologies and policies also fuel wars and conflicts and more recently terrorism.
- How to prepare for the AP World History Exam

Prerequisite: None

Length: Two Semesters

Required Materials: Bentley, Traditions & Encounters: A Global Perspective on the Past UPDATED AP Edition © 2017, 6e, Student Edition, ISBN-13: 978-0077504908, ISBN-10: 0076681289, AP World History Prep Plus 2018-2019, ISBN-13: 978-1506203379, ISBN-10: 150620337X.

Electives

Art Appreciation

What makes an artwork a masterpiece? Why do artists create art? What is the difference between Rococo and Art Nouveau? In this course, students will discover the answers to these questions and more. We examine the elements of art and principles of design, and explore how artists have used these elements and principles in the creation of art for centuries.

Major Concepts:

- Elements of Art & Principles of Design
- Ancient Art
- Aegean, Greek, Etruscan, and Roman Art
- Medieval Art
- The Renaissance to Rococo
- Pre-modern Art
- Modern Art
- Modernism and Postmodernism

Prerequisite: None

Length: One Semester

Course Types: Original Credit, Credit Recovery

Art Careers

For every Broadway dancer, every television star, and every pop singer, there are countless people behind the scenes helping to make it happen. Arts Careers introduces students to the skills that are part of many fascinating careers in the arts. Studying the arts creates independent and innovative thinkers and many doors are open to an artist with the proper training.

Major Concepts:

- **Careers in acting:** Explore the positions and careers involved with the acting industry and discover how to pursue a position in this industry.
- **Careers in dance:** Discover careers in the dance industry and find out the steps needed to land yourself in the next big performance.
- **Careers in music:** Find out more about the music industry and the diverse careers that make up it.
- **Careers in visual arts:** Explore how painting, sculpting, and other visual arts create a diverse industry made up of varying positions and talents.

- **Careers in film, television and theatre:** Find out all of the careers associated with some of the world's most viewed arts: film, television and theatre. From Broadway to "The Simpsons", explore all of the different opportunities in these industries.

Prerequisite: None

Length: One Semester

Required Materials: Digital Camera (camera phone, DSLR and other devices with a camera is acceptable), Video Camera (camera phone, DSLR and other devices with a camera is acceptable), Video software (iMovie and other video editing software is acceptable)

Art History

Interpreting the origins of art gives students a unique perspective on their own work. In Art History, students will analyze various art forms including painting, sculpture and architecture over the changing periods of time. Beginning with study of the earliest cave paintings, students will create art to immerse themselves in the content and study movements and masters over changing periods of time.

Major Concepts:

- **Influences:** Understand the influence of prehistoric art as well as the connection between Greek, Roman and Egyptian works of art.
- **Artists:** Study the life and works of significant artists including Da Vinci, Michelangelo, Rembrandt, Rubens, Goya, Monet, Whistler and Toulouse-Lautrec.
- **Architecture:** Analyze influences on architecture from Greek, Roman, Byzantine, Romanesque and Gothic art.
- **Art Periods:** Explore the development and impact of major art periods including the Renaissance, Baroque, Arts and Crafts, Art Nouveau and Art Deco.
- **Movements:** Understand Neoclassicism, Romanticism, Realism and Impressionism and their influences on each other as well as modern art.
- **Activities:** Create hands-on art projects to further understanding.

Prerequisite: None

Length: One Semester

Required Materials: Drawing pencils, colored pencils, ruler, black marker fine-line, pencil sharpener, sketch pad, rubber eraser, construction paper, scissors, art knife, glue stick, poster board, paint brushes, watercolors

Course Types: Original Credit, Credit Recovery

Basic Web Design

In this course, students will learn how to design a beautiful and functional website. Students will learn how to take their design and translate it into a live website using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) programming languages. HTML5 and CSS3 will be the standard versions used in the class. Students will understand design components of websites, including the use of color, layout and when to use different techniques, typography rules, and the importance of imagery. At the conclusion of the course, students will present a website to the class. Upon completion of this course, each student will have hands-on experience creating a fully functioning website.

Students do not need to have a previous technical background with HTML or CSS prior to taking this course.

Prerequisite: None

Length: One Semester

Required Materials: HTML Text Editor (TextEdit, Notepad, Text), Image Editing Software (Pixlr, GIMP), Web Hosting and basic in browser FTP(Neocities)

Business Law

Students learn about the American legal system. They examine ethics, court systems, criminal law, and law of torts. They examine how the court systems work together, and what misconduct results in going to court. It is important to also understand your consumer rights. As they progress through the course, they will also gain an understanding from a business perspective what is right and wrong business actions and employment laws. As an employee or employer it is important to understand the laws that protect the employee and employer. The study will focus on the formation of a business and the basic legal issues associated with each type of business.

Major Concepts:

- Ethics, court systems and types of laws are essential to understanding the legal system.
- Consumer law ensures protection on contract agreements, purchases, warranties and even product malfunctions.
- There different types of employment contracts.
- There are various ways to form a business and each has disadvantages and advantages, as well as legal obligations.

Prerequisite: None

Length: One Semester

Buzz Orientation (6-12)

This is a mini-course that consists of two units and is not credit bearing. And it might be the most useful course learners take. The first unit preps students for working in Buzz. Buzz is the learning management system that houses Accelerated online courses. Not only do students learn how to access their courses in Buzz, but also how to communicate with teachers, check grades, as well as monitor their dashboard for progress. Other topics include how to submit assignments, conduct online research, Netiquette, and smart ways to take notes.

Prerequisite: None

Length: Two Units

Character Education

This course teaches students practical skills for understanding and managing their emotions, setting goals and getting organized, understanding and getting along with others in our diverse world, and making good decisions. Research shows that people who practice these skills have greater academic achievement as students and experience more success and satisfaction as adults.

Major Concepts:

- Self-awareness helps individuals identify what they are feeling and what messages they are telling themselves.
- Understanding oneself helps a person manage emotional reactions and stress more effectively.
- Setting goals and organizing one's time and environment allow a person to focus on the things that are most important to them.
- Understanding oneself provides a basis for understanding other people.
- Our world is diverse, and the ability to communicate clearly and effectively with a wide variety of people has never been more important.
- Personal and professional relationships take work.
- Effectively communicating with individuals and groups is essential in school and in life.
- To make good decisions, individuals should follow a rational decision-making process and their own ethical or moral code.

Prerequisite: None

Length: One Semester

Course Types: Original Credit, Credit Recovery

Career Planning

The Career Planning course guides students through the essential elements of the career planning process and the development of a defined career plan. Students will consider the many factors that impact career success and satisfaction. Using a process of investigation, research, and self-discovery, students will acquire the understandings critical to the career planning process. Upon completion of the course, students will have created a practical and comprehensive college or career transition portfolio that reflects their skills and abilities, as well as their interests, values, and goals.

Major Concepts:

- Knowing Thyself
- Career Options
- Income and Opportunity
- Education and Training Plans
- Research Technology
- Work Ready

· Personal Career Project

Prerequisite: None

Length: One Semester

Child Development

The study of children is an important topic for everyone to learn. All students are influenced by their childhood and upbringing; those experiences have made them who they are. When students learn to understand children, communication with them is more efficient. This also has the potential for students to learn more about themselves in the process. During this course, students will learn about the various stages of child development and the ways children grow and change. More importantly, students will learn how to understand children and their various needs. Maybe some students will want to work with children in the future as a result. They will discover that teachers are not the only people who work with kids; other possible career choices are a pediatrician, a counselor, or even a social worker just to name a few. Whatever students have set for their career goals, learning about children will get them one step closer to that chosen career path.

Major Concepts:

- Families and Child Development
- Nutrition and Prenatal Development
- Infant Growth and Development
- Toddler Growth and Development
- Preschooler Growth and Development
- School-Aged Children

Prerequisite: None

Length: One Semester

Course Types: Original Credit, Credit Recovery

Digital Media

In this course, students will learn basic principles of audio and video design and production. The concepts of understanding audience and copyright are used throughout the course. Students will learn to create a script for an audio production. They will also produce an audio project utilizing Audacity. For the video production portion of the course students will learn about the benefits of storyboards along with other pre-production, production, and post-production techniques. Students will create a 60 second video utilizing a web 2.0 editing tool called WeVideo. The course will culminate with the creation of an online digital portfolio that can be used to showcase the student's work to colleges or potential employers.

Major Concepts:

- Ethical and legal issues, as well as target audience are important to consider when creating new media.
- You will be able to create an audio file by focusing on the creative process and technique so that your end product meets the needs of your audience.

- You can apply various techniques to improve video quality and can share video files with and others online.
- Sharing your work on the Internet can be useful and exciting, but there are many things to consider when deciding how and when to share.

Prerequisite: None

Length: Two Semesters

Required Materials: Digital Camera

Digital Photography

Understanding the tools available opens the possibilities to create images with impact. In Digital Photography, students will study the history of photography as well as the basic operation of a digital camera. As they are introduced to different styles of photography and photographers, students will begin to develop artistic skills as well as their own voice through their photographs.

Major Concepts:

- **History:** Study the history of photography, the impact of photography on historical events and the development of photography equipment.
- **Movements:** Analyze art movements through the photography lens including Expressionism, Dada and Surrealism.
- **Design elements:** Explore different techniques, design elements and the Rule of Thirds.
- **Equipment:** Understand equipment used in photography including point-and-shoot cameras, 35mm cameras, lights, lenses, accessories and software.
- **Projects:** Create a mixed media project and a personal photography portfolio using acquired best practices.
- **Artists:** Study the styles and portfolios of well-known professional photographers.

Prerequisite: None

Length: One Semester

Materials Required: Digital camera (tripod, lenses, lights optional), paper, scissors, glue, access to photo manipulation software

Film and Television

The culture of cinema and television tells a unique story of history and innovation. Students in Film and Television will be introduced to industry icons and stars of the big and small screen. By studying and writing about film and television, students will analyze trends in technology and culture and better understand how to be an informed viewer.

Major Concepts:

- **Changes in the industry:** Understand of the role of technology and how it evolves the industry.
- **Actors:** Explore the contributions of actors including Brando, Hepburn, Kelly, Stewart, Poitier, Bogart, Newman, Taylor, Eastwood, Monroe, Ball and Washington.
- **Industry leaders:** Analyze the impact of industry leaders like MGM, Paramount, Hitchcock, Disney, Capra, Wells, Coppola, Pollock, Lumet, Lucas, Spielberg, Scorsese, Lumet, Wilder, Marshall, Spelling and Carson.

- **Societal impact:** Study the relationship of history and society with the evolution of film and television, the development of talk shows, news and sports and motion picture distribution.
- **Movements:** Explain significant developments including the Golden Age of Hollywood, Hollywood Blacklist, children's television, 24 hour news, ESPN and streaming television.

Prerequisite: None

Length: One Semester

Financial Literacy

The purpose of this course is to provide students with the essential understandings about managing their money. The focus will be on sources of personal income, saving, and spending patterns. Students will learn such things as how to budget, how to make large purchases, how to invest, and how to minimize taxes.

Major Concepts:

- Consumers
- Budgeting
- Financial Institutions
- Personal Finance
- Personal Credit
- Online banking
- Identity theft
- Stocks and Mutual Funds
- Retirement Planning
- Insurance
- College Funding

Prerequisite: None

Length: One Semester

Graphic Design

Graphic Design is an introduction to elements of design, spatial relationships, typography and imagery as they apply to practical visual solutions for self-promotion, resumes, logo design, Web design, and sequential systems. In this course, the student explores the basic foundations of design through a series of visual projects that explore the principles and elements of design. Students will work both with analog and digital media as they explore two-dimensional and three-dimensional design along with color theory. This course will help develop and explore a student's ability to communicate visually.

In each lesson students acquire new skills, which take some effort. Beyond fundamental skills are various levels of creativity. Each lesson provides room for a student to express the technical skill learned in his or her own creative way.

Major Concepts:

- Show skills in lettering.

- Demonstrate techniques in layout design that include balance, margins, airspace, emphasis, and clarity.
- Solve assignment challenges with planning, practice, patience, and the use of techniques introduced in the course.
- Demonstrate awareness of art movements and artists throughout the history of design.
- Demonstrate good design principles with a focus on the composition of assignments.
- Demonstrate increased clarity and self-confidence in visual decision-making.
- Use increased awareness of visual elements in order to create a more successful design.
- Fill the role of a designer to enhance living by applying a developed sense of aesthetics and utility to the creation of a wide variety of images.
- Demonstrate visual literacy in discernment in the media of today.

Prerequisite: None

Length: One Semester

Required Materials: (Students will need a computer or laptop for this course, tablets are not sufficient)

Choose one software application: [Adobe Illustrator](#) (there is a cost associated, Mac OS X, Windows), [Adobe Photoshop](#) (there is a cost associated, Mac OS X, Windows), [GIMP](#) (free downloadable, Mac OS X, Windows, GNU/Linux), [Pixlr](#) (free browser-based program, Mac OS X, Windows, GNU/Linux, Chrome OS)

Hands-on materials: triangle, Exacto knife, markers, pencil, good paper note pad, colored pencils, dotted line paper, glue stick, ruler, scanner or camera so you can transmit photos/images of your finished work.

Health Careers

In this course students explore a variety of career options related to the healthcare field, including medicine, nursing, physical therapy, pharmacy, dental careers, child care, sports medicine, personal training, social work, psychology, and more. Students will learn about various options within each field, what each of these jobs entails, and the education and knowledge required to be successful. In addition, they will focus on basic job skills and information that would aid them in health care and other career paths.

Prerequisite: None

Length: One Semester

Individual and Team Sports

To improve and maintain optimum health, it is necessary for people of all ages to participate in physical exercise. There is little doubt that, in addition to students in schools, the number of adults participating in sports and recreational activities in the United States has increased in recent years. Physical education is much more than just fitness and exercise. A well-planned program will cause you to think and express your emotions about different situations. In addition, a good program can make a valuable contribution to your education. These experiences will help you develop a sense of wellness.

Emphasis in this course is placed on the value of these sports as possible lifetime activities and on creating a clear explanation of the rules and basic principles of a variety of sports. The sports covered in this course are archery, bicycling, golf, skiing, tennis, volleyball, baseball, basketball, football, hockey, and soccer.

Information about the playing area and equipment, basic rules, safety considerations, and terminology for each sport are included in the discussions. For the most part, the information presented in each lesson applies to sports programs throughout most sections of the United States.

Major Concepts:

- Develop values regarding appreciation of, attitudes about, and interest in sports.
- Recognize that exercise and lifetime activities are important.
- Foster courtesy and sportsmanship in sports.
- Identify the basic equipment, demonstrate skills, understand basic rules, and observe the principles of safety pertaining to the following sports: Archery, Golf, Bicycling, Alpine Skiing, Tennis, Volleyball, Baseball, Basketball, Football, Hockey, Soccer.

Prerequisite: None

Length: One Semester

Internet Safety (6-12)

The Internet Safety unit prepares students for the realities of being online. Topics covered include cyber-bullying, protecting oneself against predators, how to stay away from viruses and malware, social engineering, and an in-depth look at cheating and plagiarism. Those who learn the skills taught in this course will not only be more successful students but will have information that will aid them as adults.

Prerequisite: None

Length: Two Units

Introduction to Business

This course introduces students to the basic business concepts that will help them understand how a business survives in today's economy and the role that consumers play in the same economy. Students will learn how to balance a checkbook, save for the future, and use credit wisely. Students will also learn how to create a resume and how to participate in a job interview.

Major Concepts:

- Educated consumers understand that economic decisions can be made in many different ways, each having an opportunity cost associated with it.
- Money management is an essential part of a successful personal financial plan.
- Effective business ownership includes understanding the activities businesses perform, forms of business ownership, all aspects of marketing, business' responsibilities to their community. and the role government plays with business.
- Career research and planning will help you match interests and skills to the ideal career path.

Prerequisite: None

Length: One Semester

Introduction to Java Programming

Java is one of the most widely used computer languages in the world. This course will teach students Java by having them complete multiple projects, both in the console and user interface, including: mad libs, player vs computer games, battleship, tic tac toe, picture shuffler and many more. This is course is meant to give students lots of experience in Java by creating multiple stand alone programs. This course assumes no coding experience with Java programming and includes self graded quizzes and tests.

Prerequisite: None

Length: One Semester

Required Materials: Students will need a Windows PC or Mac for this course. Chromebooks and tablets are not sufficient. HTML text Editor (choose one): TextEdit - For use on Mac - comes with OS, Notepad - For use on Windows - comes with OS, Text - For use on Chromebook - free app download from the Google Store. Eclipse:

<http://www.eclipse.org/downloads/eclipse-packages/>

Introduction to Nursing

This two semester course introduces students to the field of nursing. In the first semester students will learn about the history and evolution of nursing, education and licensure requirements, career path options, and nursing responsibilities. Students will also focus on foundational information such as basic anatomy, physiology, medical terminology, pharmacology, first aid, and disease prevention.

In semester two students will examine various nursing theories, as well as focus on the nursing process, including assessment, diagnosis, and treatment options. Students will also learn about professional and legal standards and ethics. Additional skills of communication, teaching, time and stress management, patient safety, crisis management will be included.

Prerequisite: None

Length: Two Semesters

JavaScript

In this course, students will learn how to start programming with JavaScript. Students will learn the basics of JavaScript including testing, functions, objects, arrays, loops, conditional code, operators and syntax basics. Students will learn timing and animations, and how to debug. The class will conclude with a robust project that incorporates everything they learned in the semester.

Students should have a working knowledge of HTML and CSS prior to taking this course.

Major Concepts:

- Use variable naming rules and JavaScript data types.
- Use and understand expressions and operators.
- Understand and use objects and arrays.
- Define functions and methods.
- Understand the Document Object Model (DOM).
- Understand how to Get Input and Output.
- Managing web page Styles using JavaScript and CSS.
- Handle Web Page Events
- Script Tables
- Script Forms

Prerequisite: Basic Web Design

Length: One Semester

Required Materials: Students will need a computer or laptop for this course; tablets are not sufficient. Some YouTube videos are embedded within course.

HTML text editor (choose one): TextEdit; for use on MAC and comes with OS, Notepad; for use on Windows and comes with OS, Text; for use on Chromebook and free app download from the Google Store. Image Editing Software (choose one): Pixlr <https://pixlr.com/editor/> (in-browser), GIMP <http://www.gimp.org/downloads/> (downloadable program), Webhosting and basic in browser FTP: Neocities <https://www.neocities.org>

Journalism

This course is designed to prepare you to become a student of journalism and media. The work we do here will equip you with the critical skills you must have to succeed in high school media, college media, and beyond. We will read a variety of journalistic material and do a great deal of news writing. We will also look at journalism from legal, ethical, and historic vantage points. Expect to complete numerous writing activities in a variety of styles including editorial, hard

news, feature, review, and more. If you participate actively, you will gain tremendous skills that will serve you for the rest of your life. Individual and group project will also be a part of this class. This course is a project based course and does not include traditional tests, unit level understanding is assessed through unit projects.

Major Concepts:

- Effective journalism requires creating a story that is readily understandable to a mass audience.
- Journalistic ethics and the laws that govern journalists is a topic of constant debate.
- Responsible journalism involves meticulous researching and verifying of facts and data.
- Editorial writing contains both facts and opinions and is similar to persuasive writing.
- Features contain elements of major news stories, but also contain descriptive details.

Prerequisite: None

Length: One Semester

Media and Communication

From banner ads to billboards, newspaper articles, and Facebook feeds, people are constantly sharing ideas. This course looks at the many facets of mass media. Students will learn how the media shapes every aspect of our lives. We examine the role of newspapers, books, magazines, radio, movies, television, and the growing influence of Facebook, YouTube, and Twitter.

Major Concepts:

- Introduction to Mass Media and Communication
- Print Media: Newspapers, Magazines, & Books
- Electronic Media: Radio, Movies, and Televisions
- The Internet & Social Media
- The Powerful Influence of Media
- Advertising and Public Relations
- Media Law and Regulations
 - The Ethics of Media

Prerequisite: None

Length: One Semester

Course Types: Original Credit, Credit Recovery

Medicine

This course provides students with an introduction to healthcare, with emphasis on modern, clinical medicine. Students review basic human anatomy and physiology, the study major health concerns affecting people in the U.S. and the world. This comprehensive, 10-unit course examines such topics as infectious diseases, cancer, traumatic injuries, and healthcare career opportunities.

Major Concepts:

- Anatomy/Physiology
- Human Development
- Nutrition
- Medical Ethics
- Infectious Diseases
- Cancer
- Traumatic Injuries
- Mental Illnesses

· Medicine in Practice

Prerequisite: None

Length: One Semester

Course Types: Original Credit, Credit Recovery

Music Appreciation

Whether a sheet of music seems like a foreign language to you or music is your life, Music Appreciation has something to offer. This course begins with an overview of the building blocks of music, such as rhythm, acoustics, instruments, and orchestration. Next you will learn about the role of music in society, the aesthetics of music, and how to evaluate a piece of music. From there, you will study music history, beginning with medieval chants and leading all the way to present-day movie music. Finally, you will study music from around the world. This course is a must for aspiring musicians and avid listeners alike.

Major Concepts:

- Building Blocks of Music
- Aesthetics and Evaluating Music
- Early/Renaissance Music
- Baroque
- Classical
- Romantic
- 20th Century and Contemporary
- Music Around the World

Prerequisite: None

Length: One Semester

Photojournalism

A powerful image can tell an eloquent story without words. Students in Photojournalism will be introduced to some of the pioneers who set the standards for this unique way of storytelling. As they study the principal types of photojournalism and the ethical responsibilities a photojournalist has behind the lens, students will develop their own storytelling skills through their writing and their photographs.

Major Concepts:

- **Ethics:** Understand the role and responsibilities of the photographer as storyteller, including ethical and legal considerations.
- **Storytelling:** Develop an understanding of different ways to tell a story through images and the use of elements of art and design, technology and manipulation.
- **Publications:** Analyze the use of photojournalism in media and specific publications over time.

- **Artists:** Explore the works of key photojournalists and the different types of photojournalism.
- **Equipment:** Work with basic camera functions and equipment.

Prerequisite: None

Length: One Semester

Psychology

In Psychology A the student begins with a brief history of psychologists and their experimental methods. Next they examine personality theories. Then human development from the infant stage through adult stage is explored. Finally, the last part of the course is about consciousness: sleep, dreams, and conscious-altering substances. Students are encouraged to increase their own self-awareness as they move through the course.

Semester A; Major Concepts:

- Psychologists use a variety of methods to gather data such as observations, experiments, survey, and tests.
- Different psychologists have different theories on how personalities are developed.
- Genetics, environment and culture can influence personality development.
- Development is a lifelong process that includes physical, social, language, cognitive, moral and gender.
- Some theorists believe that individuals must go through specific stages to reach their maximum development potential.
- Mental and physical aspects of consciousness are intertwined.
- Hypnosis, sleep and psychoactive drugs influence our state of conscious awareness.
- While there is no definitive purpose to dreams, there are many theories explaining their meanings or purposes.
- The field of psychology covers a vast area to include therapy, education, psychological disorders, industry, and animal training.

Students continue to learn about psychology. Students examine the nature of intelligence in humans and animals, including the origin of intelligence and how to measure it. They learn about learning with an emphasis on classical and operant conditioning. Students also investigate social psychology and psychological disorders. They demonstrate their understanding by completing projects in which they play roles like teacher, parent, and psychologist.

Semester B; Major Concepts:

- Some researchers have suggested that intelligence is a single, general ability, while others believe that intelligence encompasses a range of aptitudes, skills and talents.
- Some researchers believe animals can think.
- What is behaviorism and how do behaviorists study learning?
- What are the principles of classical and operant conditioning and how do they affect our learning?
- Why people behave differently in groups than they would individually.
- How social norms and rules govern most of our behavior.
- Defining mental disorder is difficult.
- Psychological disorders consist of anxiety disorders, mood disorders, personality disorders, drug abuse & addiction, dissociative identity disorder and schizophrenia.

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Research

The purpose of this course is to enable students to develop fundamental knowledge of the steps in the research process. This multidisciplinary course offers students the ability to choose among research topics as they relate to various fields such as science, history, and literature. The course promotes research skills and students gain the ability to evaluate research claims made in the media, literature and other sources.

Major Concepts:

- Technology
- Science & Technology
- Quantitative Research
- Case Studies
- Journal Articles
- Powerpoint Presentations

Prerequisite: None

Length: One Semester

Sociology

Sociology examines the basics of sociology, which is the study of society including individuals, human groups, and organizations. The course is divided into four main areas: the sociological perspective, social structures, inequality in society, and social institutions and change. Students will examine controversies around social change, inequality, gender, and race. The course revolves around an overview of the field with projects that offer the student a chance to explore from a sociologist's perspective.

Major Concepts:

- One can think sociologically.
- Culture and social structures impact how society is organized and how societal norms are transmitted, practiced, and enforced.
- Many distinctions in society are the result of social constructions.
- Society may treat people unequally. Five basic social institutions are defined and analyzed by sociology.

Prerequisite: None

Length: One Semester

Course Types: Original Credit, Credit Recovery

Study Skills and Strategies

The Study Skills and Strategies course equips students with skills and understandings critical to effective learning. Using a unique approach to the traditional topic of study skills, this course weaves understanding regarding the role of the brain in learning into the instruction of discrete learning skills and strategies. Moving beyond a list of good tips and ideas, the Study Skills and Strategies course will challenge students to develop intentional approaches to learning. They will be required to make connections between the strategies and skills they learn in this course and the implementation of those strategies and skills in their other coursework. Upon completion of the course, students will have learned a variety of specific learning skills and strategies, gained greater understanding of their own learning preferences, and become prepared to develop and implement specific learning and study plans for any academic course or other learning needs.

Major Concepts:

- The Science of Learning
- Self-management: Time and Organization
- Learn through Listening
- Learn through Reading
- Learn through Researching
- Learn through Writing
- Evidence of Learning through Testing

Prerequisite: None

Length: One Semester

Course Types: Original Credit, Credit Recovery

Theater Studies

Have you ever wondered how a play goes from the playwright's mind all the way into a multi-million dollar Broadway production? In this course, you'll learn the whole process! This course provides a thorough introduction to the theater by providing an overview of major topics in theater studies, with a blend of theoretical and practical lessons. In the first half of this course you will learn about the definitions of theater, theater history, and contemporary theatrical genres.!! The second half of the course will guide you through all of the elements of putting on a professional theatrical production. You will learn about the entire production process, from playwriting through opening night, including elements of technical theater, the rehearsal process, and audience response. Whether you're an aspiring actor, technician, director, or producer, or even just an avid theater-goer, this course is for you.

Major Concepts:

- What is Theater?

- Theater History: Ancient Greece through the 18th Century
- Nineteenth and Twentieth Century Theater
- Theater Spaces
- Pre-Production
- Production
- Acting and the Rehearsal Process
- Opening Night and Beyond

Prerequisite: None

Length: One Semester

Course Types: Original Credit, Credit Recovery

World of STEAM

Each aspect of the arts relies on science and technology. In The World of STEAM, students will learn why the eye sees color, how a dancer uses gravity and what makes a sound wave travel. The arts, science and technology are intertwined, now more than ever. Understanding the science behind the art will elevate students to a new level of creativity.

Major Concepts:

- **Anatomy:** Discover the relationship between art and the human anatomy.
- **Light:** Explore reflection and absorption and break down the science to better apply it to your artistic works.
- **Geometry:** Understand the basics of drawing by using geometric shapes to create a balanced composition.
- **Water:** Take a closer look at the science of water and its importance in the arts.
- **Technology:** Learn about the technology behind microphones, lighting and other equipment used in performances.
- **Music and math:** Breakdown the math behind music to better understand music notation and organization.
- **Sound:** Learn about the science behind sound waves and how they travel.
- **Biology:** Take a step by step approach to breaking down the biology of dancing.
- **Engineering:** Analyze how math and science is used in architecture and building design.

Prerequisite: None

Length: One Semester

Health and Physical Education

First Aid & Safety

In this course, students learn and practice first aid procedures for a variety of common conditions, including muscular, skeletal, and soft tissue injuries. In addition, students learn how to appropriately respond to a variety of emergency situations. They also learn the procedures for choking and CPR for infants, children, and adults. In addition to emergency response, students will explore personal, household, and outdoor safety, and disaster preparedness.

Prerequisite: None

Length: One semester

Flexibility Training

This course focuses on the often-neglected fitness component of flexibility. Students establish their fitness level, set goals, and design their own flexibility training program. They study muscular anatomy and learn specific exercises to stretch

each muscle or muscle group. Students focus on proper posture and technique while training. They also gain an understanding of how to apply the FITT principles to flexibility training. This course explores aspects of static, isometric, and dynamic stretching, as well as touch on aspects of yoga and Pilates. This course also discusses good nutrition and effective cross-training. Students take a pre- and post fitness assessment. Throughout this course students also participate in a weekly fitness program involving flexibility training, as well as elements of cardio and strength training.

Major Concepts:

- Fitness Assessment
- Principles and Technique
- Types of Flexibility Training
- Yoga and Pilates
- Cross-Training and Nutrition
- Post Assessment

Prerequisite: Physical Education

Length: One Semester

Required Materials: Heart Rate Monitor, MOVBand, SPRI Resistance Tubing Kit

Health

In this course, students acquire the knowledge and skills they need to lead a healthy life. Semester A focuses on the impact of personal decisions on the student's own health. Students learn how to find, evaluate, and use reliable information related to a variety of health topics. They also study the basic science behind nutrition, exercise, stress, and psychology, and examine how these factors affect a person's overall health. Each lesson in the course guides students in applying what they have learned in the lesson to their own lives and choices—and gives them a chance to discuss the topic with peers and instructors.

Semester A; Major Concepts:

- Analyzing Health Information
- Strategies for Coping with Stress
- Psychological/Mental Health
- Suicide Risks and Prevention
- Effects of Nutrition on Overall Health
- Practical Approaches to Better Nutrition
- Physical Fitness

Semester B focuses on the developmental aspects of being human and healthy. Students learn about some of the more dramatic changes that the human body experiences from birth to death. They explore topics related to aging and sexuality and identify ways to remain healthy and safe throughout life's major events and challenges. As in Semester A, this part of the course emphasizes what students can do to improve or maintain their own health and encourages them to be a positive influence on family and friends. Each lesson helps identify ways that students might use what they have learned in the lesson in their own lives. As in semester A, students discuss lesson topics with peers and/or an instructor.

Semester B; Major Concepts:

- Substance Abuse
- Sexuality and Reproductive Health
- Infectious Diseases
- Cancer Types and Risk Reduction
- Human Development and Aging
- Death and Dying
- Stages of Grief

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Nutrition

This course takes students through a comprehensive study of nutritional principles and guidelines. Students will learn about world-wide views of nutrition, nutrient requirements, physiological processes, food labeling, healthy weight management, diet related diseases, food handling, nutrition for different populations, and more. Students will gain important knowledge and skills to aid them in attaining and maintaining a healthy and nutritious lifestyle.

Major Concepts:

- Nutrition Basics
- Energy Nutrients
- Non-Energy Nutrients
- Energy Balance
- Disorders and Diseases
- Consumer Nutrition
- Nutrition for Life

Prerequisite: None

Length: One Semester

Physical Education

Physical Education encompasses learning how to live and maintain a healthy lifestyle. This course covers physical fitness, why it is important, how to have a healthy attitude, and how to stick with a healthy game plan. In this ever-changing world, physical fitness becomes more important and more difficult to find the time for. This course allows the student to discover how to make physical fitness not only a part of their daily life, but also see that it is attainable. This course leads the student to discover healthy behaviors and sets the tone for physical fitness as well as healthy exercise. PE for a Healthy Lifestyle will examine the emotional, physical, and scientific factors that influence physical performance. This course is designed for anyone, ranging from the beginner to advanced abilities.

Semester A; Major Concepts:

- Fitness and Health Concepts
- FITT Principles
- Biomechanics Principles
- Health and Fitness Plans
- Weight Training
- Nutrition

Semester B; Major Concepts:

- Sportsmanship & Safety
- Sports Strategies
- Skill-Related Fitness
- Movement Skills
- Individual & Team Excellence
- Rhythmic Movement

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Running

This course is appropriate for beginning, intermediate, and advanced runners and offers a variety of training schedules for each. In addition to reviewing the fundamental principles of fitness, students learn about goals and motivation, levels of training, running mechanics, safety and injury prevention, appropriate attire, running in the elements, good nutrition and hydration, and effective cross-training. While this course focuses mainly on running for fun and fitness, it also briefly explores the realm of competitive racing. Students take a pre- and post fitness assessment. Throughout this course students also participate in a weekly fitness program involving running, as well as elements of resistance training and flexibility.

Major Concepts:

- Fitness Assessment and Training Plan
- Running Mechanics
- Safety and Equipment
- The Running Scene
- Total Wellness
- Post Assessment

Prerequisite: None

Length: One Semester

Required Materials: Heart Rate Monitor, SPRI Resistance Tubing Kit

Strength Training

This course focuses on the fitness components of muscular strength and endurance. Students establish their fitness level, set goals, and design their own resistance training program. They study muscular anatomy and learn specific exercises to strengthen each muscle or muscle group. Students focus on proper posture and technique while training. They also gain an understanding of how to apply the FITT principles and other fundamental exercise principles, such as progression and overload, to strength training. This course also discusses good nutrition and effective cross-training. Students take a pre- and post fitness assessment. Throughout this course students also participate in a weekly fitness program involving strength training, as well as elements of cardio and flexibility.

Major Concepts:

- Fitness Assessment and Training Plan
- Principles and Technique
- Upper Body and Lower Body Strength Training
- Injury Prevention and Treatment
- Post Assessment

Prerequisite: None

Length: One Semester

Required Materials: SPRI Resistance Tubing Kit

Walking Fitness

This course helps students establish a regular walking program for health and fitness. Walking is appropriate for students of all fitness levels and is a great way to maintain a moderately active lifestyle. In addition to reviewing fundamental principles of fitness, students learn about goals and motivation, levels of training, walking mechanics, safety and injury prevention, appropriate attire, walking in the elements, good nutrition and hydration, and effective cross-training. Students take a pre- and post fitness assessment. Throughout this course students also participate in a weekly fitness program involving walking, as well as elements of resistance training and flexibility.

Major Concepts:

- Fitness Assessment and Training Plan
- Walking Mechanics
- Safety and Equipment
- The Walking Scene
- Overall Wellness
- Post Assessment

Prerequisite: Fitness Fundamentals I

Length: One Semester

Required Materials: SPRI Resistance Tubing Kit

Honors

Honors Algebra 1

In the honors course, students will do in depth study, problem-solving and application of algebraic concepts. Honors Algebra 1 (semester A) introduces students to the world of Algebra through expressions and equations. Students will evaluate algebraic expressions, solve linear equations and graph them. This course also steers students through various real-world scenarios with the emphasis on using basic statistics to interpret the information given and found. Students learn through online lesson materials, videos and interactive activities. The end of each unit tests students' understanding with a self-check quiz with feedback. Also included is a unit exam and project for students to apply what they have learned.

Semester A; Major Concepts:

- Algebraic Expressions
- Operations with Real Numbers
- Properties of Real Numbers
- Basic Statistics Measures
- Solving Simple and Multi-Step Equations
- Linear Functions and Graphs
- Solving Inequality Equations

Honors Algebra 1 (semester B) builds on the concepts learned in the first semester by providing a strong foundation in solving problems. Students will work with problems and applications that involve exponents, quadratic equations, polynomials and factoring methods, rational and radical equations, data analysis and probability. Students will interact with course materials through online lessons, videos, interactive questions and real-world applications. Each unit ends with a self-check quiz to confirm knowledge of the concepts learned. There is also a unit exam and project. Teacher feedback is given throughout the course.

Semester B; Major Concepts:

- Exponents and Scientific Notation
- Arithmetic and Geometric Sequences
- Operations with Polynomials
- Systems of Equations
- Factoring Polynomials
- Quadratic Functions and Graphs

- Higher-Order Polynomials
- Data Analysis and Probability
- Exponential and Radical Equations
- Rational Functions and Equations

Prerequisite: None

Length: Two Semesters

Honors Algebra 2

This course further extends the learner's understanding of major algebra concepts, and prepares them with the building blocks needed to dive deeper into trigonometry, pre-calculus and advanced probability and statistics. Topics include radicals, quadratic functions and equations, polynomials, rationals, systems of equations and inequalities, exponents and logarithms, sequences and series, probability and statistics and trigonometry. In the honors course, students will do in depth study, problem-solving and application of algebraic concepts.

Semester A; Major Concepts:

- Interpret key features of linear functions and their graphs in a context, solving linear equations when necessary.
- Explain the connection between rational exponents and radicals, and become fluent with complex numbers.
- Sketch, transform and solve maximizing or minimizing problems with quadratic functions, using the technique of completing the square.
- Solve quadratic equations using many different techniques.
- Use and explain the remainder theorem and factor theorem to analyze polynomial functions.
- Sketch and dissect rational functions, examining end behavior and exploring applications

Semester B; Major Concepts:

- Use linear and nonlinear inequalities to represent solution sets algebraically and graphically.
- Model real world situations using exponential and logarithmic functions and explore by graphing and solving.
- Work with geometric and arithmetic sequences and series.
- Explore and apply probability in a variety of contexts.
- Make inferences using statistical analyses.
- Explore, apply, graph and transform trigonometric functions.

Prerequisite: Algebra 1

Length: Two Semesters

Required Materials: Calculator

Honors American Government

American Government Honors provides the student with the basic knowledge of the history and philosophy of the United States government, and the principles that guide our democracy. The student examines the United States Constitution to answer questions and determine the facts of government. The course focuses on the functions and duties of the three branches of government, which are the legislative, executive, and judicial. Special attention is given to political participation, the rights and responsibilities of citizenship, and government systems of the world. American Government Honors references the view of political institutions to explore the history, organization, and functions of the U.S. government. It offers students learning opportunities that build one on another. A goal of the course is for the student to develop the critical skills of analysis, synthesis, and evaluation in a demanding and thoughtful academic setting. Students are encouraged to use their knowledge of the organizations and management of governing to develop their own views on current political issues. Then the students are taught how to apply what they have learned into civic action. The course looks closely at the political knowledge and values of the country as it gives students a look into the problems faced by presidents, congressional representatives, and other political activists. It also covers the roles of political parties, interest groups, and the media in shaping the government. The Supreme Court is presented as the voice of reason in the balance of powers. Students are encouraged to perform at higher levels as they analyze historical documents and additional readings, work with a set of facts arranged by theme, become skillful in note taking, and join in student discussions. Students develop and demonstrate their writing skills by preparing extended research-based papers and through participation in community service.

Major Concepts:

- Foundations of Government
- Origins of American Government
- Constitution
- Federalism
- Congress: the Legislative Branch
- Presidency: the Executive Branch
- Federal Courts: the Judicial Branch
- The Political Process
- Civil Liberties
- Comparative Political and Economic Systems

Prerequisite: None

Length: One Semester

Honors American History

American History A Honors helps students learn the story of the founding of North America by Europeans in the 1600s. A prevailing theme of the course is that America accomplished tasks that no other country had undertaken before. America broke away from Europe, established its own country with a Constitution that has given freedom to more people than any other country in the world, and settled a country by putting that Constitution into practice. The course ends with a study of America's emergence as a world power at the beginning of the 20th Century. Students will encounter primary and secondary source document investigations, biographies of key individuals, political cartoons, map studies, and period literature.

Semester A; Major Concepts:

- Birth of America
- Founding a Nation
- Developments
- Civil War and Reconstruction
- National Expansion
- Progressivism

American History B Honors begins in the 1920s Jazz Age and ends in the 21st Century. Students will examine economic factors that lead to the Great Depression and World War II. The West's involvement in the Cold War, as well as the fall of the Soviet Union, will be covered in detail. America's rise as a world power is featured. The final unit of the course includes a study of the environment, modern presidential foreign and domestic policies, and the Middle East. Unit 30 includes a lesson designed to help students prepare for the final exam.

Semester B; Major Concepts:

- Industrialization
- The Great Depression
- World War II
- Civil Rights
- American Domestic and Foreign Policy
- Global Issues
- Current Events

Prerequisite: Honors World History, World History

Length: Two Semesters

Honors Biology

The science of biology must begin with cell theory, including the structure, function, and chemistry of the cell. Cells form the primary level of organization of all living things. The chemistry and function of each cell shapes the lifestyle of the organism, from feeding to reproductive patterns. This first course in biology focuses on the life of the cell, dealing with issues of structure, transport, genetics, protein synthesis, energy production, and usage. The tools of science are explained and then focused on the living systems in the cell. In the case of genetics, the molecular behavior of DNA is elaborated to show how it determines the visible traits of the organism and population. Thus, you are led on a tour of living systems from the tiniest to the broadest levels of organization. During this tour, you will employ text, computer simulations, videotaped labs, and hands-on investigation to verify each concept and make them relevant to what you see each day. The aim of this course is to guide you, the student, to see your world in biological terms, and then to expand your vision to contemplate current topics in biological research and application.

Semester A; Major Concepts:

- Science of Life
- Biochemistry and the Cell
- The Carbon Cycle
- Cellular Reproduction
- Protein Synthesis
- Genetics and Humans

The study of the human body involves more than just its anatomy, but also entails an understanding of the roles each part plays, how each contributes to system, and holistic wellness. The basic plan of the course is to examine each of the organ systems, including the skeletal, muscular, integumentary (skin), circulatory, respiratory, immune, digestive, excretory, nervous, sensory, endocrine, and reproductive systems. The regulation and coordination of these systems is what constitutes physiology, which is the major part of the laboratory investigations associated with the course. After completing the course, students will have a foundation for more specialized studies in the health sciences.

Semester B; Major Concepts:

- Bones, Muscles and Skin
- Heart, Blood and Lungs
- Staying Healthy, Eating Well
- Digestion, Excretion and Nerve Transmission
- Mechanisms of Control
- Reproduction

Prerequisite: None

Length: Two Semesters

Honors Chemistry

In this course, students will discover what chemistry is, and how it is used and found all around us. The importance of the scientific method to solve real world problems will be investigated. Knowledge will be gained in the following areas: types of matter, atomic structure, chemical periodicity, chemical formula writing and naming, chemical equations. This course will also stress the important relationship between math and science while studying measurement, metric system and stoichiometry. Students will use higher order thinking throughout the entire course.

Semester A; Major Concepts:

- Chemistry is the study of matter and the changes that matter undergoes.
- Matter can be classified as substances (elements or compounds) or mixtures (homogeneous or heterogeneous).
- The position of an element on the periodic table is based on the number of protons and electrons for that element and allows chemists to see patterns in physical properties and chemical reactivity.
- The visual model of the atom evolved as advances in technology were discovered.
- Elements combine to form compounds.
- Elements and compounds undergo chemical reactions to form new substances.
- Defined measurement qualifiers known as units are needed to describe measurements in the physical world.
- Units can be interconverted via dimensional analysis.
- Chemical equations are quantified via the unit known as the mole.
- Theoretical yields can be computed for balanced, chemical equations.

It follows the Chemistry 1 A course. In Chemistry 1 B, students will investigate chemical bonding, thermochemistry, and acids and bases. The importance of the scientific method to solve real world problems will be investigated. Knowledge will be gained in the following areas: organic chemistry, biochemistry, and nuclear chemistry. This course will also stress the important relationship between math and science. Students will use higher order thinking throughout the entire course.

Semester B; Major Concepts:

- Atoms having great electronegativity differences will combine to form ionic bonds.
- Atoms that share electrons equally form covalent bonds.
- Water is a unique compound held together by strong hydrogen bonding.
- Chemists express the concentrations of solutions in various units.
- Heat flows from higher temperature to lower temperature.
- The specific heat of an object is related to its mass and temperature.
- Pressure, volume and temperature are factors that determine the behavior of a gas.
- At equilibrium, the rate of the forward and reverse reactions are equal.
- Many chemical reactions exhibit acid/base behavior.

- There is a systematic method for naming organic compounds.
- Life is based on chemical and physical principles.
- Many nuclear processes can be described by three types of particles released by the atom.
- Neutralization reactions involve an acid and a base and will react to form water and a salt.
- Oxidation-Reduction reactions are based upon the transfer of electrons.

Prerequisite: Algebra 1, Geometry

Length: Two Semesters

Honors Economics

Economics Honors provides the student with basic knowledge of the history and philosophy of the United States economy and the economic principles that guide our democracy. Students demonstrate problem solving, and their understanding of the processes for economic reasoning, by applying economic principles to decisions they make as consumers, workers, and members of local and larger societies. This, in turn, enables the student to understand the issues and public policies that affect economic, political, and cultural systems. The course focuses on the functions and duties of the three branches of government, which are the legislative, executive, and judicial as they relate to the economy. Special attention is given to the role of the Federal Reserve System in administering the United States economy.

Major Concepts:

- Foundations of Economics
- Microeconomics
- Macro Economics
- Global Economics
- Personal Finance

Prerequisite: None

Length: One Semester

Honors Geometry

Geometry is the study of the measurement of the world. What makes Geometry so interesting is the relationship of these measures to each other. An in-depth exploration of logic and reasoning leads the student to practical applications. Through discovery and predictions, students gain insight into the geometry of everyday life. In this course, the student observes how the five postulates of Euclid create a whole schema of the world. Non-Euclidean assumptions are briefly explored. The student gains skills in reasoning, using logic tables that are usually reserved for more advanced studies of mathematics. Students are also required to produce geometric constructions that correlate to theorems, using simple tools such as the drawing compass. The course ensures all students have the opportunity to succeed through engaging activities and contact with the teacher. Each lesson has several activities that all contribute to an exploration of new mathematical concepts. Projects provide students with hands-on experience. The activities and discussions also help the student think creatively and critically about each topic. At every point in the course, teacher feedback is provided and available.

Semester A; Major Concepts:

- Building Blocks of Geometry
- Formulas and Reasoning
- Proofs
- Lines and Triangles
- Congruence
- Properties of Polygons

In Honors Geometry B, the student continues the study of shapes and transformations begun in Geometry A - Honors. The course reviews proportions and similarity. Then, it emphasizes planar coordinates and solid figures. The course also introduces trigonometry, the measurement of the triangle and the proportional relation of its angles. Throughout the course, the student has the opportunity to approach concepts from various viewpoints, including hands-on exercises, games, and constructions, all while applying deductive reasoning. In class discussions and special projects, the student exercises critical and creative thinking. Most importantly, through logic and exploration, the student sees the practical connections of geometry with day-to-day living.

Semester B; Major Concepts:

- Proportions and Similarity
- Perimeter Circumference and Area
- Circles
- Trigonometry
- Solid Geometry
- Transformations

Prerequisite: Honors Algebra 1 or Algebra 1

Length: Two Semesters

Honors Language Arts 9

English Honors for grade 9 is an integrated curriculum with challenging assignments aimed at preparing Honors-level students for advanced work in the study of literature and language arts. Each unit contains thematically related lessons in five domains: reading and the study of literature, reading informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. Topics are presented in ways that help young adolescents relate literacy skills to other aspects of their lives. Writing assignments include narrative, expository, and persuasive/argumentative modes and emphasize the use of details and reasoning to support ideas. Speaking and listening lessons in Semester A emphasize collaborative discussion skills and peer review. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Assignments that are specific to the Honors level of this course ask students to apply advanced skills earlier in the course and more often than students in the regular version of English 9. For example, students move immediately beyond the identification of literary elements or aspects of informational text to the analysis of these components. Likewise, Honors students don't simply recognize and describe rhetorical strategies—they also use these strategies to create specific effects. Some Honors assignments require students to go one step farther in developing an assignment—for instance, writing an essay after generating ideas for the essay using the worksheet provided to students in the regular course. Clear and extensive guidelines are provided for each Honors assignment along with a detailed rubric for evaluation.

Like semester A, semester B of English 9 Honors consists of integrated units focused on a theme or mode of study. Literature study in semester B focuses on the analysis of different forms of literature and on comparative studies of world literature and literature delivered in different media. As in Semester A, Honors assignments in this semester require students to take a more analytical or active approach to many of the assignments and activities in the course. Honors students will write more often and more deeply about topics and also reflect more critically on the processes they use to read and write. Writing and informational text lessons guide students through the stages of research and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

Prerequisite: None

Length: Two Semesters

Required Materials: Use of audio recording software, Use of multimedia presentation software, Internet searches for research purposes. Required Novels: *Romeo and Juliet* (Semester A), *To Kill a Mockingbird* (Semester B). Optional Novels: *The Old Man and the Sea*, *House on Mango Street*, *Fahrenheit 451*, *The Odyssey*, *Ender's Game*, *Speak of Mice and Men*

Honors Language Arts 10

English 10 Honors is an integrated curriculum consisting of thematically related lessons in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. The course provides challenging assignments aimed at preparing Honors-level students for advanced work in the study of literature and language arts. An introductory lesson at the start of each unit helps students identify any areas of weakness and review those topics if needed. Writing assignments required in Semester A of this course include fiction, expository, and persuasive, and analytical models, emphasizing the use of details, evidence, and reasoning to support ideas. Speaking and listening lessons in Semester A cover collaborative discussion skills, the peer review process, and how to plan and deliver informative speeches and presentations. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Assignments that are specific to the Honors level of this course ask students to apply advanced skills earlier in the course and more often than students in the regular version of English 10. For example, students move immediately beyond the identification of literary elements or aspects of informational text to the analysis of these components. Likewise, Honors students don't simply recognize and describe rhetorical strategies—they also use these strategies to create specific effects. Some Honors assignments require students to go one step farther in developing an assignment—for instance, writing an essay after generating ideas for the essay using the worksheet provided to students in the regular course. Clear and extensive guidelines are provided for each Honors assignment along with a detailed rubric for evaluation.

Like semester A, semester B consists of integrated units focused on a theme or mode of study. Literature study in semester B focuses on the analysis of different forms of literature and as well as the evaluation of various modes and forms of writing. Writing and informational text lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations. As in Semester A, Honors assignments in this semester require students to take a more analytical or active approach to many of the assignments and activities in the course. Honors students will write more often and more deeply about topics and also reflect more critically on the processes they use to read and write.

Prerequisite: Language Arts 9

Length: Two Semesters

Required Materials: Required Novels: *Animal Farm* (Semester A), *Night* (Semester B). Optional Novels: *The Catcher in the Rye*, *The Bean Trees*, *All Quiet on the Western Front*, *Lord of the Flies*, *Twelfth Night*, *Farewell to Manzanar*, *Antigone*

Honors Language Arts 11

Honors English 11 is an American Literature course, with units organized chronologically according to periods in literary history. As students read foundational works of literature and other historical documents written between 1600 and 1900, they'll review and extend skills in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. Each module or unit begins with a lesson that provides historical context for the era and introduces themes that emerged in the literature of that era. Each lesson provides students with an opportunity to review basic analysis skills before applying those skills to works of literature or key historical documents. Lessons focused on more difficult historical documents include activities that help students comprehend the complex ideas in these works. The Honors level of the course provides additional challenging assignments aimed at preparing college-bound students for advanced work in the study of literature and language arts.

Writing modes addressed in Semester A of this course include narrative, reflective, persuasive, and analytical modes. Assignments emphasize the use of details, evidence, and reasoning to support ideas; writing lessons include model essays that demonstrate key features of each mode. The speaking and listening lessons in Semester A cover rhetoric, the peer review or writing workshop process, and performance skills. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Semester B of Honors English 11 consists of units focused on historical eras and literary movements of the 20th and 21st century, such as Naturalism, Imagism, the Harlem Renaissance, and Postmodernism. Literature analysis lessons in semester B focus on the forms of literature that were most commonly written during the Twentieth Century and how the forms, styles, and techniques of that century inform literature written today. Students will also evaluate various modes and forms of language expression, including single media and multimedia messages. Writing and informational text lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations. As in Semester A, the second semester of Honors English 11 provides additional challenging assignments aimed at preparing college-bound students for advanced work in the study of literature and language arts.

Prerequisite: Language Arts 9, 10

Length: Two Semesters

Required Materials: Required Novels: *The Scarlet Letter* (Semester A), *The Great Gatsby* (Semester B). Optional Novels: *Death of a Salesman*, *A Farewell to Arms*, *My Antonia*, *A Lesson Before Dying*, *Black Boy*, *The Island*, *The Adventures of Huckleberry Finn*

Honors Language Arts 12

English 12A Honors focuses on learning to write with confidence and mastery. Emphasis is placed on building language flexibility, improving sentence structure, and mastering the writing process. Students create, revise, and edit six writing projects that are designed to help them take their writing to the next level. As an Honors course, emphasis is placed on project-based instruction and increased reading and writing opportunities. In this thought-provoking writing course, students prepare themselves for the demands of college and/or the job market by developing their writing skills. Through text readings, videos, interactive PowerPoint presentations, practice activities, workbook questions, interactive skills challenges, discussions, writing projects, and other activities students demonstrate their mastery of the writing process. Students will integrate the 6-Traits of Writing (i.e., ideas and content, organization, voice, word choice, sentence fluency, and conventions) to all of their writing. As an Honors course, emphasis will be placed on additional reading and writing project-based instruction. Students will create projects including a short story, expository essay, functional document, persuasive essay, literary analysis, and research paper. Through the engaging activities in English 12A Honors, students become more mature and accomplished writers.

In English 12B Honors, students experience a survey of dynamic British literature from the ancient epic poem of Beowulf to more contemporary pieces by authors such as George Orwell and Doris Lessing. Emphasis is placed on major literary movements, British authors and classics, and the impact of historical events on literary works. In English 12B Honors, students gain a better understanding of English masterpieces as well as their own writing. As an Honors course, emphasis is placed on project-based instruction and increased reading and writing opportunities. Engaging videos, interesting readings, and interactive activities provide students with pragmatic opportunities to apply reading comprehension and writing skills to their lives. Students work through interactive lessons, completing several self-check activities and quizzes. In each unit, students complete an exam as well as writing projects that include a personal narrative, a research document, a literary response, a descriptive essay, an expository essay, and a persuasive composition. Students also participate in daily discussions and teacher feedback is provided throughout the course. English 12B Honors covers the content and skills in English 12B as well as providing additional project-based instruction and increased reading and writing opportunities.

Prerequisite: Language Arts 9, 10, 11

Length: Two Semesters

Required Materials: In this course, you are required to read two novels from the You-Choose list in addition to the works that are listed as required reading below. Required Novels: Jane Eyre (Semester A), The Grapes of Wrath (Semester B), The Alchemist (Semester B), The Metamorphosis (Semester B), Hamlet (Semester B). You-Choose Novels: 1984, Wuthering Heights, Brave New World, Othello, One Hundred Years of Solitude, A Tale of Two Cities, Cry, the Beloved Country, Frankenstein

Honors Physics

Physics delves into the interactions of matter and energy, from the subatomic level of quarks and leptons to the astronomical level of the Big Bang and black holes. This first course on physics focuses on the ordinary interactions seen in our everyday world. The model of Newton's laws of motion applies to all such interactions and serves as a basis for analyzing the forces of gravity, friction, heat, and other forms of energy. This first course deals with motion, forces, momentum, heat, and waves, along with their subtopics, such as work and energy. A short description of this physics course might be "engineering physics," since the most obvious applications of everyday physics is in engineering machines and facilities. The first Honors course in physics examines the concepts of forces, motion, and acceleration, momentum, heat, work, power, and energy in a more in-depth manner. The honors student will have more opportunity to explore such topics fully, gaining skill in applying quantitative methods and analyzing the implications of physical forces. Much of the emphasis in the course will be on communicating through graphs and mathematical models. Successful completion of the course will prepare the student to do well in a collegiate course in physics or other sciences.

Semester A; Major Concepts:

- Motion and Forces
- Laws of Motion
- Work, Energy and Power
- Manipulating Forces
- Heat and Energy
- Heat Waves

Physics B Honors is the continuation of the introductory course, Physics A Honors. Physics B Honors investigates the energy of waves and their fields, electromagnetism, nuclear reactions, and subatomic physics. Whereas Physics A Honors mostly deals with classical mechanics, Physics B Honors examines waves and quantum mechanics, areas of physics that are not so familiar to most students. Physics B Honors takes you into the world of the very small to see how physicists discovered that the laws that govern tiny things explain how larger masses act. These introductory courses familiarize you with the topics of interest in physics research and make connections to the everyday world of physical laws and phenomena. This course is rigorous but offers you support in the way of audiovisual presentations, interactive mentoring, and video labs. You will be asked to perform laboratory experiments and solve calculations on your own, with instructor support. Finally, you will discover that the discussion topics will broaden your outlook toward the relevance of physics in the world today. As an honors course, you will have additional practice activities, computer simulations, and enhanced projects to help you analyze, apply, and evaluate the concepts of physics. You should recognize, particularly as you study particle physics and cosmology, that physics is a work in progress. Every day, new evidence and new explanations arise to explain what happens in the world of the very small and very large. Reconciling our models of the cosmological universe

with those of the smallest particles is currently one of physics' biggest challenges. Your serious thoughts on the issues may be very insightful and helpful.

Semester B; Major Concepts:

- Waves and Light
- Optics
- Electrostatics
- Electrical Current
- A New Look at the Atom
- The Particle Zoo

Prerequisite: Algebra 1 and Geometry

Length: Two Semesters

Honors World History

In World History A Honors, students explore ancient civilizations in order to understand the geographic, political, economic, and social characteristics of people. By developing their understanding of the past, students can better understand the present and determine their direction for the future. In this course, students explore the first civilization in Mesopotamia; the ancient civilizations of China, Greece, and Rome; the rise of the Byzantine Empire; and the feudal system in Europe and Japan. They also learn about the Renaissance and Reformation, the Enlightenment Period, and the scientific and democratic revolutions in Europe that spread to the new nation of America. The last part of the course concentrates on the Napoleonic Era, the Industrial Revolution in England, and the rise of imperialism in Europe. In addition, historical analysis and current events are featured in the final lessons.

In World History B Honors, students examine the factors leading up to World War I, the rise of nationalism, and the worldwide economic depression. The causes of War II, and the military strategies involved are also analyzed. The advances in modern warfare for both World Wars are a special focus. In addition, students learn about the struggle between the ideologies of democracy and communism as well as the change in the balance of power after World War II in which countries fought for self-rule. An appraisal of the Cold War and the fall of the Soviet Union are included. Later lessons find students exploring the roots of terrorism and the conflicts in the Middle East, Eastern Europe, and Asia. The final unit of the course centers on the new global economy, advances in science and technology, and current environmental issues. Students assess primary and secondary source materials in depth. Projects and class discussions challenge students to predict outcomes, draw conclusions, and make choices based upon critical thinking.

Prerequisite: None

Length: Two Semesters

World Languages

HS Chinese 1

Students begin their introduction to Chinese by focusing on the four key areas of foreign language study: listening, speaking, reading, and writing. The course represents an ideal blend of language learning pedagogy and online learning. Each unit consists of a new vocabulary theme and grammar concept, reading and listening comprehension activities, speaking and writing activities, multimedia cultural presentations, and interactive activities and practices which reinforce vocabulary and grammar. There is a strong emphasis on providing context and conversational examples for the language concepts presented in each unit. Both Chinese characters and pinyin are presented together throughout the course and

specific character practices are introduced after the first quarter. Students should expect to be actively engaged in their own language learning, become familiar with common vocabulary terms and phrases, comprehend a wide range of grammar patterns, participate in simple conversations and respond appropriately to basic conversational prompts, analyze and compare cultural practices, products, and perspectives of various Chinese-speaking countries, and take frequent assessments where their language progression can be monitored. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

Major Concepts:

- Engage in language learning
- Master common vocabulary terms and phrases
- Comprehend a wide range of grammar patterns
- Participate in simple conversations and respond appropriately to basic conversational prompts
- Generate language incorporating basic vocabulary and grammar patterns
- Read, write, speak, and listen for meaning in basic Chinese
- Analyze and compare cultural practices, products, and perspectives of various Chinese-speaking countries
- Regularly assess progress in proficiency through quizzes, tests, and speaking/writing submissions

Prerequisite: None

Length: Two Semesters

HS Chinese 2

Students continue their study of Chinese by further expanding their knowledge of key vocabulary topics and grammar concepts. Students not only begin to comprehend listening and reading passages more fully, but they also are able to express themselves more meaningfully in both speaking and writing. Each unit consists of a new vocabulary theme and grammar concept, reading and listening comprehension activities, speaking and writing activities, multimedia cultural presentations, and interactive activities and practices which reinforce vocabulary and grammar. There is a strong emphasis on providing context and conversational examples for the language concepts presented in each unit. Character recognition and practice are a key focus of the course and students are expected to learn several characters each unit. However, pinyin is still presented with characters throughout the course to aid in listening and reading comprehension. Students should expect to be actively engaged in their own language learning, understand common vocabulary terms and phrases, use a wide range of grammar patterns in their speaking and writing, participate in conversations and respond appropriately to conversational prompts, analyze and compare cultural practices, products, and perspectives of various Chinese-speaking countries, and take frequent assessments where their language progression can be monitored. By semester 2, the course is conducted almost entirely in Chinese. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

Major Concepts:

- Engage in language learning
- Review and expand their study of common vocabulary topics
- Gain a deeper understanding of a wide range of grammar patterns
- Participate in extended conversations and respond appropriately to a variety of conversational prompts
- Communicate more meaningfully using correct vocabulary and grammatical structures
- Read, write, speak, and listen for meaning in Chinese
- Analyze and compare cultural practices, products, and perspectives of various Chinese-speaking countries
- Regularly assess progress in proficiency through quizzes, tests, and speaking/writing submissions

Prerequisite: Chinese I, or equivalent

Length: Two Semesters

HS French 1

French 1 focuses on developing listening skills by repeated exposure to the spoken language. Speaking skills are encouraged through recommended assignments using voice tools. Reading and writing skills, as well as language structures, are practiced through meaningful, real-life contexts. The use of technology enhances and reinforces authentic language development and fosters cultural understandings through exposure to native speakers and their daily routines.

Semester A; Major Concepts:

- Language connects people.
- You can learn a second language.
- The language we use changes with the situation.
- People appreciate your effort to learn their language.
- Learning another language will open the door to a new culture.
- Language requires you to solve problems.
- Conversations are more than questions and answers.
- You already have language skills that you can use to successfully learn another language.

Semester B; Major Concepts:

- You already have language skills that will help you learn another language.
- Language learning requires you to solve problems.
- Conversations are more than questions and answers.
- Learning another language will open the door to a new culture.
- Language and culture are inextricably linked.

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

HS French 2

Semester A focuses on the continuation and enhancement of language skills presented in Level 1. Vocabulary and grammar structures are revisited and expanded to provide students an opportunity to move towards an intermediate comprehension level. Speaking and listening skills are enhanced through recommended real-life voice activities. Listening skills are honed through online dialogues. Reading and writing skills are developed through access to completion of meaningful activities, reading of culturally-related articles of interest and responding to reading in the target language. The use of technology enhances and reinforces authentic language development and fosters cultural understandings through exposure to native speakers and their daily routines.

Semester A; Major Concepts:

- Learning a language is an ongoing process.
- The recognition and use of patterns of verb forms gives the speaker a wider range of communication skills.
- Successful communication requires knowledge of culture and customs.
- Culture influences perception, perspectives, values, and reaction.

Semester B continues the enhancement of language skills. Vocabulary and grammar structures are revisited and expanded as students explore other French-speaking areas. Speaking and listening skills are enhanced through recommended real-life voice activities. Listening skills are honed through online dialogues. Reading and writing skills are developed through access to completion of meaningful activities related to travel, to the Olympics, to natural disasters, and to the space program. Reading of culturally related articles of interest and responding to reading in the target language, along with the use of technology, reinforces authentic language development and fosters cultural understandings through exposure to native speakers and their daily routines.

Semester B; Major Concepts:

- Using direct and indirect object pronouns makes speech sound more natural.
- Like the United States, France has territories and departments that are not located in mainland France.
- Reflexive verbs are often used to describe daily events related to personal care and feelings.
- Although English is the official language for most of Canada, the province of Québec is predominantly French speaking and is the only Canadian province whose official language is French.
- French speakers use two different tenses to describe events that occurred in the past.
- Haiti is an independent Caribbean nation with a rich history that has suffered many hardships due to natural disasters and corrupt leadership.
- French speakers can express what will happen using the future tense.
- French is not a direct translation of English.

- France has a space program, which is based in its département d'outre mer, la Guyane Française.

Prerequisite: French 1

Length: Two Semesters

Required Materials: Semester B Only: Joie De lire! Intermediate Reader Level 2. July 19, 2002 By Rinehart and Winston Holt (ISBN: 0030656273)

Course Types: Original Credit, Credit Recovery

HS French 3

Students further deepen their understanding of French by focusing on the three modes of communication: interpretive, interpersonal, and presentational. Each unit consists of a variety of activities which teach the students how to understand more difficult written and spoken passages, to communicate with others through informal speaking and writing interactions, and to express their thoughts and opinions in more formal spoken and written contexts. Students should expect to be actively engaged in their own language learning, use correct vocabulary terms and phrases naturally, incorporate a wide range of grammar concepts consistently and correctly while speaking and writing, participate in conversations covering a wide range of topics and respond appropriately to conversational prompts, analyze and compare cultural practices, products, and perspectives of various French-speaking countries, read and analyze important pieces of Hispanic literature, and take frequent assessments where their language progression can be monitored. The course is conducted almost entirely in French. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

Major Concepts:

- Engage in language learning
- Begin to prepare for the AP French test
- Review and expand upon a wide range of grammar patterns
- Participate in detailed conversations and respond appropriately to a variety of conversational prompts
- Generate language incorporating advanced vocabulary and grammar patterns
- Read, write, speak, and listen for meaning using advanced French
- Analyze and compare cultural practices, products, and perspectives of various French-speaking countries
- Regularly assess progress in proficiency through quizzes, tests, and speaking/writing submissions

Prerequisite: French 2, or equivalent

Length: Two Semesters

HS German 1

This German 1A course is an introductory course teaching basic comprehension and communication in German. It coordinates the study of language with culture through the use of video, audio and mass media production. This course assumes prior or no knowledge of the German language. It introduces the fundamentals of conversational and grammatical patterns of the German language with presentations to present the material. Students who complete the course successfully will begin to develop a functional competency in the four primary language areas: speaking, reading, listening and writing, while establishing a solid grammatical base and exploration into German culture.

Semester A; Major Concepts:

- Language connects people.
- You can learn a second language.
- The language we use changes with the situation.
- People appreciate your effort to learn their language.
- Learning another language will open the door to a new culture.
- Language requires you to solve problems.
- Conversations are more than questions and answers.
- You already have language skills that you can use to successfully learn another language.
- We gain knowledge of our own culture through comparing it with others.

The second semester course will expand on the knowledge gained from German 1A and further develop their skills in pronunciation, grammar skills, grammar structures and vocabulary. Oral practice (via Voice Tools), homework assignments, games, songs, watching videos, quizzes, tests, projects and other activities such as writing wikis and journal entries, will be emphasized to accomplish this goal. The different cultures of the German-speaking world are emphasized through readings, videos and other activities. Taking the time to learn another language is a mind-expanding activity that can open up a world of opportunities and advantages.

Semester B; Major Concepts:

- Language connects people.
- You can learn a second language.
- The language we use changes with the situation.
- People appreciate your effort to learn their language.
- Learning another language will open the door to a new culture.
- Language requires you to solve problems.
- Conversations are more than questions and answers.

- You already have language skills that you can use to successfully learn another language.
- We gain knowledge of our own culture through comparing it with others.

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

HS German 2

In this course, students build on grammar and language skills that they acquired during their G1A and G1B courses. While reviewing basic grammar skills, (present and past tenses), students learn and study stem-changing verb conjugation and explore cultural themes regarding current events, famous German people, music and famous festivals.

Semester A; Major Concepts:

- Basic vocabulary, grammar and word structure are an important foundation to becoming more fluent in speaking and writing German.
- Learning about German-speaking culture and people gives you the tools to better understand the German people today.
- Learning words and structures for talking about your future is important to expressing yourself in German.
- Vocabulary and grammar describing daily life and life in the country are essential to understanding how others live.
- Knowing vocabulary and grammar related to living in the city allows you to draw better comparisons between where you live and German-speaking countries.

In the second semester course, students increase their proficiency in being able to communicate by forming more complex German sentences in a variety of tenses using all four cases (Nominative, Accusative, Dative and Genitive). The variety of topics increases also, from exploring different careers to discussing relationships. Cultural themes are entwined throughout this course related to going shopping, to going to the zoo and also to travel throughout the German-speaking world.

Semester B; Major Concepts:

- Correct use of shopping vocabulary and grammar are essential to living and expressing your opinion in German.
- Using the correct vocabulary and commands when participating in hobbies and going to the doctor allows you to have more successful experiences.
- Basic housing-related vocabulary is a fundamental building block in speaking German with fluency.
- German words and phrases are important to planning travel in and around Europe.

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

HS Latin 1

Since mastering a classical language presents different challenges from learning a spoken world language, students learn Latin through ancient, time-honored, classical language approaches which include repetition, parsing, written composition, and listening exercises. These techniques, combined with a modern multimedia approach to learning grammar, syntax, and vocabulary, provide students with a strong foundation for learning Latin. Each unit consists of a new vocabulary theme and grammar concept, reading comprehension activities, writing activities, multimedia culture, history, and mythology presentations, and interactive activities and practices which reinforce vocabulary and grammar. There is a strong emphasis on engaging with authentic classical Latin through weekly encounters with ancient passages from such prestigious authors as Virgil, Ovid, and Lucretius. The curriculum concurs with the Cambridge school of Latin; therefore, students will learn ancient high classical styles of pronunciation and grammar in lieu of generally less sophisticated medieval styles, making it possible for students to comprehend the most Latin from the widest range of time periods. Students should expect to be actively engaged in their own language learning, become familiar with common vocabulary terms and phrases, comprehend a wide range of grammar patterns, understand and analyze the cultural and historical contexts of the ancient sources they study, and take frequent assessments where their language progression can be monitored. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

Major Concepts:

- Engage in language learning
- Master common vocabulary terms and phrases
- Comprehend a wide range of grammar patterns
- Engage with primary sources from ancient Roman authors
- Generate language incorporating basic vocabulary and grammar patterns
- Read and write for meaning in basic Latin
- Analyze and compare cultural practices, products, and perspectives of various Greek and Roman cultures
- Regularly assess progress in proficiency through quizzes, tests, and speaking/writing submissions

Prerequisite: None

Length: Two Semesters

HS Latin 2

Students continue with their study of Latin through ancient, time-honored, classical language approaches which include repetition, parsing, written composition, and listening exercises. These techniques, combined with a modern multimedia approach to learning grammar, syntax, and vocabulary, prepare students for a deeper study of Latin. Each unit consists of a new vocabulary theme and grammar concept, reading comprehension activities, writing activities, multimedia culture, history, and mythology presentations, and interactive activities and practices which reinforce vocabulary and grammar. There is a strong emphasis on engaging with authentic classical Latin through weekly encounters with ancient passages from such prestigious authors as Virgil, Ovid, and Lucretius. The curriculum concurs with the Cambridge school of Latin; therefore, students will learn ancient high classical styles of pronunciation and grammar in lieu of generally less sophisticated medieval styles, making it possible for students to comprehend the most Latin from the widest range of time periods. Students should expect to be actively engaged in their own language learning, understand and use common vocabulary terms and phrases, comprehend a wide range of grammar patterns, understand and analyze the cultural and historical contexts of the ancient sources they study, and take frequent assessments where their language progression can be monitored. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

Major Concepts:

- Engage in language learning
- Review and expand their study of common vocabulary topics
- Gain a deeper understanding of a wide range of grammar patterns
- Translate Latin more fluently
- Analyze and compare myths from the ancient world with the students' own culture and experiences today
- Regularly assess progress in proficiency through quizzes, tests, and speaking/writing submissions

Prerequisite: Latin I, or equivalent

Length: Two Semesters

HS Spanish 1

Spanish 1 is designed to develop an authentic and practical understanding of the Spanish language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts, grammatical concepts, and cultural information will be introduced in context while incorporating various listening, speaking and writing activities.

Major Concepts:

- Language is an interactive and communicative experience.
- Learning a foreign language will allow you to make comparisons to your native language.
- Language requires the use of critical thinking (problem-solving) skills.
- By learning about other cultures and ways of life, you will make connections to your own and gain a deeper understanding of the world.
- Learning to ask meaningful questions is an important part of learning and using a language.
- Making plans in Spanish is a key component of interaction and conversation in Spanish.
- Spanish is not a homogenous language or culture, rather it is full of regional linguistic and cultural variation.
- Playing and talking about sports in Spanish is a great way to learn the language well.

Prerequisite: None

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

HS Spanish 2

Students build upon the foundation developed in Spanish 1. They continue to build vocabulary, learn new verb tenses and other grammar concepts, and they increase their ability to communicate with others. They learn new concepts, like reflexive verbs, infinitive expressions, commands, the imperfect tense. Semester B will continue building on vocabulary, grammar concepts and communicating effectively in the target language. You will explore new countries where Spanish is spoken and continue to keep abreast of current events in the Spanish-speaking world.

Semester A; Major Concepts:

- Comprehension of the material presented in Spanish 1 is vital for success in Spanish 2.
- The present progressive is useful to describe what is happening now, but English speakers must take care not to overuse it in Spanish.
- The reflexive tense is primarily used to discuss actions that are done to oneself.
- Object pronouns are vital to communication in Spanish and English.

Semester B; Major Concepts:

- Certain verbs in Spanish require the use of an indirect object pronoun.
- The Preterite tense is a common and important way to express the past in Spanish.
- Like the Preterite, the Imperfect also plays an important role in discussing the past.
- The Preterite and the Imperfect have distinct shades of meaning and must be used accordingly.

Prerequisite: Spanish 1

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

HS Spanish 3

Students continue to develop their ability in reading, writing, speaking, and understanding Spanish through a systematic review of its structure. Students focus on applying vocabulary in a wider array of situations by learning about the past progressive and subjunctive moods and the present perfect, future, and conditional tenses.

Semester A; Major Concepts:

- To effectively communicate in the target language, you must recognize, understand, and apply the correct verb endings to verbs in the present, present progressive, and near future tenses.
- To effectively communicate in the target language, you must recognize, understand, and apply the correct preterite tense verb endings to refer to activities that happened only once in the past.
- You can name the “Madre patria” of the Spanish language, identify and locate the Spanish speaking countries on a world map, name their capital cities, and discuss the geography and contributions the countries made to world history.
- To effectively communicate in the target language, you must recognize, understand, and apply the correct preterite tense verb endings to refer to activities that happened only once in the past.
- To effectively communicate in the target language, you must recognize, understand, and apply the correct tense, whether preterite or imperfect, and its corresponding verb endings to refer to activities that happened in the past.
- To effectively communicate in the target language, you must recognize, understand, and apply the correct pronouns and verb endings to describe activities in the passive voice.

Semester B; Major Concepts:

- That to effectively communicate in the target language, you must recognize, understand, and apply the correct verb endings to describe activities in that will occur in the future tense.
- That to effectively communicate in the target language, you must recognize, understand, and describe activities that may occur by using the correct verb endings for regular and irregular verbs in the Conditional Tense.
- That to effectively communicate in the target language, you must recognize, understand, form, and use positive and negative commands in written and verbal expression.

Prerequisite: Spanish 1, Spanish 2

Length: Two Semesters

Course Types: Original Credit, Credit Recovery

Odysseyware®



ODYSSEYWARE® is an innovative leader in digital learning across PA and the entire U.S., offering standards-aligned learning resources for grades 3-12, with built-in assessments, and dashboard access to actionable data.

Curriculum and Support

Instructional Design: All curriculum is based on an instructional design framework including systematic organization, backward design, explicit instruction, multimodal engagement, and gradual release of responsibility.

Vocabulary/Reference: Definitions and correct pronunciation of key academic vocabulary are provided at the beginning of every lesson. Students can lookup background information and context about any words or phrases.

Translation Tool/ELL Support: Any selected text included in the lessons can be translated into 23 languages with audio support.

Text-to-Speech Audio Supports: Six different voice readers are available at six fluency rates. Students can follow along with automated highlighting and tracking of words as they read.

Teacher and Students Notes: Students can take notes within the context of the lesson, adding interactive color-coded sticky notes, promoting informal writing and annotating text. Teacher notes can be added as additional scaffolds. Notes can also be printed and used as study guides.

Message Tool: Students can virtually raise their hand and communicate with their teacher using the message tool at any time as well as the “Ask for help” tool embedded within assessments.

Writer Tool: Applies six proven writing analysis indices for accurate scoring and feedback on topic consistency, grammar, spelling and word count.

Direct Instruction Media: Short (2-3 minute) direct instruction videos provide students step-by-step guidance in the conceptual understanding of key skills, impart background knowledge, and place concepts into real-world context. Videos follow a social media type approach, allowing students to fast-forward, rewind, and play them as often as needed.

Video Transcript: A text transcript is available for embedded instructional videos, which can be translated using the Translation Tool.

Embedded Instructional Strategies: Embedded throughout the lesson content are guided and independent practices, quizzes, and assessments.

Virtual Labs: Virtual Labs in math and science recreate and expand the traditional student laboratory experience. Virtual Labs are fully interactive and built to encourage active learning, engagement, and the application of conceptual understanding.

Assessment Types: Courses include diagnostic, prescriptive, formative, and summative assessments. Assessments are aligned to Webb’s DOK levels, with an emphasis on levels 2, 3, and 4. Questions are aligned to specific sections of the lessons, promoting close reading of text and text evidence.

Project-based Assessments: Several of our courses, such as our CTE courses, also include project-based assessments culminating in a capstone project.

Course Delivery System

Learning Management System (LMS): All courses are ‘housed’ on a single platform. Courses are fully HTML5 compliant and Java free, meaning no extra plugins such as Flash are needed, and therefore, is accessible on all devices!

Next Generation Type Questions: We offer a dozen question types, as well as different technology-enhanced item types like drag and drop, multiple select, and constructed response to prepare students for next generation assessments.

Course Types

Courses: Odysseyware offers an extensive library for grades 3-12 of more than 300 standards-aligned courses and instructional materials in core subjects, AP[®] and electives, CTE courses, and test prep, as well as **NCAA-approved courses**.

Advanced Placement (AP[®]) & Electives: AP[®] courses are College Board approved, and courses include areas such as fine arts, world languages, Keyboarding, Principles of Coding, Calculus, business, engineering, economics, health, physical education and more!

Career Technical Education (CTE): Odysseyware offers 80+ CTE courses aligned to each of the 16 national career clusters. Career clusters include a progression of related courses, supporting students in their preparation for career-pathway-specific certifications.

Career Exploration: We offer several courses designed to provide students exposure to career options and planning in middle school and early high school.

Test Prep: Odysseyware provides college entrance assessment prep for the ACT[®], and high school equivalency prep for the GED[®], HiSET[®], and TASC[™].

Blended Learning: In addition to the 300+ courses, Odysseyware also offers a Blended Learning Library designed specifically for use within math and English language arts courses, with nearly 800 lessons for grades 6–12!

Credit Recovery (Mastery-Based Instruction Mode): Our diagnostic, prescriptive mode tailors learning for students by allowing them to take a pre-test at the beginning of each unit – and based on student performance, individualized learning paths are automatically created!

Intervention: SPARK: A K-8 assessment and remediation tool for English Language Arts and Reading (ELAR) and mathematics, that provides efficient and targeted skills practice and remediation.

Social Emotional Learning (SEL): BASE Education for grades 6-12 is a powerfully-engaging, SEL solution, backed by research, for both prevention and intervention. With over 60 courses available now and a separate portal for parents/guardians, the systemic BASE Education approach helps students learn to build strategies to handle issues such as anger, bullying, self-esteem, communication, substance abuse, helplessness and motivation. **New courses, including for grades 3-5, to release fall 2018.**

Course Options

Customization: Teachers can customize or personalize learning paths, author new courses, and monitor student progress with easy-to-use data functions via the Odysseyware platform. Schools also have the ability to embed district-approved content as well.

Personalized Learning Paths: Odysseyware is a proud partner of the Northwest Evaluation Association™(NWEA™). Educators who administer Measures of Academic Progress® (MAP®) can now import test results into Odysseyware to generate individualized learning paths.

Odysseyware PA Teacher-Certified and Virtual Services: Odysseyware offers PA certified teachers for schools needing virtual learning programs for NCAA athletes, homebound students, students who need to access their instruction mostly or completely outside of the brick and mortar school, and/or students looking to accelerate their learning. Parents also have the option to enroll their children directly in **Odysseyware Academy** for skill practice, test prep, and/or homeschool curriculum.

Course Versions

Comprehensive	For students at grade level or slightly below and who work well independently and can manage large tasks to completion.
Foundations (core ELA and Math courses)	For students who need a sequence that more explicitly teaches foundational skills and need more practice in building foundational reading, writing and grammar skills or math skills.
Pacing Plus	For students that may struggle with time management or the completion of large tasks, the number of projects has been reduced in order to help students achieve course pacing goals
Credit Recovery Mode	For students who are retaking a course or need to accelerate their learning; students take a pretest before each unit to demonstrate mastery of content and then work ONLY on lessons with concepts they have not yet mastered. Also referred to as Mastery-Based Instruction mode.

Odysseyware

Advanced Placement

Calculus AP

AP Calculus is a full-year, high school credit course that is intended for the student who has successfully mastered a minimum of four high school level mathematics courses that cover analytical and conceptual algebra (with heavy emphasis on functions), coordinate and plane geometry, and trigonometric functions. It is highly recommended that the student successfully complete pre-calculus as a prerequisite. The course primarily focuses on the skills and methods of analyzing graphical behavior of functions, the definition of a derivative as well as applications of derivatives, integration and their relationships with the graphical function.

Prerequisite: Algebra I, Algebra II, Geometry, and Pre-Calculus

Length: Two Semesters

Required Materials: Textbook: Larson, Ron; Hostetler, Robert P. and Bruce H. Edwards. Calculus: of a Single Variable. Seventh ed. Boston: Houghton Mifflin Company, 2002. Graphing calculator (The TI-89 Titanium Graphing Calculator is strongly recommended.)

Course Types: Comprehensive

+NCAA Eligibility for Comprehensive

Comparative Government and Politics AP

This course will first and foremost prepare the students to be successful on the AP Comparative Government and Politics exam. The tests and written work will be formatted in a manner similar to the exam to allow them practice and refinement over the year. The course will, on its broadest level, consider "ideas and their consequences." Ideas and worldviews are at the root of how everyone sees the world (metaphysics), and gains knowledge and understands truth (epistemology). An individual's and a government's view of these things influences their decisions, and ultimately lives and countries are impacted. Today's world is highly interdependent and global in nature. Students will learn to think globally and will explore the impact of countries' interactions. Students will learn, not only how countries interact and affect the world, but also how other governmental and non-governmental organizations shape our world. We will compare and contrast ideologies, governments, and policies in order to grasp the significance of the current world political scene and analyze its impact. We will focus primarily on the following countries: the USA, Great Britain, Russia, China, Mexico, Nigeria, and Iran. These countries will not only prepare the students for the exam but will give them a broad understanding of the major political systems.

Prerequisite: Government recommended

Length: Two Semesters

Required Materials: Drogus, Orvis, Introducing Comparative Politics: Concepts and Cases in Context, 3rd edition. Sage, CQ Press 2013. (Primary textbook.) Wood, Ethel. AP Comparative Government and Politics: An Essential Coursebook and Study Guide. 6th edition Woodyard Publications, 2013. (Supplemental textbook.) "The Most Successful Revolution" by Irving Kristol. Access to websites: American Thinker, Foreign Affairs, Foreign Policy Review, CIA World Factbook, and The Economist

Course Types: Comprehensive

+NCAA Eligibility for Comprehensive

Human Geography AP

Human Geography is taught as an introductory-level college course intended to prepare students for the Advanced Placement Human Geography exam. This two-semester course will teach students the basic concepts of human geography and give them a geographic framework for the analysis of current world problems through case studies, computer applications, and fieldwork. The students will learn to use the tools of a geographer to ask geographic questions; acquire, organize, and analyze geographic information; and answer geographic questions. They will also take online, multiple-choice quizzes, and practice free-response questions (FRQs) in preparation for the AP exam.

Each Unit contains multiple choice quizzes and a Unit exam consisting of multiple choice and free-response questions.

This course is taught as a totally asynchronous course

Prerequisite: World Geography Recommended

Length: Two Semesters

Required Materials: Human Geography: Landscapes of Human Activities , by Jerome Fellmann, Mark Bjelland, Arthur Getis, and Judith Getis, 11th edition, McGraw-Hill, 2010. (Main text) Human Geography in Action, by Michael Kuby, John Harner, and Patricia Gober, 6th edition, John Wiley & Sons, Inc., 2012. (Supplemental text.) Both books should be purchased. Will need access to map collections, atlases, encyclopedias, and other reference materials both online and from local libraries. Access to videos from the Power of Place: Geography for the 21st Century and the Human Geography: People, Places, and Change video series by Annenberg.

Course Types: Comprehensive

+NCAA Eligibility for Comprehensive

Macroeconomics AP

Macroeconomics is the study of the performance of an economy as a whole. This course will cover in detail basic economic concepts, measurement of economic performance, national income and price determination, the financial sector, inflation, unemployment and stabilization policies, economic growth and productivity, and international trade and finance. Upon completing this course, students will be trained to interpret economic news, understand the effects of government policies, and excel on the AP exam. The learning methodologies in this course are varied and highly interactive, and the main textbook will be supplemented with economic simulation games, application reports, assessments, and videos.

Prerequisite: Economics Recommended

Length: Two Semesters

Required Materials: Word processor, internet research resources, Principles of Economics, 2.0 Version, Libby Rittenberg and Timothy Tregarthen; ISBN 978-1453352335, Flat World Knowledge Inc. Publications. Advanced Placement Economics: Macroeconomics, Student Manual, 4th Edition, Margaret A. Ray; ISBN 978-1-56183-668-0, Council for Economic Education.

Course Types: Comprehensive

+NCAA Eligibility for Comprehensive

US Government and Politics AP

This United States Government and Politics course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. We will become familiar with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. This course will involve the study of democratic ideas, balance of powers, and the tension between the practical and ideal in policymaking. We will look at how "ideas have consequences," and how one's "first truths," develop into political positions. Students will analyze and discuss the importance of various constitutional principles, rights and procedures, institutions, and political processes that impact citizenship. The class will be interactive and will have a live meeting each week (though attendance is not required). Students will be evaluated through tests, quizzes, short essays and threaded discussions. We will use Blackboard as our class platform. There will be assignments and reading every week, along with required interaction on the course site (password protected). The students will watch a number of pre-recorded lectures and will have the opportunity to discuss this material. We will also have some class simulations involving the 3 branches of government. These activities will encourage the students to think critically about current events and their own personal political ideals.

Prerequisite: Government Recommended

Length: Two Semesters

Required Materials: Keeping the Republic: Power and Citizen in American Politics 6th Edition by Barbour and Wright, 5 Steps to a 5 AP US Government and Politics, Current Edition by Pamela Lamb. Declaration Of Independence, Constitution Of The United States of America, Bill Of Rights And Constitutional Amendments Paperback–January 9, 2013 by Benjamin Franklin (optional can find free online), Numerous articles and online sources (free). Films, available online (free). Hillsdale College "Constitution" lectures (Free online) "The Most Successful Revolution" by Irving Kristol (Free) Short film/ news clips as assigned. Online Media Sources for contemporary articles.

Course Types: Comprehensive

+NCAA Eligibility for Comprehensive

Assessment and Diagnostic

ACT Test Prep

The course is designed to help prepare students to take the ACT test.

Prerequisite: None

Length: One Semester

Required Materials: Internet research resources

Course Types: Comprehensive

Essentials of Language Arts

Essentials of Language Arts is a semester-length review of the fundamentals needed at the high school level for basic skill remediation and/or practice necessary to prepare for a state exam. The course highlights basic English skills through multiple review, practice reading and writing, as well as sample exam questions.

Prerequisite: Middle school level language arts/English.

Length: One Semester

Required Materials: Word processing software, Presentation software, Internet and research resources

Course Types: Comprehensive

Essentials of Mathematics

Essentials of Mathematics is a semester-length review of the fundamentals taught in Pre-Algebra, Algebra I and Geometry courses and is useful at the high school level for basic skill remediation and/or practice necessary to prepare for a state exam. The course highlights basic mathematical skills through multiple review, practice and sample exam questions.

Prerequisite: Middle school level mathematics.

Length: One Semester

Required Materials: Scratch paper, notebook, pencil, calculator

Course Types: Comprehensive

GED Test Prep

This course is designed to prepare students to register for and take the GED test. It includes units that cover the sections of the test including reasoning through Language Arts, Mathematical Reasoning, Social Studies, Science and includes a practice test.

Prerequisite: None

Length: One Semester

Required Materials: Word processing software, internet access, research resources

Course Types: Comprehensive

TASC Test Prep

The Purpose of the TASC Test Prep Course is to:

- Identify the purpose of the TASC test.
- Describe the testing process and the different sections of the test.
- Outline strategies for preparing for the test.
- Describe how the test is scored.
- Provide an overview of the different formats of the test and accommodations available to test takers.
- Discuss costs and how to register for the test.

Prerequisite: None

Length: One Semester

Required Materials: Internet research resources, word processor

Course Types: Comprehensive

Business

Business Computer Information Systems

BCIS is a high school elective that explores the use of technology applications in both business and personal situations. The course provides key knowledge and skills in the following areas:

- communication skills
- business technology
- word processing applications
- spreadsheet applications
- database applications
- telecommunications technology
- desktop publishing technology
- presentation technology
- computer networks
- computer operating systems

The course is intended to help students arrive at the following understandings:

- Effective communications skills and productive work habits can increase employees' success.
- Technology solutions can help employees be more productive and effective.

Keyboarding is a stated prerequisite for this course. While there are some keyboarding reviews in the course, there is no keyboarding instruction.

Prerequisite: Keyboarding

Length: Two Semesters

Required Materials: Word processing software, Spreadsheet software, Presentation software, and the ability to Interview network administrators

Course Types: Comprehensive, Comprehensive Credit Recovery

Essentials of Business

This semester-long course is an introduction to the goals, processes, and operations of business enterprises for students. The main focus is on the functions that a company – whether a multinational corporation or a corner grocery store – must manage effectively to be successful. These include accounting, finance, human resource management, marketing, operations management, and strategic planning. Attention is also given to the legal environment in which businesses operate, and the importance of business ethics and corporate citizenship.

Prerequisite: None

Length: One Semester

Required Materials: Internet or other research material, Paper, pencils, or other writing material, Printer, Local business person for an interview, Optional: Device that records audio or audio-visual

Course Types: Comprehensive

Essentials of Communication

Essentials of Communication: A Guide to Interacting Effectively in Today's World™ is a five-unit elective course for high school students. The materials cover fundamentals of the communication process important for successful interaction in a variety of social and professional settings. Students can use the course to gain and apply knowledge about communication theories, characteristics of language and language use, interpersonal relationships, group dynamics, and public speaking in order to interact more effectively with others. The course seeks to help students expand their knowledge and skills as communicators so that they may achieve the following goals:

- Know and understand aspects of communication theories and processes appropriate to both social and professional settings.
- Use interpersonal communication strategies appropriately in social and professional settings.
- Effectively communicate in social and professional group settings.
- Plan, prepare, deliver, and evaluate formal and informal personal and professional presentations.

Prerequisite: None

Length: One Semester

Required Materials: Internet or other research material, Paper, pencils, or other writing material, Printer, Local business person for an interview, Optional: Device that records audio or audio-visual

Course Types: Comprehensive, Comprehensive Credit Recovery

Personal Financial Literacy

Personal Financial Literacy is a semester-length elective designed to help high school students prepare for success in making financial decisions throughout their lives. Topics in the course address the advantages of making sound financial decisions in both the short and long term, income planning, money management, saving and investing, and consumer rights and responsibilities.

Prerequisite: Middle school level mathematics and Economics recommended.

Length: One Semester

Required Materials: Two books from a bookstore or library, A newspaper article in the business section, News or program on TV, research materials, interview a counselor or professional, Printer, Call insurance companies, News articles about stocks, Stock tables, phone calls to experts, Visit tire store, website access ability to: www.money.cnn.com, www.fidelity.com, and www.beginnersinvest.about.com

Course Types: Comprehensive, Comprehensive Credit Recovery

Technology and Research

This semester-long course uses the topic of technology as a way to help students develop fundamental knowledge of the steps in the research process. During the course, students learn how new technology is developed and evaluate ways that technology affects society. Students learn about the development of the personal computer, robots, blogs, and wikis. They learn research and writing skills such as how to evaluate scientific journal articles, how to write an abstract, and how and when to use different online sources.

Prerequisite: Students should understand how to research a topic through books, magazines, and the Internet. Students should have proficiency using Microsoft Word and PowerPoint, and a basic understanding of Excel.

Length: One Semester

Required Materials: Internet or other research material, Paper, pencils, or other writing material, Printer, Powerpoint software program

Course Types: Comprehensive

CTE Agriculture Food and Natural Resources

Animal Systems

The role of animals in civilization has an ancient history, and they are no less prominent in today's society. For example, pigs were domesticated in China as long as 10,000 years ago and are still vital to our lifestyle today. But we know that pigs are also intelligent beings. What are their preferences for habitat and treatment, and what are their social and reproductive habits?

Animals today are used for clothing, food, transportation, agriculture, herding, companionship, guide assistance, and crime fighting, and research continues to reveal new uses. As our scientific understanding of animal systems grows, so do our best practices, ethical considerations, and research applications. How mankind treats animals impacts their well-being and productivity.

The course provides students with a wealth of information on livestock-management practices, animal husbandry, physiological systems, the latest scientific trends, and innovations in food production.

Changes in practices, regulations, and legislation for animal welfare continue as new research provides solutions to medical, ethical, and practical concerns. The course reviews current topics, such as advancements in technology and research, and defines areas of discussion while maintaining focus on best-management practices. How the research translates to management practices is a vital area of study and discussion.

Prerequisite: This is an introductory course in animal systems at the high-school level. An interest in animal physiology, husbandry, livestock, veterinary practice, animal welfare, or food production would be desirable for students of the course. The information gained will be helpful in making educational decisions for undergraduate or graduate study. A student might use the knowledge gained from the course to further an interest in becoming a chef, a researcher, a doctor, a wildlife-management professional, or any number of applicable careers. No previous experience in or knowledge of these careers is required for the course. Some students will have more experiential knowledge of animals; however, hands-on experience is not a requirement. The course covers livestock anatomy, physiology, and reproductive systems, but medical knowledge is not required for the course. The ability to review online information, research topics independently, pursue hands-on projects, and create reports and presentations is required.

Length: One Semester

Required Materials: Research resources, Presentation software, Word processing/graphic software, Paper, Pencil, pen, Notebook, Movie: Temple Grandin (2010), One box of instant gelatin, Water, Spoon, Microwave, Refrigerator, One gallon plastic bag, Small fruits and candies to represent parts of a cell, camera, Interview local butcher

Course Types: Comprehensive

Environmental Service Systems

This semester-length, high school elective introduces students to career opportunities and educational pathways in a wide array of environmental fields. Students examine environmental legislation and regulations, government agencies and organizations, monitoring and testing methods and requirements. They discover the relationship between environmental regulations and careers, and study the issues, history, and current status of air and water quality, soil and atmospheric conditions. In an environmentally challenged world, ESS professionals are critically important. Job outlooks and salary scales reflect this need for educated, dedicated researchers, scientists, engineers, etc.

Prerequisite: Middle school level general science, math, and Social Studies.

Length: One Semester

Required Materials: Word processing software, Presentation software, Internet and research resources

Course Types: Comprehensive

Introduction to Agriculture, Food, and Natural Resources

This semester-length high school elective introduces students to the basic scientific principles of Agriculture and Natural Resources. Students will be recognizing and researching plant systems, animal systems, government policy, “green” technologies, agribusiness principles, and sustainability systems.

Prerequisite: Middle school level general science.

Length: One Semester

Required Materials: Research resources, Presentation software, Paper, Pencil, pen

Course Types: Comprehensive

Natural Resources Systems

People depend on natural resources. Regions, cultures, nations, and societies are shaped by how people use land, water, plants, and wildlife. The large and small ecosystems that make up the environment are complex. Each component of our ecosystem depends on another.

The purpose of this course is to provide students with an overview of the planet’s natural resource systems. Students will explore and develop a basic understanding of how the systems relate to one another. Students will consider the role people play in managing, using, protecting, and conserving natural resources. In addition, the course will provide information about many different careers that are available to students who are interested in natural resources and natural resource management.

Prerequisite: Students should be familiar with general concepts about the environment. Students wishing to gain additional insight into many of the issues and challenges facing wildlife managers before beginning this course may benefit from reviewing the information provided by the U.S. Department of Agriculture at <http://usda.gov/wps/portal/usda/usdahome?navid=CONSERVATION>.

Length: One Semester

Required Materials: Research resources, Presentation software, Word processing/graphic software, Three people to survey

Course Types: Comprehensive

CTE Business Management and Admin

Business Law

This course is designed to provide students with the knowledge of some of the vital legal concepts that affect commerce and trade, after first gaining some familiarity with how laws are created and interpreted. Students will then be introduced to the types of businesses that can be created to engage in commerce as well as the contractual and liability considerations that can impact a business. Laws that affect how a business is regulated will also be reviewed, particularly the impact of administrative rules and regulations on a business. Global commerce and international agreements, treaties, organizations, and courts that can affect business will be discussed to get a better sense of what it means to "go global" with a business. Consumer and environmental protections will be explained as well as bankruptcy options, should a business go insolvent. Lastly, no business exists without experiencing some kind of dispute or another, and so we will review the options that exist for dispute resolution and alternative dispute resolution to provide a better understanding of how best to deal with such matters.

Prerequisite: None

Length: One Semester

Required Materials: Research resources, Word processing/graphic software

Course Types: Comprehensive

Career Management

Career management is a semester-length high school elective course that assists students in their preparation for career selection. The course is designed to improve workforce skills needed in all careers including:

- communication
- leadership
- teamwork
- decision making
- problem solving
- goal setting
- time management

Students will complete activities that help identify personal interests, aptitudes, and learning styles. Students will use results of self-assessments to determine careers that may prove personally satisfying.

Students will complete an in-depth career research activity that can be repeated for each future career decision. Students will also create a career portfolio as they work through the curriculum.

Prerequisite: None

Length: One Semester

Required Materials: Research resources, Word processing/graphic software, Calculator, Presentation software, Paper, Pencil, pen

Course Types: Comprehensive, Comprehensive Credit Recovery

Office 2010 Applications I

Office Applications I is a semester-length, high school elective that explores the use of application skills in Microsoft® Word®, Publisher®, and PowerPoint® 2010. Students will use these applications to design, develop, create, edit, and share business documents, publications, and presentations. This course provides key knowledge and skills in the following Microsoft Office® applications:

1. Microsoft Word: Students are provided with an introduction to advanced skills in Microsoft Word that range from simply developing an understanding of the various uses of Word to more complex explorations of mail merge, tab stops, reference resources, and additional features available in backstage view.
2. Microsoft Publisher: Students learn to create publications, insert and edit publication items, and view, review, and share those publications.
3. Microsoft PowerPoint: Students will learn how to create presentations, enter and modify content, modify and deliver presentations, and collaborate and share PowerPoint presentations.

Prerequisite: None

Length: One Semester

Required Materials: Research resources, Microsoft Word® 2010, Microsoft Publisher® 2010, Microsoft PowerPoint® 2010

Course Types: Comprehensive, Comprehensive Credit Recovery

Office 2010 Applications II

Office Applications II is a semester-length, high school elective course that explores the use of application skills in Microsoft® Excel® and Microsoft® Access®. Students will use these applications to design, develop, create, edit, and share business spreadsheet and database documents. This course provides key knowledge and skills in the following areas:

1. Introduction to advanced skills in Microsoft® Excel® ranging from basic spreadsheet terminology to exploring data entry, formatting, formulas, functions, charts, graphics, and additional features available in backstage view
2. Skills in Microsoft® Access®, ranging from basic relational database terminology to creating and modifying tables, forms, queries, and reports

Prerequisite: Office 2010 Applications I

Length: One Semester

Required Materials: Research resources, Microsoft Excel® 2010, Microsoft Access® 2010, Word processing software, Presentation software

Course Types: Comprehensive, Comprehensive Credit Recovery

Office 2013 Applications I

Office 2013 Applications I is a semester-length, high school elective that explores the use of application skills in Microsoft® Word®, Publisher®, and PowerPoint® 2013. Students will use these applications to design, develop, create, edit, and share business documents, publications, and presentations. This course provides key knowledge and skills in the following Microsoft Office® applications:

1. Microsoft Word: Students are provided with an introduction to advanced skills in Microsoft Word that range from simply developing an understanding of the various uses of Word to more complex explorations of mail merge, tab stops, reference resources, and additional features available in backstage view.
2. Microsoft Publisher: Students learn to create publications, insert and edit publication items, and view, review, and share those publications.
3. Microsoft PowerPoint: Students will learn how to create presentations, enter and modify content, modify and deliver presentations, and collaborate and share PowerPoint presentations.

Prerequisite: None

Length: One Semester

Required Materials: Research resources, Microsoft Word® 2013, Microsoft Publisher® 2013, Microsoft PowerPoint® 2013

Course Types: Comprehensive, Comprehensive Credit Recovery

Office 2013 Applications II

Office 2013 Applications II is a semester-length, high school elective course that explores the use of application skills in the 2013 versions of Microsoft® Excel® and Microsoft® Access®. Students will use these applications to design, develop, create, edit, and share business spreadsheet and database documents. This course provides key knowledge and skills in the following areas:

1. Introduction to advanced skills in Microsoft® Excel® ranging from basic spreadsheet terminology to exploring data entry, formatting, formulas, functions, charts, graphics, and additional features available in backstage view
2. Skills in Microsoft® Access®, ranging from basic relational database terminology to creating and modifying tables, forms, queries, and reports

Prerequisite: Office 2013 Applications I

Length: One Semester

Required Materials: Research resources, Microsoft Excel® 2013, Microsoft Access® 2013, Word processing software, Presentation software

Course Types: Comprehensive, Comprehensive Credit Recovery

Principles of Business and Finance

This course will introduce students to the fundamental structure of the American economy, the complexities of the global economy, and the principles, practices, and strategies associated with starting, managing, or simply working for a business.

Through a combination of lessons and projects, students will trace a trajectory of their potential role in the American economy as consumers, laborers, and executives. With lessons on everything from marketing to writing formal business correspondence, from the basic structures and legal definitions of business to the operations and importance of financial institutions, students will emerge from this course with a thorough introductory understanding of the business world. Students will perform research, conduct interviews, and write papers on various topics designed to enrich their understanding of the American business environment. They will also navigate an interactive and creative project that spans the length of the course and asks students to engage their learning, imaginations and individual career motivation with the course material.

Prerequisite: None

Length: One Semester

Required Materials: Research resources, Presentation software, Word processing software

Course Types: Comprehensive

Small Business Entrepreneurship

This semester-long course is designed to provide the skills needed to effectively organize, develop, create, and manage your own business, while exposing you to the challenges, problems, and issues faced by entrepreneurs. Throughout this course, you will be given the chance to see what kinds of opportunities exist for small business entrepreneurs and become aware of the necessary skills for running a business. You will become familiar with the traits and characteristics that are found in successful entrepreneurs, and you will see how research, planning, operations, and regulations can affect small businesses. You will learn how to develop plans for having effective business management and marketing strategies.

Prerequisite: Students must be computer literate and have Internet access. Students should have basic research skills, as well as the ability to conduct online searches and access recommended websites.

Length: One Semester

Required Materials: Internet research resources, word processor, data processor (like excel), current event article access

Course Types: Comprehensive

Technology and Business

Technology and Business is a year-long, high school elective that teaches students technical skills, effective communication skills, and productive work habits needed to make a successful transition into the workplace or postsecondary education. In this course, students gain an understanding of emerging technologies, operating systems, and computer networks. In addition, they create a variety of business documents, including complex word-processing documents, spreadsheets with charts and graphs, database files, and electronic presentations.

Prerequisite: None

Length: Two Semesters

Required Materials: Word-processor software, spreadsheet software, database software, presentation software, email

Course Types: Comprehensive, Comprehensive Credit Recovery

CTE Education and Training

Introduction to Careers in Education and Training

The Introduction to Careers in Education and Training course will introduce students to the field of education and training, and the opportunities available for early-childhood care, primary school, secondary school, higher education, vocational training, and adult and continuing education. The students will gain an understanding of the career options available in teaching, administrative work, and support services. They will also explore the education and background experience needed to succeed in these careers.

Students will learn about the evolution of the modern educational system in the United States, and the policies and laws that govern educational institutions. They will also discover the similarities and differences between the ethical and legal obligations of working with adults versus working with children.

Students will learn about the skills needed to be effective communicators. They will also learn how to differentiate between different types of learning theories, and they will explore how to implement current principles from educational psychology into the classroom.

Students will also learn how to create a safe and healthy learning environment. They will discover the federal laws and agencies that set health-and-safety standards, and they will learn how these regulations are enforced in the workplace. The objective of this course is to introduce the student to the field of education and training, and to explain the career opportunities that are available in this field.

Prerequisite: None

Length: One Semester

Required Materials: Word processor, research resources

Course Types: Comprehensive

Teaching and Training Careers

This course introduces students to the art and science of teaching. It provides a thorough exploration of pedagogy, curriculum, standards and practices, and the psychological factors shown by research to affect learners. In five units of study, lessons, and projects, students engage with the material through in-depth exploration and hands-on learning, to prepare them for teaching and training careers. Students are given many opportunities to be the teacher or trainer, and to explore the tasks, requirements, teaching strategies, and research-based methods that are effective and high- quality.

Prerequisite: None

Length: One Semester

Required Materials: Internet research resources, word processor

Course Types: Comprehensive

CTE Health Science

Careers in Allied Health

Allied health is the term for the area of healthcare (and health care professions) that provide support and care services other than specific doctoring and nurse care. At times, the line between allied health and "non-allied health" may seem to be separated by level of degree/education, although this isn't always true. Allied health career paths can be divided into general roles like diagnostic (testing to see what's wrong), technical (taking care of technology aspects), therapeutic (moving the patient toward healing) and direct patient care (caring for the patient in other ways), although there is some overlap in a few roles. There are a few hundred potential jobs and dozens of potential settings that one could work in. The career field is important for several reasons. First, the care and support that allied health professionals provide is integral to the health care system. In addition it's estimated that these professionals make up more than half of the entire health care field. This representation within the industry shows how very important the various roles are. In this course, we will focus on select allied health careers, studying a variety of different levels, responsibilities, settings, education needs and amounts of patient contact. We will look at things like the degree or training needed for each job, the environment one would work in, how much money the position could make, and the facts of the actual working day.

Prerequisite: Since this course leans heavily on reporting and research, students should already know how to choose appropriate resources (especially online), and how to properly cite those resources. Introduction to Careers in the Health Sciences recommended.

Length: One Semester

Required Materials: 2-4 pieces of poster board/large paper (or graphics/drawing software), Access to newspaper/media archives, 2-5 Paper plates, Drawing tools, Suggested: Copy of the book "Alex, the Life of a Child" by Frank DeFord

Course Types: Comprehensive

Forensics: Using Science to Solve a Mystery

This course is the overview of modern-day forensic science careers at work using science concepts to collect and analyze evidence and link evidence to the crime and suspects in order to present admissible evidence in courts of law. Modern-day forensic science practices have come into being thanks to the contribution of science and legal professions seeking ways to study crime scenes and criminal activities in an effort to stop crime. Of particular interest in this course are the various applications of medicine in the field of forensic science. This course identifies science concepts and critical thinking in the area of forensic science. Following the presentation of the concepts, students are encouraged to conduct online research exploring examples and applying the concepts just learned. Links to case studies and interactive learning tools are supplied along with high-quality research sites. Projects are assigned throughout the course that allow students to actively apply the information just learned. These projects include simulated crime-scene investigation, actual DNA separation, development of a cybersecurity plan, and the identification of specific forensic skills used during the course of a very large murder case. The focus of this course is to assist students in making career choices. Secondary school students who complete this course will have gained an awareness of the diversity of careers available in the forensic field. In addition, attention is drawn to many similar careers in medicine and computer science. Included in this overview of careers is the consideration of job descriptions and availability, educational and training requirements, licensing and certification, and typical annual salaries. Students who take this class will become equipped to make more informed career choices in regards to the forensic and medical science fields. At the same time, students will survey the history and scope of present-day forensic science work.

Prerequisite: It is recommended that the student have successfully completed a secondary-level course in biology and have a good background in physical science.

Length: One Semester

Required Materials: High-speed Internet and functional sound system, a presentation software program such as PowerPoint, updated word-processing capabilities, a good firewall and antivirus protection

Course Types: Comprehensive

Introduction to Careers in the Health Sciences

This course is an overview of health careers and overriding principles central to all health professions. Units include:

- science and technology in human health
- anatomy, physiology, and disease development
- privacy, ethics, and safety in health care
- communication and teamwork in the healthcare environment
- health careers; creating a diverse workforce of lifelong learners

The course provides a foundation for further study in the field of health science. When students complete the course, they will be able to discuss the potential career choices and have an understanding of basic concepts that apply to many different career choices.

Prerequisite: None

Length: One Semester

Required Materials: Word processing software, Presentation software, Internet and research resources

Course Types: Comprehensive

Public Health: Discovering the Big Picture in Health Care

In this course, we discuss the multiple definitions of public health and the ways that these definitions are put into practice. We explore the five core disciplines and the ways that they interact to reduce disease, injury and death in populations. By understanding the roles of public health, we are able to gain a greater appreciation for its importance and the various occupations that one could pursue within the field of public health. Unit 1 introduces the definition of public health and provides a description that allows you to differentiate public health from other healthcare fields.

The five core disciplines and the interactions between local, state, and federal organizations are also discussed. The history of public health concludes the introductory unit. Unit 2 focuses on specific information regarding the core disciplines of behavioral science and emergency preparedness and response. Unit 3 takes a detailed look at epidemiology and biostatistics. Unit 4 relates to environmental and occupational health issues. Finally, Unit 5 describes global health and the future of public health.

Prerequisite: It is assumed the student will have access to the Internet and associated resources and will understand how to conduct research using the Internet. It is important the student learn how to discern correct and quality information on the web. Students will need to conduct personal interviews as part of their projects.

Length: One Semester

Required Materials: Internet or other research material, Word processing software, Graphics software (ie: Microsoft Word or Publisher), Presentation software, materials to create a game (board, card or computer game), Rent or borrow the movie Contagion (2011)

Course Types: Comprehensive

Scientific Discovery and Development

This course teaches students about careers in laboratory science while simultaneously instructing them on major concepts in the biological sciences. The curriculum is quite comprehensive and is spread over five units:

Unit One begins with a history of clinical laboratory science, which covers two lessons. These lessons lay the groundwork by explaining how clinical laboratories evolved and became professionalized and how scientific discoveries and breakthroughs fueled the development of the laboratory while the sub-disciplines in biology were also advancing. The science covered in the first unit includes immunology, the circulatory system, and the blood-bank system.

Unit Two touches on the circulatory system and gives more detailed instruction on microbiology and the subfields within it.

Unit Three covers cells and tissues and includes discussion of cell division as well as basic genetics.

Unit Four launches into research. A brief history of the philosophy of science is provided to students, along with an explication of the scientific method. The unit goes on to teach the difference between basic and applied research. This unit also covers three major areas in bioresearch: biotechnology, nanotechnology, and pharmaceutical research and development.

Unit Five culminates with research in the social science that is something of a hybrid, since the topics cross over into science. Emphasis is put on the interdisciplinary nature of this type of research. The last few lessons in the unit raise the controversial issues of embryonic stem-cell research and the problems raised by outsourcing clinical research. The final lesson gives students a chance to catch their breath and do some exercises that can help them find a career path they are interested in.

Prerequisite: Biology recommended.

Length: One Semester

Required Materials: Paper, pen, access to research materials including Biology and Anatomy textbooks.

Course Types: Comprehensive

Therapeutics: The Art of Restoring and Maintaining Wellness

This course focuses on careers that help restore and maintain mobility and physical and mental health, such as physical therapists, physical therapy assistants, occupational therapists, athletic trainers, massage therapists, dietitians and dietetic technicians, art therapist, neurotherapists, vocational rehabilitation counselors, and registered dental hygienists.

Each career is explored in depth, examining typical job duties, educational and licensure requirements, working conditions, average salary, and job outlook. Key concepts and specific skill sets are introduced in the lessons, allowing students to apply what they have learned to health careers. This course is important because skilled health care workers are in high demand and expected to remain so for the foreseeable future. The unprecedented growth in this field is due to an aging population with more chronic conditions, new technology that has saved and lengthened lives, and increased demand for high-tech services. Students who take this course will come away with a broad perspective of the myriad career opportunities in healthcare today. They will understand how people in different healthcare professions interact with each other, and how significant expected growth in the industry can give them flexibility, good pay, and high job satisfaction.

Prerequisite: Students should have access to a computer with Internet and a good working knowledge of how to find information on the Web. While sample URLs are usually presented as a starting point, the student should have a basic knowledge of using search engines to find specific information.

Length: One Semester

Required Materials: Internet or other research material, word processing software, Ruler, Duct Tape, Gauze or fabric, Paper, scissors, glue, magazine cutouts, etc. to make a collage

Course Types: Comprehensive

CTE Hospitality and Tourism

Marketing and Sales for Tourism and Hospitality

This course is designed as an introduction to the study of tourism and hospitality marketing and sales. Students will be introduced to marketing theory and application of the basic principles of marketing as applied in hospitality and tourism. The relationship between marketing and other functions such as advertising, sales techniques, and public relations in order to maximize profits in a hospitality organization is addressed. Students will have an opportunity to explore this multifaceted world, identifying multiple career paths and opportunities.

Prerequisite: None

Length: One Semester

Required Materials: Word processing software, Research resources, Video recording software, Presentation software

Course Types: Comprehensive

CTE Human Services

Early Childhood Development and Services

Early Childhood Development (ECD) is an introductory course offering a detailed overview of both developmental stages and areas of early childhood, and how early childhood education professionals provide optimal assistance during these important years of growth and learning. An examination of the history, theories, teaching models, research, and policies that grew with the advance of early childhood education, as well as an introduction to the achievements of many leaders in this field, provide students a thorough grounding in the science and practice of early childhood education. This course further provides students with keen insight into why these years are so important to the life of the child, what areas of physical, emotional, and cognitive development are manifested from birth through age five, and what developmentally appropriate practices are proving to be most effective.

Students will see how state, county, and community programs and non-profit social service organizations benefit from a combination of contributions and regional and federal funding mandated through national legislation; students will also appreciate the role ECE professionals play in their work with families, organizations, and licensing administrators.

Students will be able to identify the advances, the challenges, the results, and the trends in ECE, explore a wide spectrum of professional possibilities, and learn the requirements and responsibilities of those positions. The complex interaction of state and federal policymaking on program funding and availability is covered in depth, as are codes of ethics and legislation affecting the quality of preschool and kindergarten programs.

Diversity is a key topic, and inclusion of families and children of cultural, economic, linguistic, and ethnic and ability diverse backgrounds are covered in depth. The rights, programs, and services available for children with disabilities and their families are reviewed. As the areas of study show, the need for highly qualified, engaged professionals in preschool classrooms, child care centers, and school readiness programs is growing. Teachers and other professionals in the field need to be not only educated in ECD, but also adept at building positive relationships between teacher and child and parent and colleagues, with the sensitivity to, enthusiasm for, and awareness of diversity issues and developmentally appropriate practices requiring skill and ongoing training.

Prerequisite: None

Length: One Semester

Required Materials: Word processing software, Presentation software, Internet and research resources

Course Types: Comprehensive

Family and Community Services

This course introduces applications within professions related to Family and Community Services. You will identify degree and credential requirements for occupations in this pathway and identify individual, social, historical, economic, and cultural context to increase awareness of family and community services. You will develop the abilities necessary to evaluate and identify a range of effective communication strategies and skills for establishing a collaborative relationship with others. You will also complete a variety of projects to apply your skills and knowledge.

Prerequisite: There are no specific requirements for taking and succeeding in this course. This is a foundation course on family and community services that provides an overview of family and community systems and the professionals who serve and support them.

Length: One Semester

Required Materials: Word processing software, Presentation software, Internet and research resources

Course Types: Comprehensive

Introduction to Consumer Services

In this introductory Consumer Services course, students analyze various career paths in terms of employment opportunities. We will discuss educational requirements, including applicable hard and soft skills, certifications, and licensures for different pathways. Developing research, analytical, and presentations skills will be key components. This course is designed as an overview to prepare students for a consumer services-related career and to introduce them to specialty areas. Emphasis is placed on the human services aspect (vs. corporate concerns) of consumer services. Social issues and advocacy, as well as ethics and legalities, are a recurring theme. Students will gain knowledge of current issues affecting various consumer services professions, and the impact of local, state, national and global issues on consumer services.

Prerequisite: Algebra 1

Length: One Semester

Required Materials: Internet or other research material, Word processing, software, Interview someone in a relatively high management position at a consumer services-related organization, Spreadsheet application

Course Types: Comprehensive

Introduction to Human Growth and Development

This course focuses on human growth and development over the lifespan, as well as careers that help people deal with various physical, intellectual, and socioemotional issues, such as physicians, nurses, nutritionists, substance abuse counselors, clergy, teachers, career counselors, psychologists, and psychiatrists.

This course is important because it gives the student a background in human growth and development from before birth, through childhood, into adulthood, and through death and grief. It gives the student perspective and highlights where people in the caring professions are most needed.

Students who take this course will come away with a broad understanding of all the careers that help people from birth to death. They will understand how people in the helping professions interact with each other and how continued growth in this sector can give them flexibility, good pay, and high job satisfaction.

Prerequisite: None

Length: One Semester

Required Materials: Word processing software, Presentation software, Internet and research resources

Course Types: Comprehensive

Introduction to Human Services

This course introduces high school students to the possibilities for careers in the human services professions. Through anecdotes, lessons, and a variety of assignments and projects, students will learn about the broad variety of jobs available in the human services. These begin with entry-level positions, such as associate social workers, that require only a two-year Associate of Arts degree. At the apex of the profession, being a psychiatrist brings the most prestige and the biggest salary, but only after many years of school and training.

Students will learn exactly what the human services are and the ethics and philosophies of the helping professions. The history of the profession will be covered, as well as the impact of the cultural, social, and economic environment on individual people, especially those who are in need of social services assistance.

By the conclusion of this course, students will have a firm introductory understanding of the social services professions. Employment at all levels of social work and related jobs is projected to grow rapidly over the next decade. Students will have a better idea of whether this is a career course they would like to explore further.

Prerequisite: None

Length: One Semester

Required Materials: Word processing software, Presentation software, Internet and research resources

Course Types: Comprehensive

Personal Care Services

This course in Personal Care Services introduces students to a variety of careers in the following areas: cosmetology (including hairstyling and haircutting, esthetics, manicuring, makeup, and teaching) and barbering (including cutting and styling of hair and facial hair and manicuring for men); massage therapy, teaching body-mind disciplines (yoga, Pilates, and the martial arts), and fitness (general exercise classes and acting as a personal trainer); and mortuary science (embalming and funeral directing). The course teaches students about what each career entails and the education and training they will need to become credentialed in various career specialties. In addition, about half of the course is devoted to teaching knowledge associated with the various professions, so that students can get a feel for what they will have to learn and whether they would like to learn it.

Prerequisite: None

Length: One Semester

Required Materials: Word processor, internet research resources

Course Types: Comprehensive

CTE Information Tech

Fundamentals of Computer Systems

The Computer Fundamentals course will provide students with an understanding of computers and how they operate as well as a basic understanding of how to manage and maintain computers and computer systems. These skills will provide students with the ability to configure computers and solve computer problems.

Students will learn details about the different elements of computers and computer systems. They will learn to identify hardware devices and their functions. They will be instructed on the role of operating systems as well as how to install and customize the Windows operating system. Students will learn about networking and the Internet. They will also be introduced to security issues in order to protect themselves and their computers and data.

Students will also learn about some of the software applications typically used on computers today, such as Microsoft Office. In addition, students will learn specifics about maintaining and troubleshooting computers, including managing files, backing up systems, and using the administrative tools in the Windows operating system. Lastly, the students will learn the basics of customer service and working as a help desk support technician.

Prerequisite: For topics in this course, it is helpful for students to be familiar with the basics of using desktop or laptop computers as well as accessing Web sites over the Internet. If students are not familiar with these topics, it is recommended, though not required, that they familiarize themselves with the operating system and Web browser(s) they will be using for this course. This includes logging into an account, if necessary, exploring the different types of software available, navigating through some of the operating system menus to understand the available tools, and doing a basic search on the Internet.

Length: One Semester

Required Materials: Word processing software, Presentation software, Spreadsheet software, Computers with different operating systems, Research resources, Computer with Windows 7 operating system, Computer with Microsoft Office (2007, 2010 or 2013) installed, Set up a Google account

Course Types: Comprehensive

Fundamentals of Digital Media

This course gives an overview of the different types of digital media and how they are used in the world today. Students examine the impact that digital media has on culture and lifestyle. The course reviews the basic concepts for creating effective digital media and introduces a number of different career paths that relate to digital media.

Students will examine some tools used to create digital media and discuss best practices in the creation of digital media.

This includes an overview of the process used to create new media pieces as well as the basics concepts of project management.

In the course, students will examine the use of social media, digital media in advertising, digital media on the World Wide Web, digital media in business, gaming and simulations, e-commerce, and digital music and movies. Students will review ethics and laws that impact digital media use or creation.

Prerequisite: Students should have a basic understanding of computers and the Internet.

Length: One Semester

Required Materials: Word processing software, Presentation software, Talk to friends or family on how businesses use digital media, research resources

Course Types: Comprehensive

Introduction to Information Technology

In this course, we introduce students to the knowledge base and technical skills that will help them to successfully compete for jobs within the Information Technology Career Cluster. Lessons are structured so that students learn and then demonstrate not only critical assessment and analytic skills, but also interpersonal skills that are valued so highly among IT employers.

We explore a range of career tracks that include network engineers, application/programming developers, and systems analysts. These career paths are described in depth, discussing typical job responsibilities, educational and licensure requirements, working conditions, and job outlooks.

Our lessons help students place the evolution of technology and job opportunities in context so that they will understand their important role in furthering its development. We believe that the most successful IT professionals combine technical know-how with leadership ability. To this end, students learn that their acquired expertise comes with the responsibility to represent themselves and the companies they work for within the highest legal and ethical standards.

Prerequisite: None

Length: One Semester

Required Materials: Word processing software, Research resources, Presentation software, Spreadsheet software

Course Types: Comprehensive

CTE Manufacturing

Careers in Marketing Research

Marketing research is the foundation of all marketing activities because it provides the data needed to make key strategic decisions about products, promotions, pricing, and other key organizational decisions. This course will provide information about the process of investigation and problem analysis by using research to produce key marketing statistics that are communicated to management and used throughout the organization. This course concludes with the execution, interpretation, and presentation of marketing research.

-The World of Marketing Research: Students will explore the role of market research and current trends. They will examine ways that companies and nonprofits can use marketing research and how the 4-step marketing research process works. It also covers various functions of marketing research as well as differences between basic and applied studies in terms of marketing research.

-The Marketing Research Industry and Ethics: This unit focuses on the marketing research industry and types of careers in the field. It also identifies the major marketing research firms and explores skills, experience and education requirements for research positions. Research ethics are also addressed.

-Types of Marketing Research: Ways to utilize surveys to inform business decisions kicks off this unit. Types of surveys are also covered as well as how to construct and word surveys. Differences between primary and secondary data and how technology is used in marketing research is also explored.

-Marketing Research Basics: This unit focuses on what measurement means and how measurement is used in terms of marketing research. Types of measurement scales and data examples are also explored as is how the data processing and analysis phase relates to the marketing research process.

-Putting It All Together: This unit focuses on formatting research reports, guidelines for presentations, decisions based on findings, and implementing decisions. It also touches on which organizations use marketing research to make decisions, and ways that research data can be used to make decisions on a continual basis.

Prerequisite: No prerequisite, but Introduction to Careers in Marketing Research recommended.

Length: One Semester

Required Materials: Internet or other research material, Word processing software, spreadsheet software, Presentation software

Course Types: Comprehensive

Introduction to Careers in Marketing Research

After completing this course, students will have a fundamental understanding of the principles of marketing. They will be able to explain the marketing process, marketing strategic planning, the marketing environment, and the trends, opportunities, and challenges in the marketing world today.

-Overview of Marketing: Students will explore the role of marketing in an organization and evaluate the ways in which marketing creates value for a product or service. They will be able to evaluate how marketers understand and segment their markets, identify the steps of the marketing research process, and describe various data collection techniques.

-Marketing Strategic Planning: This unit focuses on the importance of strategic planning and the five steps of the strategic planning process.

-The Marketing Environment and Consumer Behavior: This unit focuses on the marketing microenvironment and macroenvironment, as well as why consumers behave the way they do.

-The Marketing Mix: This unit focuses on the Four P's of the marketing mix: product, price, place, and promotion.

-Marketing Today: This unit focuses on how technology has impacted every area of marketing, and the world of global marketing.

Prerequisite: No prerequisite

Length: One Semester

Required Materials: Word processor, research resources

Course Types: Comprehensive

CTE Science Tech Engineering and Math

Principles of Technology and Education

The Principles of Technology & Engineering course will introduce students to the field of engineering and the types of technology that can result from the engineering design process. Student will also gain an understanding of the career options available in this field, and the skills, education, and experience needed to obtain these careers.

Students will learn how to be successful problem solvers. They will become familiar with the steps in the invention process and will investigate the ways in which engineers take an idea from an initial concept to a working technology. They will learn about real-world examples of engineering innovations, including global civil engineering projects, cutting-edge medical technology, and environmentally friendly designs.

Students will also learn about the relationship between engineering, science, and technology. They will learn how scientific knowledge is applied to create technology that benefits society. Additionally, students will learn how design modifications can be made based on an analysis of the underlying principles from physics, chemistry, biology, and the earth sciences.

Prerequisite: For the topics and assignments in this course, it would be helpful for the student to have a basic understanding of the scope of scientific investigations, including the types of questions that science does and does not address. It will also be useful for the student to be familiar with conducting online research and be able to evaluate the credibility of online sources. If a student is not comfortable assessing the credibility of online sources, information on this topic can be found on a variety of educational websites, including library.columbia.edu and mason.gmu.edu.

Length: One Semester

Required Materials: Internet or other research material, Pencil, Paper, Ruler, Protractor, Camera/scanner to upload drawings, Presentation software, Word processing software, Webcam, video recording device to record a presentation

Course Types: Comprehensive

Science and Mathematics in the Real World

Science and mathematics are part of the STEM (Science, Technology, Engineering, and Mathematics) multi-dimensional strategy that can effectively sustain our twenty-first century knowledge-based economy. STEM careers provide a wide variety of opportunities to understand and address global issues. The most pressing issues of this generation include overpopulation, environmental degradation, pollution, and global warming. These are all subjects of intense and dedicated research by STEM professionals in very diverse fields.

In this course, students will focus on how to apply science and mathematics concepts to the development of plans, processes, and projects that address real world problems, including sustainability and “green” technologies. This course also highlights how science and mathematics and the applications of STEM will be impacted as a result of the development of a greener economy.

The course exposes students to a wide variety of STEM applications and to real world problems from the natural sciences, technology fields, and the world of sports, and emphasizes the diversity of STEM career paths. The importance of math, critical thinking, and mastering scientific and technological skill sets is highlighted throughout. Challenging and enjoyable activities provide multiple opportunities to develop critical thinking skills and the application of the scientific method, and to work on real world problems using STEM approaches.

Prerequisite: For this course, students should know the following: Science and mathematics provide a myriad of opportunities for challenging, rewarding, and lucrative careers in the STEM fields. STEM career paths develop out of a combination of academic and professional experience. STEM provides effective tools to generate solutions to real world problems. Students should have the following: An ability to access the Internet in order to review videos, articles, and additional educational materials provided throughout the course.

Length: One Semester

Required Materials: Internet research resources, word processor

Course Types: Comprehensive

STEM and Problem Solving

Science, technology, engineering, and math (STEM) are active components in the real world. This course will outline how to apply the concepts and principles of scientific inquiry, encouraging the use of problem-solving and critical-thinking skills to produce viable solutions to problems.

Students will learn the scientific method, how to use analytical tools and techniques, how to construct tests and evaluate data, and how to review and understand statistical information. This course is designed to help students understand what we mean by problem solving and to help understand and develop skills and techniques to create solutions to problems.

Advanced problem-solving skills are necessary in all science, technology, engineering, and math disciplines and career paths. This problem-solving course stresses analytic skills to properly format problem statements, use of the scientific method to investigate problems, the use of quantitative and qualitative approaches to construct tests, and an introduction to reviewing and interpreting statistical information.

Prerequisite: Students should understand how to research a topic through books, magazines, and the Internet. Students should have proficiency using Microsoft Word and PowerPoint, and a basic understanding of Excel.

Length: One Semester

Required Materials: Internet research resources, word processor

Course Types: Comprehensive

English

English I Comprehensive

English I Comprehensive - Students should enter this course with a foundation in fiction, drama, poetry, mythology, and nonfiction. This course will provide them with the opportunity to build on that foundation. They will engage in in-depth analysis of more complex literature, view that literature from its historical perspective, and connect it to other arts. They will write literary analysis, logical arguments, informational/explanatory texts, narratives, and focused research projects. These writing tasks will be both formal and informal. Additionally, they will engage in speaking and listening activities that use and incorporate media and technology. As a result of the reading, writing, speaking, and listening students will do in this course, they will grow their vocabulary and their understanding of how to communicate effectively by making skillful choices when expressing themselves with language.

To become critical consumers of text, students will be exposed to increasingly more complex texts to which they apply those skills. The content is both rigorous and relevant and includes high-quality contemporary works as well as the classics of literature.

Prerequisite: Middle school level Language Arts/English

Length: Two Semesters

Required Materials: Word processor, internet research resources, *The Odyssey*, Homer. Recommend text: Penguin Classics edition, *Homer, The Odyssey*, translated by Robert Fagles, introduction and notes by Bernard Knox. ISBN: 0140268863 *To Kill a Mockingbird*, Harper Lee. Recommended text: Grand Central Publishing (1982) ISBN-13: 978-0-446-31078-9

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

English I Foundations

English I Foundations continues to build on the sequential development and integration of communication skills in four major areas: reading, writing, speaking, and listening. It most specifically focuses on deepening and furthering students' understanding in the following ways:

- Reading reinforces reading comprehension skills by teaching students how to understand and appreciate poetry, drama, informative nonfiction, and fiction; shows students how to analyze, evaluate, and interpret a text; reinforces awareness of the elements and structure of narrative prose; guides students through readings of drama, a novel, and selections from well-known poetry, and short stories.
- Writing furthers students' understanding of sentence structures; reviews parts of speech and their types, including in-depth studies on verbs (transitive, intransitive, conjugation, tense, voice, mood); develops students' understanding of the types and functions of phrases and clauses; teaches language history and etymology to help students build on knowledge of word structures, including prefixes, roots, and suffixes; expands on students' vocabulary skills; reviews spelling skills; gives students the opportunity to develop their abilities in writing speeches, short essays, poetry, friendly/business letters, and short stories.
- Speaking offers students experience in delivering a speech; teaches skills that enable students to become effective speakers and communicators, weaving these skills together throughout the course.
- Listening teaches effective listening comprehension skills, weaving these together throughout the lessons.
- Special Topics incorporates research skills, including Internet, library, reference material, and multimedia use; includes mass media structure and influence.

Prerequisite: Middle school level Language Arts/English

Length: Two Semesters

Required Materials: Word processor, internet research resources, *The Odyssey*, Homer. Recommend text: Penguin Classics edition, *Homer, The Odyssey*, translated by Robert Fagles, introduction and notes by Bernard Knox. ISBN: 0140268863

Course Types: Foundations, Foundations Credit Recovery, Foundations Pacing Plus, Foundations Pacing Plus Credit Recovery

English II Comprehensive

English II Comprehensive students will study literature that spans centuries, continents, and genres. Each of the four thematically- integrated units encourages close study of this literature and its context. Students will gain valuable cultural insight as they read and write about works depicting the social, personal, religious, and political struggles and triumphs faced by people all over the world and all through history. Students will continue to build their literacy skills by engaging in focused reading, composition, speaking and listening activities, vocabulary study, and research. By the end of the course, students will have gained a broader perspective and will be well-prepared to apply that perspective to the study of American Literature in English III.

To become critical consumers of text, students will be exposed to increasingly more complex texts to which they apply those skills. The content includes classic myths and stories from around the world, America's founding documents, foundational American literature, and Shakespeare.

Prerequisite: English I Comprehensive

Length: Two Semesters

Required Materials: Animal Farm, George Orwell. Recommended text: Published by Houghton Mifflin, ISBN: 0151072558, Nectar in a Sieve, Kamala Markandaya. ISBN: 0-451-16836-4 Signet (1995), Things Fall Apart, Chinua Achebe. First Anchor Books Edition (1994) ISBN: 0-385-47454-7, "Master Harold"...and the Boys, Athol Fugard. Vintage (2009) ISBN: 978-0307475206

Course Types: Comprehensive, Comprehensive Credit Recovery
+NCAA Eligibility for Comprehensive

English II Foundations

English II Foundations continues to build on the sequential development and integration of communication skills in four major areas: reading, writing, speaking, and listening. It focuses on deepening and furthering students' understanding in the following ways:

- Reading reinforces reading comprehension skills by teaching students how to comprehend and appreciate poetry, drama, and fiction; shows students how to analyze, evaluate, and interpret a text; reinforces awareness of the elements and structure of narrative prose; guides students through readings of drama, a novel, and selections of well-known poetry and short stories.
- Writing develops students' understanding of complex sentence and paragraph structures, providing hands-on experience with connectives, transitions, phrases, and clauses; teaches language history and etymology to help students build on knowledge of grammar and word structures; expands on students' vocabulary skills; gives students the opportunity to develop their abilities in writing a set of instructions, a literary critique, a poem, a short story, and a speech.
- Speaking offers students experience in delivering a speech; teaches skills that enable students to become effective speakers and communicators, weaving the skills throughout the course.
- Listening teaches effective listening comprehension skills, integrating these throughout the lessons.
- Special Topics incorporates research skills, including internet, library, and reference material use.

Prerequisite: English I Foundations or English I Comprehensive

Length: Two Semesters

Required Materials: Internet research available for various print media, various broadcast media, various Internet media, access to the library, magazines, short story anthology, newspapers, magazines, poetry anthology, Sources or works by George Eliot, and specifically Silas Marner, by George Eliot, print (and optional video version).

Course Types: Foundations, Foundations Credit Recovery, Foundations Pacing Plus, Foundations Pacing Plus Credit Recovery

English III Comprehensive

English III Comprehensive is a survey of American Literature and literary culture from its inception through the twentieth century. Students will explore the major literary forms, themes, authors, and periods of American Literature. They will understand how this literature represents the experiences of people native to America, those who immigrated to America, and those who were brought to America against their will. Emphasis is placed on a rhetorical analysis of the literature to determine how authors achieve a particular purpose or effect. Through focused readings, composition, speaking and listening activities, vocabulary study and research, students will continue to build the literacy skills they need to meet the challenges of high school and beyond.

To become critical consumers of text, students will be exposed to increasingly more complex texts to which they apply those skills. In English language arts, that critical content is both rigorous and relevant and includes high-quality contemporary works as well as the classics of literature. In English language arts, that content includes classic myths and stories from around the world, America's founding documents, foundational American literature, and Shakespeare.

Prerequisite: English II Comprehensive

Length: Two Semesters

Required Materials: Word processor, *The Crucible*, Arthur Miller. Recommended Text: Penguin (2003), ISBN: 978-0142437339, *Their Eyes Were Watching God*, Zora Neal Hurston. Recommended Text: HarperCollins, ISBN 978-0-06-083867-6, *Our Town*, Thornton Wilder. Any version.

Course Types: Comprehensive, Comprehensive Credit Recovery
+NCAA Eligibility for Comprehensive

English III Foundations

English III Foundations continues to build on the sequential development and integration of communication skills in four major areas: reading, writing, speaking, and listening. It most specifically focuses on deepening and furthering students' understanding in the following ways:

- Reading reinforces reading comprehension skills by teaching students comprehension techniques for literary fiction, nonfiction, poetry, and drama; discusses common literary devices; shows students how to analyze, evaluate, and interpret a text; reinforces awareness of the elements and structure of narrative and expository prose; guides students through readings of Thornton Wilder's *Our Town* and Hemingway's *The Old Man and the Sea* as well as selections of and excerpts from well-known poetry and nonfiction pieces.
- Writing develops students' writing skills by teaching about clauses and phrases in sentence structures; reviews common sentence construction errors and methods for avoiding them; provides practice in standard and nonstandard English, as well as specialized language use; teaches Greek and Latin roots and prefixes to enhance vocabulary and spelling skills; expands students' abilities to write cohesive and coherent expository prose; gives students the opportunity to develop their abilities in writing literary critiques, personal essays, poetry, and research papers.
- Special Topics incorporates research skills, including Internet, library, and reference material use, throughout the curriculum.

Prerequisite: English II Foundations or English II Comprehensive

Length: Two Semesters

Required Materials: Internet resources, word processor, National Geographic or other scientific magazine, Dictionary, public documents, Poetry anthology, Library access, newspaper, television, news magazines, *Our Town*, by Thornton Wilder, and *The Old Man and the Sea*, by Ernest Hemingway. Page numbers refer to the Scribner edition, ISBN: 0684801221.

Course Types: Foundations, Foundations Credit Recovery, Foundations Pacing Plus, Foundations Pacing Plus Credit Recovery

English IV Comprehensive

By English IV Comprehensive, students have repeatedly peered through the window to humanity that literature has opened for them. Through it, they have gained valuable perspective on their world, past and present. Close-textual interaction with literature should have heightened appreciation for those texts, improved critical and analytical skills in reading and writing, enhanced speaking and listening abilities, and enriched students' academic and personal vocabulary. This course is organized chronologically, so students can see the influences on and evolution of the ideas and forms.

Writing, research, and speaking assignments will continue to focus on formulating and expressing ideas and arguments about the readings. Particular emphasis is placed on gaining critical perspective on the relationship between content and form and on synthesizing ideas into clear and concise prose and presentations.

To become critical consumers of text, students will be exposed to increasingly more complex texts to which they apply those skills. In English language arts, that critical content is both rigorous and relevant and includes high-quality contemporary works as well as the classics of literature. In English language arts, that content includes classic myths and stories from around the world, America's founding documents, foundational American literature, and Shakespeare.

Prerequisite: English III Comprehensive

Length: Two Semesters

Required Materials: Word processor, internet resources, *The Stranger*, Albert Camus. translated by Matthew Ward, ISBN: 978-0-679-72020-1.

Course Types: Comprehensive, Comprehensive Credit Recovery
+NCAA Eligibility for Comprehensive

English IV Foundations

English IV Foundations continues to build on the sequential development and integration of communication skills in four major areas: reading, writing, speaking, and listening. It most specifically focuses on deepening and furthering students' understanding in the following ways:

- Reading reinforces reading comprehension skills by teaching students comprehension techniques for literary fiction, poetry, and drama, including discussion of common literary devices; shows students how to analyze, evaluate, and interpret a text; reinforces awareness of the elements and structure of narrative and expository prose; guides students through English literary history, including readings of Shakespeare's *Hamlet*, Milton's *Paradise Lost*, *Beowulf*, and other selections of and excerpts from major English literary figures.
- Writing develops students' writing skills by teaching about clauses and phrases in sentence structures; reviews common sentence and paragraph construction errors and methods for avoiding them; teaches Greek and Latin roots and prefixes to enhance vocabulary and spelling skills; expands students' abilities to write cohesive and coherent expository prose; gives students the opportunity to develop their abilities in writing literary criticism, poetry, short stories, and expository prose.
- Listening teaches effective listening comprehension skills, weaving these throughout the lessons; builds upon students' study skills as well as helps them to become reliable and efficient note takers.
- Special Topics incorporates research skills, including Internet, library, and reference material use, throughout the curriculum.

Prerequisite: English III Foundations or English III Comprehensive

Length: Two Semesters

Required Materials: Internet research resources, library access, Television access, Public document (speech, debate, resolution), Short story anthology, and poem anthology.

Course Types: Foundations, Foundations Credit Recovery, Foundations Pacing Plus, Foundations Pacing Plus Credit Recovery

Fine Arts

Art History

Art History is a year-long elective designed to enable students to develop knowledge of the history and theory of art and the relationship between artist, artwork, and society. Students will research and critique periods, styles, and works of art from early civilizations through modern and contemporary art.

Prerequisite: None

Length: One Semester

Required Materials: Internet or other research material, Word processing software, Clay or some other modeling medium, Digital camera, and Sticks or other natural objects

Course Types: Comprehensive

Digital Arts

Digital Arts is a semester-long elective designed to provide computer science students with an introduction to visualization-graphics programming on computers. To equip students for today's digitally driven lifestyle, this course focuses on using a digital camera and the practical application of digital imaging and editing programs. Additionally, students will work with audio-editing programs, and will also examine 3D technology and cinematography.

Prerequisite: None

Length: One Semester

Required Materials: Internet Access, Students will be asked to download free software such as Photoshop Express or Audacity, A digital camera is also recommended but not mandatory

Course Types: Comprehensive

Media Studies

This semester-long course is part of a worldwide educational movement called media literacy. The goal of the media literacy movement is to educate people about how the media impacts both individuals and society as a whole. Students will examine media such as magazines, the Internet, video games, and movies. They'll learn the kinds of strategies that advertisers use to persuade people to buy products. They'll also explore how news broadcasters choose which stories to air. Lessons and projects encourage students to examine ways in which media helps shape our culture and the ways in which our culture shapes the media. While many media literacy courses focus upon learning how to make media, this one will focus exclusively on analyzing the media.

Prerequisite: None

Length: One Semester

Required Materials: Word processor, internet research resources

Course Types: Comprehensive

Music Appreciation

The goal of this semester-long course is to provide instruction in basic musical elements, trace the development and growth of classical music, and give students a strong foundation for a greater appreciation of music. Students will examine music in the world around them and discover how they experience music. They'll be introduced to the basic elements and sounds of music and instruments. Students will learn the names and backgrounds of several famous musical composers. Students will also learn how and where classical music began, how it developed over the centuries, and the ways in which music and culture affect each other. Lastly, students will examine the ways modern music has been influenced by classical music.

Prerequisite: None

Length: One Semester

Required Materials: Internet or other research material, Paper, pencil, or other writing material, Printer, Access to at least 20 minutes of recorded or live classical music, Access to listening samples of traditional ethnic music, Access to at least 10 minutes of a listening sample of traditional ethnic music, Access to a listening sample of a favorite song, Internet access to a musical piece, "The Young Person's Guide to the Orchestra" by Benjamin Britten, Access to two or three pictures of student's choice of musical instrument, Access to two listening samples of student's choice of musical instrument, Access to listening samples of music created by student's choice of composer, Access to listening samples of music created by student's choice of classical music composer, Access to listening samples of music created by student's choice of Romantic music composer, Access to photographs of the following two paintings: "The Hay Wain" by John Constable and "The Battle of Trafalgar" by J.M.W. Turner, Access to listening samples (at least 10 minutes long) of music created by student's choice of 20th-century music composer, Access to listening samples (at least 10 minutes long) of music created by student's choice of 20th-century American music composer, Option 1: Attend a local classical music concert. Option 2: If no live concerts are available, an audio-visual recording of a classical music concert may be substitute

Course Types: Comprehensive

Music Theory

Music Theory is a semester-length fine arts elective for high school students. The course requires no prior instrumental, vocal, or music theory study. Using the piano keyboard as a visual basis for comprehension, the course materials explore the nature of music, integrating these concepts:

- rhythm and meter
- written music notation
- the structure of various scale types
- interval qualities
- melody and harmony
- the building of chords
- transposition

Throughout the series of assignments, ear training exercises are interspersed with the bones of composition technique, building in students the ability not only to hear and appreciate music, but step-by-step, to create it in written form as well. This highly interactive course culminates in the students producing original compositions, which while based on standard notation, demonstrate facets of personal expression. As the students' ability to perform increases in the future, they will better understand music and therefore better demonstrate its intrinsic communication of emotion and ideas.

Prerequisite: None

Length: One Semester

Required Materials: Internet or other research material, Printer, Noteflight (online notation program linked within course)

Course Types: Comprehensive

Health and Physical Education

Health Education

Health Education is a health science elective course that introduces students to what good health is, why good health is important, and what students should do to achieve good health.

Body Essentials: This unit introduces the different systems in the human body, showing how the body develops. Physical

Health: This unit demonstrates to students how they may develop good practices as they promote proper physical health.

Social and Mental Health: This unit teaches how to establish strong social and mental health through true health wisdom.

Preventive Healthcare and First Aid: This unit focuses instruction on safety, emergency care, and disease prevention.

Responsible Living: This unit discusses how students may apply the principles of good stewardship, covering topics like pollution, drugs, alcohol, and tobacco.

Prerequisite: None

Length: One Semester

Required Materials: Stopwatch or clock with second hand, Pieces of white paper, Some colored pencils, A ruler, Some tape, Tape recorder (optional), Gauze bandages (sterile), Aspirin or aspirin substitute, Foil blanket, Triangle bandage, Scissors, Tweezers, Calamine lotion, Roll of cotton gauze (sterile), Assorted adhesive bandages, Adhesive tape, Disposable rubber gloves, Antiseptic hand wipes, Safety pins, Antiseptic ointment, Flashlight, Rubbing alcohol in a plastic container, Syrup of Ipecac (used to induce vomiting in case of the ingestion of specific poisons), Towels, Blankets, Pillows, Magazine rolled up, Newspaper, Broomstick, Pipe, Stick, Research materials, Resource available to create a flyer

Course Types: Comprehensive

Personal and Family Living

This semester-long high school elective takes students on an interactive exploration of the challenges they may face as they transition into adulthood, including constructive conflict resolution, nutrition and health, building healthy families, financial responsibility, and long-term employment.

Prerequisite: None

Length: One Semester

Required Materials: Newspaper, Interview someone, Scratch paper, Research materials, Trip to the library

Course Types: Comprehensive, Comprehensive Credit Recovery

Physical Education

Physical Education is a semester-long elective designed for high school students. The course focuses on performance of individual and team sports, with explanations of proper technique, rules of the game, and preparation. Team sports introduced include soccer, basketball, football, baseball, and volleyball. An introduction to fitness, strength, endurance, and nutrition is also included.

Students will have the opportunity to perform each sport on their own time, while keeping a log of activity. The goal is incorporation of activity into their daily lives and the gain of lifelong healthy fitness habits.

Prerequisite: None

Length: One Semester

Required Materials: Internet or other research material, Paper, pencils, or other writing material, Printer, Variety of hand held weights, rubber tubing, or barbells, depending on exercises chosen, Cloth tape measure, clock or watch with second hand, access to a 12 inch high step, 3 nutritional labels off of food packaging, Accurate scale, tape measure, Soccer ball or one of similar size, Large play area (at least 20 feet long), Basketball or ball of similar size, Basketball court (helpful, but not mandatory), volleyball or ball of similar size, Volleyball or ball of similar size, Gymnasium (helpful, but not mandatory), Two movies about baseball, TV for watching one inning of a televised baseball game, Golf club (helpful, but not mandatory), Tennis racquet, tennis balls, Swimsuit and access to a swimming pool (helpful, but not mandatory), Clock or watch, Appropriate shoes for running, Heart monitor (helpful, but not mandatory)

Course Types: Comprehensive

Physical Fitness

Physical Fitness is a semester-length elective designed for high school students. The course focuses on the health benefits of regular physical activity and of a long term exercise program.

As students work through the course, they will learn about the many aspects of physical fitness, including basic nutrition, the importance of flexibility, cardiovascular health, muscle and strength training, and realistic goal setting. Along the way, students will be required to maintain and submit an activity log in order to measure progress in course exercises, as well as in personal fitness goals.

Prerequisite: None

Length: One Semester

Required Materials: Word processor, internet research resources

Course Types: Comprehensive, Comprehensive Credit Recovery

Mathematics

Advanced Algebra

Advanced Algebra is a full year high school mathematics course intended for the student who has successfully completed Analytic Geometry. This course is designed to prepare students for college-level and real-world mathematical reasoning. The concepts covered in this course integrate the topics of Statistics, Algebra II, and Trigonometry. Throughout the course, students will perform operations with rational, radical, and exponential expressions, explore higher order strategies necessary for analyzing multi-level logarithmic, exponential, linear, quadratic and polynomial functions and equations. Students are exposed to several branches of mathematics and will explore ways in which each one can be used as a mathematical model in understanding the world.

Prerequisite: Analytic Geometry

Length: Two Semesters

Required Materials: Internet research resources

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Algebra I Comprehensive

Algebra I Comprehensive – is a full year, high school credit course that is intended for the student who has successfully mastered the core algebraic concepts covered in the prerequisite course, Pre-Algebra. Within the Algebra I course, the student will explore basic algebraic fundamentals such as evaluating, creating, solving and graphing linear, quadratic, and polynomial functions.

Prerequisite: Pre-Algebra (Mathematics 800 Comprehensive)

Length: Two Semesters

Required Materials: Scratch Paper/Notebook, Scientific Calculator, Graph Paper, and Printer

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Algebra I Foundations

Algebra I Foundations is a full year, high school credit course that is intended for the student who has successfully mastered the core algebraic concepts covered in the prerequisite course, Pre-Algebra. Within the Algebra I course, the student will explore basic algebraic fundamentals such as evaluating, creating, solving and graphing linear, quadratic, and polynomial functions.

Prerequisite: Pre-Algebra (Mathematics Foundations 800 or Mathematics 800 Comprehensive)

Length: Two Semesters

Required Materials: Scratch Paper/Notebook, Graph Paper, and Printer

Course Types: Foundations, Foundations Credit Recovery

Algebra II Comprehensive

Algebra II Comprehensive – is a full-year, high school math course intended for the student who has successfully completed the prerequisite course Algebra I. This course focuses on algebraic techniques and methods in order to develop student understanding of advanced number theory, concepts involving linear, quadratic and polynomial functions, and pre-calculus theories. This course also integrates geometric concepts and skills throughout the units, as well as introducing students to basic trigonometric identities and problem solving.

Prerequisite: Algebra I Comprehensive

Length: Two Semesters

Required Materials: Scratch Paper/Notebook, Graph Paper, and Scientific or Graphing Calculator

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Algebra II Foundations

Algebra II Foundations is a full-year, high school math course intended for the student who has successfully completed the prerequisite course Algebra I. This course focuses on algebraic techniques and methods in order to develop student understanding of advanced number theory, concepts involving linear, quadratic and polynomial functions, and pre-calculus theories. This course also integrates geometric concepts and skills throughout the units, as well as introducing students to basic trigonometric identities and problem solving.

Prerequisite: Algebra I Foundations

Length: Two Semesters

Required Materials: Scratch Paper/Notebook and Scientific or Graphing Calculator

Course Types: Foundations, Foundations Credit Recovery

Analytic Geometry

Analytic Geometry is a full year high school mathematics course intended for the student who has successfully completed Coordinate Algebra. This course is designed to prepare students for college-level and real-world mathematical reasoning. The concepts covered in this course integrate the topics of Advanced Algebra, Geometry, Trigonometry, and Statistics. Throughout the course, students will explore higher order strategies necessary for analyzing multilevel linear, quadratic and polynomial functions and equations, investigate geometric proofs involving similarity and congruence in triangles and quadrilaterals as well as special angle relationships formed by parallel lines and transversals. Students are exposed to several branches of mathematics and will explore ways in which each one can be used as a mathematical model in understanding the world.

Prerequisite: Coordinate Algebra

Length: Two Semesters

Required Materials: Scratch Paper/Notebook

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Consumer Math

Consumer Math is an introduction to the many ways in which math can be used in everyday life. The course gives practical advice on how to handle situations that involve money and math principles. Consumer Math focuses on the basic skills and methods of arithmetic and provides students the opportunity to develop experience with algebraic techniques of evaluating variables and equations, including geometric formulas and interest equations. Students will also be introduced to topics in statistics.

Prerequisite: Middle School Level Math

Length: Two Semesters

Required Materials: Scratch paper/notebook, calculator

Course Types: Comprehensive, Comprehensive Credit Recovery

Coordinate Algebra

Coordinate Algebra is a full-year mathematics course intended for high school students who have successfully completed general mathematics for grade 8 or pre-algebra. This course focuses on complex operations of integers and variables while incorporating algebraic techniques and methods in order to develop student understanding of mathematical expressions, and concepts involving linear, quadratic, exponential and polynomial functions. Coordinate Algebra also integrates statistical theory with computational practices as well as to include coordinate geometry and geometric concepts, theorems and skills. Students are exposed to several branches of mathematics and will explore ways in which each one can be used as a mathematical model in understanding the world.

Prerequisite: Mathematics 800 or pre-algebra.

Length: Two Semesters

Required Materials: Scratch paper/notebook, calculator

Course Types: Comprehensive, Comprehensive Credit Recovery

Geometry Comprehensive

Geometry Comprehensive is a full-year, high school math course for the student who has successfully completed the prerequisite course, Algebra I. The course focuses on the skills and methods of linear, quadratic, coordinate, and plane geometry. In it, students will gain solid experience with geometric calculations and coordinate plane graphing, methods of formal proof, and techniques of construction.

Prerequisite: Algebra I Comprehensive

Length: Two Semesters

Required Materials: Scratch Paper/Notebook, Pencil, Ruler, Compass, Protractor, Scientific Calculator

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Geometry Foundations

Geometry Foundations is a full year, high school math course for the student who has successfully completed the prerequisite course, Algebra I. The course focuses on the skills and methods of linear, coordinate, and plane geometry. In it, students will gain solid experience with geometric calculations and coordinate plane graphing, methods of formal proof, and techniques of construction.

Prerequisite: Algebra I Foundations or Algebra I Comprehensive

Length: Two Semesters

Required Materials: Scratch Paper/Notebook, Pencil, Ruler, Compass, Protractor, Scientific Calculator

Course Types: Foundations, Foundations Credit Recovery

Pre-Calculus Comprehensive

Pre-calculus Comprehensive is a full-year, high school credit course that is intended for the student who has successfully mastered the core algebraic and conceptual geometric concepts covered in the prerequisite courses: Algebra I, Geometry, and Algebra II. The course primarily focuses on the skills and methods of analytic geometry and trigonometry while investigating further relationships in functions, probability, number theory, limits, and the introduction of derivatives.

Prerequisite: Algebra I, II, and Geometry

Length: Two Semesters

Required Materials: Scratch Paper/Notebook, Scientific Calculator, Graph Paper-Coordinate and Printer

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Trigonometry

Trigonometry is a five-unit elective course for high school students who have successfully completed Algebra I, Geometry, and Algebra II. The materials cover a development of trigonometry from right triangle trigonometry to oblique triangles and the polar plane. Throughout the course, students will develop trigonometric formulas and use them in real-world applications, evaluate trigonometric proofs using complex trigonometric identities and solving trigonometric equations with regard to the unit circle.

Prerequisite: Algebra I, Geometry, and Algebra II

Length: Two Semesters

Required Materials: Scratch Paper/Notebook, Scientific Calculator, Printer

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Science

Biology

Biology is intended to expose students to the designs and patterns of living organisms and their interactions with the environment. In preceding years, students should have developed a foundational understanding of life sciences. Expanding on that, this Biology course will incorporate more abstract knowledge. The student's understanding should encompass both the micro and macro aspects of life, and this biology course includes both. The major concepts covered are taxonomy, the chemical basis of life, cellular structure and function, genetics, microbiology, plant structure and function, animal structure and function, and ecology and the environment.

Students at this level should show development in their understanding of scientific inquiry. The units contain experiments and projects that seek to develop a deeper conceptual meaning for students and that actively engage them. The continued exposure of science concepts and scientific inquiry will serve to improve the students' skills and understanding.

Biology should be preceded or accompanied by an Algebra I course.

Prerequisite: Middle school general science. Biology should be preceded or accompanied by an Algebra I course.

Length: Two Semesters

Required Materials: Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Chemistry

Chemistry is intended to provide a more in-depth study of matter and its interactions. In preceding years students should have developed an understanding for the macroscopic properties of substances and been introduced to the microstructure of substances. This chemistry course will expand upon that knowledge, further develop the microstructure of substances and teach the symbolic and mathematical world of formulas, equations, and symbols.

The major concepts covered are measurement in chemistry, atomic structure, chemical formulas and bonding, chemical reactions, stoichiometry, gases, chemical equilibrium, and organic chemistry. Students at this level should show development in their ability and understanding of scientific inquiry. The units contain experiments and projects that seek to develop a deeper conceptual meaning for the student and actively engage the student. The continued exposure of science concepts and scientific inquiry will serve to improve the student's skill and understanding.

Chemistry should be preceded by an Algebra I course and preceded or accompanied by an Algebra II course.

Prerequisite: Middle school general science. Chemistry should be preceded by an Algebra I course and preceded or accompanied by an Algebra II course.

Length: Two Semesters

Required Materials: Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery

+NCAA Eligibility for Comprehensive

Earth Science

Earth Science is a basic science course intended to further explore the designs and patterns of our planet. This course covers such areas as the origin, history, and structure of the earth. It also covers forces that cause change on the earth and features of the earth including the crust, water, atmosphere, weather, and climate. Earth science wraps up with astronomy and a study of all the planets, the solar system, and galaxies. The course strives to teach that each feature of the earth interacts with the others in many critical ways, and the study of these relationships is important to humanity. Students at this level should show development in their understanding of scientific inquiry. Some of the units contain experiments and projects that seek to develop meaning and to actively engage the student. The continued exposure to science concepts and scientific inquiry will serve to improve the students' skill and understanding.

Prerequisite: Middle school level general science.

Length: Two Semesters

Required Materials: Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery
+NCAA Eligibility for Comprehensive

Environmental Science

Environmental Science is an interdisciplinary course covering a wide variety of topics including biology, physics, geology, ecology, chemistry, geography, astronomy, meteorology, oceanography, and engineering. The course also considers ways in which human populations affect our planet and its processes. Of special emphasis is the concept of sustainability as a means of using resources in a way that ensures they will always be around us.

Prerequisite: Middle school level general science.

Length: Two Semesters

Required Materials: Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery
+NCAA Eligibility for Comprehensive

Integrated Physics and Chemistry

Integrated Physics and Chemistry is a physical science course designed for high school students needing an entry-level science course covering basic concepts found in chemistry and physics. Topics included in this study are:

- matter,
- motion and forces,
- work and energy,
- electricity and magnetism, and
- waves.

Throughout the course, students will have opportunities to observe simulations, investigate ideas, and solve problems—both on screen and away from the computer.

Prerequisite: Middle school level general science.

Length: Two Semesters

Required Materials: Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery
+NCAA Eligibility for Comprehensive

Keystone Biology

Keystone Biology is intended to expose students to the designs and patterns of living organisms and their interactions with the environment. In preceding years, students should have developed a foundational understanding of life sciences.

Expanding on that, this Biology course will incorporate more abstract knowledge. The student's understanding should encompass both the micro and macro aspects of life, and this biology course includes both. The major concepts covered are taxonomy, the chemical basis of life, cellular structure and function, genetics, microbiology, plant structure and function, animal structure and function, and ecology and the environment.

Students at this level should show development in their understanding of scientific inquiry. The units contain experiments and projects that seek to develop a deeper conceptual meaning for students and that actively engage them. The continued exposure of science concepts and scientific inquiry will serve to improve the students' skills and understanding. Keystone Biology should be preceded or accompanied by an Algebra I course.

Prerequisite: Middle school general level science and the course should be preceded or accompanied by an Algebra I course.

Length: Two Semesters

Required Materials: Word processing software, Presentation software

Course Types: Comprehensive, Comprehensive Credit Recovery

Physics

Physics is intended to provide a more in-depth study of the physical universe. In preceding years students should have developed a basic understanding for the macroscopic and microscopic world of forces, motion, waves, light, and electricity. The physics course will expand upon that prior knowledge and further develop both. The curriculum will also seek to teach the symbolic and mathematical world of formulas and symbols used in physics. The major concepts covered are kinematics, forces and motion, work and energy, waves, sound and light, electricity and magnetism, and nuclear physics. Students at this level should show development in their ability and understanding of scientific inquiry. The units contain experiments and projects that seek to develop a deeper conceptual meaning for students and actively engage them. The continued exposure to science concepts and scientific inquiry will serve to improve the students' skill and understanding. Physics should be preceded by Algebra I and II courses and geometry.

Prerequisite: Algebra I, II, and Geometry. (Integrated Physics and Chemistry is also recommended)

Length: Two Semesters

Required Materials: Household items to be used for experiments, Word processing software, internet research resources, spreadsheet software.

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery

+NCAA Eligibility for Comprehensive

Social Studies

Civil War

You are about to embark on the fascinating history of the Civil War. It is a story of human choices that linked the past to the present and influenced the future. It is a drama of how one nation changed through times of conflict and cooperation. It is a tale of two children (the North and South) living under the same roof (The United States) and how they disagreed over the issues of states' rights and slavery.

As you study the Civil War, you will detect patterns in the way people thought and acted. You will see familiar patterns in how battles were won and lost. You will also note how events happening today affect the future. The principle of cause and effect applies in everything you do.

Even today, there are some people who believe the South won the Civil War or that the North had no right to abolish slavery. Others cannot believe that people from the South found nothing wrong with enslaving fellow human beings. For all these people, their view of history differs from one another based on their perspective.

Regardless of where you stand, enjoy learning about this period in American history. It is filled with heroism and cowardness, conflict and cooperation, heartache and joy, triumph and tragedy. Hopefully, you will be able to apply the enduring understandings mentioned above to advance your understanding America.

Prerequisite: None

Length: One Semester

Required Materials: Internet, encyclopedia or other research materials, Paper, pencils, or other writing materials, Printer, Trip to the library

Course Types: Comprehensive, Comprehensive Credit Recovery

Economics

The goal of this semester-long course is to provide students with a strong foundation in basic economic principles. Students will examine topics such as:

- Scarcity
- Economic roles of individuals, organizations, and institutions
- Factors that affect supply and demand
- Different market structures
- Market regulation
- The Macroeconomy

Prerequisite: Middle school level Social Studies/History

Length: One Semester

Required Materials: Internet, encyclopedia or other research materials, paper, pencils, or other writing materials, Printer, Ten people (family, friends, classmates, etc) to participate in a very brief survey, calculator

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Government

Government focuses on American and international governments. Students will learn about the history of governments, the characteristics of the United States government, political parties, and voting. These areas of focus target two major content strands: History, and Government and Citizenship.

Prerequisite: Middle school level Social Studies/History

Length: One Semester

Required Materials: Internet, encyclopedia or other research materials, Paper, pencils, or other writing materials, Printer, Digital Presentation Tool, Digital Presentation Tool or video editing software, Word processing software or digital media software, Poster board, word processing software or digital media software

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

Psychology

Psychology is an introductory elective course for high school students. Throughout the course students will examine influences on human actions and beliefs, factors influencing behavior and perception, and basic psychological theories. Students will develop and apply their understanding of psychology through lessons and projects that require interaction and observation of others.

Prerequisite: Middle school level Social Studies/History

Length: One Semester

Required Materials: Internet, encyclopedia or other research materials, Apple, Onion, Pencil, Paper, elevator, Walking path

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

20th Century American History

Twentieth Century American History is a history elective for high school students interested in examining American history during a century of change, continuity, and conflicts.

Students will examine America's economic, political, governmental, cultural, and technological growing pains during the twentieth century. They will also consider the causes and effects of national and international cooperation, competition, and conflict.

Prerequisite: Middle school level Social Studies/History

Length: One Semester

Required Materials: Internet or other research material, word-processing software, Powerpoint software program

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

US History: Foundations to Present

U.S. History Foundations to Present covers early American exploration to the present day, placing special emphasis on the politics of the 18th and early 19th centuries and the Civil War. These areas of focus target three major content strands: History, Geography, and Government, and Citizenship.

Prerequisite: Middle school level Social Studies/History

Length: Two Semesters

Required Materials: Internet, encyclopedia or other research materials, paper, pencils, or other writing materials, Printer, Copy of Martin Luther King's "I Have a Dream" speech, word-processing software

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery

+NCAA Eligibility for Comprehensive

US History: Reconstruction to Present

U.S. History Reconstruction to Present examines American history from the Civil War to the present day, placing special emphasis on the major political, economic, and social movements of the twentieth century.

Prerequisite: Middle School level Social Studies/History. U.S. History Foundations to Present recommended.

Length: Two Semesters

Required Materials: Internet, word-processing software, encyclopedia or other research materials, paper, pencils, or other writing materials, Printer, multimedia, presentation software

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery

+NCAA Eligibility for Comprehensive

Vietnam Era

What comes to mind when you think about the Vietnam Era? For many, that period represents a difficult time in U.S. history. It is defined by an unpopular war that claimed the lives of 58,000 Americans and some 3 million Vietnamese. In this course, you'll look at the history of the Vietnam War. The roots of the conflict stretch further back than you might know. You'll examine why the United States got involved in the conflict and why the United States failed to achieve its objectives.

Prerequisite: Middle School level Social Studies/History.

Length: One Semester

Required Materials: Internet or other research material, encyclopedia, paper, pencils, printer, word-processing software, Powerpoint software program, Examples of anti war songs

Course Types: Comprehensive, Comprehensive Credit Recovery

World Geography

World Geography takes students on a journey around the world in which they will learn about the physical and human geography of various regions. They will study the history of each region and examine the political, economic, and cultural characteristics of the world in which we live. Students will also learn about the tools and technologies of geography such as globes, maps, charts, and global information systems.

Prerequisite: Middle School level Social Studies/History.

Length: Two Semesters

Required Materials: Internet, encyclopedia or other research materials, Paper, pencils or other writing materials, Printer, World and state maps may be helpful to have for this course, Three articles with a geographic focus, Scanner (if articles and map are in print form, they must be scanned to upload a digital copy), Digital art software or website creation application, Digital art software, multimedia design software, or presentation software, Word processing software, or scanner to upload graphic organizer (if printed and completed by hand), A nonfiction text

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

World History

World History explores the people, events, and ideas that have shaped history from the beginnings of human society to the present day.

As you read the lessons in this course, keep these enduring understandings in mind:

- World History is the story of the interaction between people, the environment, and ideas that form cultures, societies, and civilizations.
- World History is the story of human choices that link the past to the present and influence the future.
- Individuals, cultures, societies, and the world change through times of conflict and cooperation.
- Historical patterns are identified across times, places, ideas, institutions, cultures, people, and events.
- From the past to the present, events and trends on the local, national, and global sphere are interrelated.
- People have different views of history depending on their perspective.

Prerequisite: Middle School level Social Studies/History.

Length: Two Semesters

Required Materials: Internet, encyclopedia or other research materials, Paper, pencils or other writing materials, Printer, a community, state, or national newspaper, multimedia, presentation development software

Course Types: Comprehensive, Comprehensive Credit Recovery

+NCAA Eligibility for Comprehensive

World Languages

French I

In French I, students begin to develop competence in four basic skill areas: listening, speaking, reading, and writing. While developing communicative competence in French, students gain and expand their knowledge of francophone countries and cultures.

Emphasis is placed on learning the present tense, the near future and the past tense in French I through thematically designed units. Topics include home, school, family, holidays, and daily and leisure activities.

Students develop the ability to:

- greet and respond to greetings
- introduce and respond to introductions
- engage in conversations on several themes
- express likes and dislikes
- make requests
- obtain information
- understand some ideas and familiar details
- begin to provide information.

Prerequisite: None

Length: Two Semesters

Required Materials: Access to vocaroo.com, microphone with headset, High-speed Internet and functional sound system, a presentation software program such as PowerPoint, updated word-processing capabilities, a good firewall and anti-virus protection

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery
+NCAA Eligibility for Comprehensive

French II

French II is a high school foreign language course that builds on and reviews skills and concepts taught in French I through further exposure to communication, cultures, connections, comparisons, and communities.

Course materials are designed to support students as they work to gain a basic proficiency in speaking, listening, reading, writing, and cultural competency.

Upon completion of the course, students should be able to do the following:

- Use basic French in everyday situations in oral and written communication.
- Use French vocabulary at the level appropriate to living in francophone countries.
- Demonstrate knowledge of France and other francophone countries.
- Listen to and understand passages in French related to various themes.
- Read and understand passages in French related to presented themes.
- Compare and contrast cultural aspects of francophone countries and the United States.

Prerequisite: French I

Length: Two Semesters

Required Materials: Access to vocaroo.com, microphone with headset, High-speed Internet and functional sound system, a presentation software program such as PowerPoint, updated word-processing capabilities, a good firewall and anti-virus protection

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery
+NCAA Eligibility for Comprehensive

Spanish I

Spanish I is an entry level high school foreign language course that explores the Spanish language through communication, culture, connections, comparisons, and communities.

Course materials are designed to support students as they work to gain a basic proficiency in speaking, listening, reading, and writing Spanish, and in cultural competency.

Upon completion of the course, students should be able to do the following:

- Use Spanish in everyday situations in a basic manner and in both oral and written communication.
- Use vocabulary necessary to function as a tourist in Spanish-speaking countries.
- Demonstrate a basic knowledge of the Spanish-speaking world.
- Listen to and understand basic passages in Spanish related to various themes.
- Read and understand basic passages in Spanish related to various themes.
- Compare and contrast cultural aspects of Hispanic countries and the United States.

Spanish I introduces students to the mechanics of the Spanish language, acquaints them with the cultural differences of Hispanic countries, and helps them gain a keen awareness of their own culture.

Prerequisite: None

Length: Two Semesters

Required Materials: Access to vocaroo.com, microphone with headset, Printer, internet Research materials, pictures of the student and family members, PowerPoint or presentation material, 2 lbs Meseca (a corn flour mix, found in the International section of the supermarket), Approx 2 c vegetable oil, 2 c of beans (generally cooked, black beans), Approx 3 c water to boil, Mixing bowls/utensils, Chipilin (an herb used in Central America that may be difficult to find in the United States) or chicken bouillon to taste, Salt to taste, Waxed paper or aluminum foil, Map of the country the student selects, Materials for map decorating. Ingredients for Salvadoran Pupusas: 2 c cornmeal or Maseca, if available, 1 ½ c water, Oil for frying, The filling of your choice (pork, beef, chicken, cheese)

Ingredients for Nuegados De Yuca: 2 c ground cassava (you can grind the raw cassava (also called yuca), or purchase cassava flour), 2 eggs, ½ t baking powder, Salt to taste, 4 oz of shredded cheese, Oil for frying, as much as you need for the pan, Paper, Pencil, Pictures of location chosen by the student illustrating its weather, Materials to build a model house, Materials for creating a restaurant menu, colored pencils, Materials to use to illustrate clothing on paper, 3 pictures of memories with the criteria listed in lesson. Ingredients for arroz con leche: Mixing bowls, 1/2 c rice, 4 c water, 4 c milk, 1 can evaporated milk, 1/4 t salt, Ground cinnamon, Sugar to taste, 1 t vanilla, Pictures of a memorable event, 5 pictures that represent things student did in the past

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery

+NCAA Eligibility for Comprehensive

Spanish II

Spanish II is a high school foreign language course that builds upon skills and concepts taught in Spanish I, emphasizing communication, cultures, connections, comparisons, and communities.

Course materials are designed to support students as they work to gain a basic proficiency in speaking, listening, reading, and writing Spanish, and in cultural competency.

Upon completion of the course, students should be able to do the following:

- Use Spanish in everyday situations in both oral and written communication.
- Use vocabulary necessary to live in a Spanish-speaking country.
- Demonstrate an understanding of Hispanic countries.
- Listen to and understand passages in Spanish related to various themes.
- Read and understand passages in Spanish related to themes.
- Compare and contrast cultural aspects of Hispanic countries and the United States.

This course gives students practice using the mechanics of the Spanish language, acquaints them with the cultural differences of Hispanic countries, and helps them gain a keen awareness of their own culture.

Prerequisite: Spanish I

Length: Two Semesters

Required Materials: Access to vocaroo.com, microphone with headset, Internet Research materials, Presentation materials, Microsoft Publisher (Recommended), Poster board, Materials for decorating, 4 pictures that represent a school and its features, Materials to create a brochure or poster, Photos of tourist areas (possibly could come from magazines), Microsoft PowerPoint (Recommended), Visual aids such as maps, drawings and photos, Poster board, Pictures, drawings, graphs, Materials for decorating, Paper, Drawing/painting tools, Four pictures of Guatemalan transportation, Presentation material, writing utensils, 5 photos from students' past

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery
+NCAA Eligibility for Comprehensive

Spanish III

Spanish III is a high school foreign language course that builds upon skills and concepts taught in Spanish II, emphasizing communication, cultures, connections, comparisons, and communities.

Course materials are designed to support students as they work to gain a basic proficiency in speaking, listening, reading, and writing Spanish, and in cultural competency.

Upon completion of the course, students should be able to do the following:

- Speak Spanish in everyday situations to communicate with other Spanish speakers.
- Write accurately and appropriately in Spanish to communicate with other Spanish speakers.
- Listen to and understand passages in Spanish related to various themes.
- Read and understand passages in Spanish related to various themes.
- Compare and contrast cultural aspects of Hispanic countries.
- Demonstrate an understanding of Hispanic countries and their corresponding cultures.

Prerequisite: Spanish II

Length: Two Semesters

Required Materials: Access to vocaroo.com, microphone with headset, Research materials, •Online research resources, Materials to create a brochure, Microsoft Publisher, Materials to take notes and write a report, Microsoft PowerPoint, Video presentation materials, camera, Photos of the place you choose to visit, Survey materials, interview materials, video presentation materials

Course Types: Comprehensive, Comprehensive Credit Recovery, Pacing Plus, Pacing Plus Credit Recovery
+NCAA Eligibility for Comprehensive

eDynamic Learning is North America's largest provider of middle and high school career and elective courses. Our catalog has over 100 specialized, high interest courses in 16 different pathways to ensure that students leave high school with the knowledge and preparation needed to make life-shaping college and career decisions.

Engage Students

Offer courses that engage your students in meaningful ways and improve their educational experience within your school program. Our courses allow students to customize their learning experience, engage socially and intellectually, and achieve academic excellence.



Personal Curriculum Narratives

Online course content does not have to read like a dry textbook. Our curriculum writers focus on keeping the student interested in the subject matter.



Reflective Discussion Assignments

High-interest discussion questions encourage students to share learning experiences with each other.



Captivating Course Lab Activities

Insightful videos and interactive online activities reinforce key course concepts.



Contemporary Graphics

Next generation graphics and thought-provoking instructional design that is expected by today's online student.



Effective Animations

Animated unit summaries, learning objectives and reflection points (with professional voice narrations) add to the media-rich learning experience.



Balanced Reading Level

A reading level that is both balanced and interesting for high schools students. To help students identify main ideas, key words and concepts are in bold.



Review Games

Entertaining and informative review games help prepare students for course assessments.



iTunes Audio Integration

All professional curriculum audio narration can be imported into a student's iTunes audio library.



eDynamic Podcasts

Each course contains professional audio narration of all unit content. This feature addresses the student's auditory needs, allowing them to either listen to the entire course, or download it using their choice of music player.

Why Choose eDynamic Learning?



Hassle-Free LMS Integration

Don't worry. Our courses are compatible with your current learning management system. We ensure that each course is 100% compatible with every LMS available. If you are not currently using a learning management system, we will provide one.



Flexible Teacher Implementation

Each course includes a detailed teacher guide and free access to our support team for any questions that arise. As a teacher-founded company, we know the importance of easy-to-use teacher guides that allow for more meaningful student-teacher interactions.



Inclusive of all Types of Learners

Courses meet Web Content Accessibility Guidelines 2.0 AA, enabling learners of all styles to participate equally.



Learning with Unlimited Flexibility

All courses work equally well on smartphones, tablets, laptops, or desktops.

twitter: @edynamiclearn

EDynamic

3D Modeling

Are you interested in a career in technology? Are you curious about working in fields like virtual reality, video game design, marketing, television and motion pictures, or digital imaging? If so, this course in 3D Modeling is a great place to start as it is the foundation for all these career paths. Gain a deeper understanding of graphic design and illustration as you use 3D animation software to create virtual three-dimensional design projects. Hone in on your drawing, photography, and 3D construction techniques and develop the skills needed to navigate within a 3D digital modeling workspace. This course is an excellent introduction to careers in the fast-growing field of technology and design.

Prerequisite: None

Length: Two Semesters

Required Materials:

This course was created using Blender version 2.79 and requires a computer running Windows Vista and above, Mac OSX 10.6 and above, or Linux

Minimum hardware requirements:

- 32-bit dual core 2Ghz CPU with SSE2 support
- 2 GB RAM
- 24 bits 1280×768 display
- Mouse or trackpad
- OpenGL 2.1 compatible graphics with 512 MB RAM

Recommended hardware requirements:

- 64-bit quad core CPU
- 8 GB RAM
- Full HD display with 24 bit color
- Three button mouse
- OpenGL 3.2 compatible graphics with 2 GB RAM

For Unit 1 Activity:

- Drawing paper or online drawing tool
- Protractor
- Pens and pencils
- Ruler
- Objects or graphics representing different polygons

Advertising and Sales Promotion

What comes to mind when you think of ‘marketing’? Perhaps a familiar television jingle plays in your head? Or maybe you think of those irritating sales phone calls? There’s no denying the sheer magnitude and power of the marketing industry. Every year companies spend approximately \$200 billion promoting their products and services—and that’s just in the United States alone! You may be familiar with being on the receiving end marketing, but what’s it like on the other side? In Advertising and Sales Promotions, you’ll see how these marketing campaigns, ads, and commercials are brought to life and meet some of the creative folks who produce them. You’ll learn about different marketing career opportunities and discover ways to be part of this exciting, fast-paced industry.

Prerequisite: None

Length: One Semester

Required Materials: A digital camera or camera phone

African American History

Over the course of U.S. history, how have African Americans helped shaped American culture? This African American History course answers that question by tracing the accomplishments and obstacles of African Americans beginning with the slave trade on up to the modern Civil Rights movement. What was it like during slavery, or after emancipation, or during the years of discrimination under Jim Crow? Who were some of the main figures who have shaped African American history? In this course, you'll learn about the political, economic, social, religious, and cultural factors that have influenced African American life, come face to face with individuals who changed the course of history, and explore how the African American story still influences current events today.

Prerequisite: None

Length: Two Semesters

Agriscience 1: Introduction

How can we make our food more nutritious? Can plants really communicate with each other? These are just two of the questions tackled in Agriscience 1: Introduction. From studying the secrets in corn roots to examining how to increase our food supply, this course examines how agri scientists are at the forefront of improving agriculture, food production, and the conservation of natural resources. In Agriscience 1: Introduction, you'll learn about the innovative ways that science and technology are put to beneficial use in the field of agriculture. You'll also learn more about some of the controversies that surround agricultural practices as nations strive to provide their people with a more abundant and healthy food supply.

Prerequisite: None

Length: One Semester

Agriscience 2: Sustaining Human Life

Have you ever strolled past a bright green cauliflower at the market and paused to ponder its unusual color? Ever wonder why "broccolini" is suddenly a thing? Well, if you find yourself curiously questioning these, and other, peculiar vegetables and wondering about the role of agriculture in the modern world, Agriscience 2 is for you. Learn how science and technology are revolutionizing our food supply and promoting innovative ways to produce healthy plant-based foods, such as developing better hybrids and growing edible plants in challenging places. Food is our most essential resource; see how plant science will change the face of eating in the 21st century and give us the knowledge to continually improve our green thumbs!

Prerequisite: Agriscience 1: Introduction

Length: One semester

Required Materials:

- Plant seeds or cuttings
- Growing media
- Growing container
- A sharp blade and rooting hormone, depending on the plant you choose
- Soil or other growing media
- Soil test kit
- 2-3 pots
- Seeds of your choice (make sure your growing medium is appropriate for the seed you chose)
- Plant
- Pest management materials (vary based on chosen strategy)

American Sign Language 1a: Introduction

Did you know that American Sign Language (ASL) is the third most commonly used language in North America? American Sign Language 1a: Introduction will introduce you to vocabulary and simple sentences, so that you can start communicating right away. Importantly, you will explore Deaf culture – social beliefs, traditions, history, values and communities influenced by deafness.

Prerequisite: None

Length: One Semester

Required Materials

- Computer with:
- Internet access
- Word processing program
- Slideshow creation program
- Cell phone, tablet, or computer camera with sound and video recording abilities
- A person, large stuffed animal, or chair
- 2 people (family, friend, classmate) to use in videos and lead a discussion with
- A photo (or even a drawing) of your family
- A hat—silly, crazy, or ordinary is fine
- Blank Paper
- Drawing tools (pencils, markers, etc.)

American Sign Language 1b: Learning to Sign

The predominant sign language of Deaf communities in the United States, American Sign Language is a complex and robust language. American Sign Language 1b: Learn to Sign will introduce you to more of this language and its grammatical structures. You will expand your vocabulary by exploring interesting topics like Deaf education and Deaf arts and culture.

Prerequisite: American Sign Language 1a: Introduction

Length: One Semester

Required Materials:

- Computer with:
- Internet access
- Word processing program
- Slideshow creation program
- Cell phone, tablet, or computer camera with sound and video recording abilities
- A person, large stuffed animal, or chair
- 2 people (family, friend, classmate) to use in videos and lead a discussion with
- A photo (or even a drawing) of your family
- A hat—silly, crazy, or ordinary is fine
- Blank Paper
- Drawing tools (pencils, markers, etc.)

Animation

Do you wonder what it would be like to create the next blockbuster animated movie or do you want to make the next big video game? Do you have an eye for drawing, technology, and timing? If so, Animation is the course for you! You will learn how to use animation tools to conceptualize and bring your creations to life. You'll learn the ins and outs of creating 2D and 3D animation, from start to finish. You'll even begin working on our own design portfolio and get hands on experience with creating your own animation projects. Learning about Animation could lead to a thriving career in the growing world of technology and animation.

Prerequisite: None

Length: Two Semesters

Required Materials:

The following program will need to be downloaded for use during the course:

- Stop Motion Studio App

The following free, cross-platform programs will need to be downloaded for use during the course (programs will run on Windows XP and higher, Linux and Mac computers):

- GIMP (GNU Image Manipulation Program)
- Tupi 2D Magic
- Blender
- DaVinci Resolve

Required Computer System Requirements:

- 2 GB of RAM
- 32-bit dual core
- 2Ghz CPU
- An OpenGL 2.1 compatible graphics card or chip

Recommended Items and Computer System Requirements:

- Smartphone or tablet computer
- Computer with keyboard that includes number pad
- 64-bit quad core CPU
- 8 GB of RAM
- HD display
- Three-button mouse
- OpenGL 3.2 compatible graphics card with 2 GB of RAM

Additional Materials Required for Unit 1:

- Modeling clay (optional)
- Camera (can be an actual camera or a camera on a tablet or device)
- Scissors
- Stiff paper or cardboard
- Glue or tape
- Thumbtack or pushpin
- Mirror

Additional Materials:

- Paper, pencil or pens • Magazines and/or newspapers

Anthropology 1: Uncovering Human Mysteries

What makes us human? Is it our ability to use language? Is it our abstract thinking skills or our use of tools and technology? In Anthropology 1: Uncovering Human Mysteries you will trace the history of homo sapiens and explore our evolutionary trail. This course offers an anthropological lens to observe our movement from cave dweller to modern human. It sheds light on how we forged our way and developed all of the things that make us human, such as our cultures, languages, and religions. We, as humans in the 21st century, are highly intelligent, innovative people with astounding technological ability—how did we get this way?

Prerequisite: None

Length: One Semester

Anthropology 2: More Human Mysteries Uncovered

How does your culture influence you? Find out how different locations shape various cultures and, in turn, how these cultures shape people's lives around the world—from the jungles of the Amazon to the islands of Indonesia.

Anthropology 2: More Human Mysteries Uncovered provides a fascinating look at this puzzle of culture. Many of our ancient cultures and languages were shaped by the geographical locations of our ancestors, and in this course, you will begin to visualize new ideas about how ancient cultures flourished through examining their views on life, death, art, and survival. In looking back and learning about cultures through the ages, we are better equipped to understand the world around us today.

Prerequisite: Anthropology 1: Uncovering Human Mysteries

Length: One Semester

Archaeology: Detectives of the Past

The famous Spanish philosopher and writer George Santayana once said, “Those who cannot remember the past are condemned to repeat it.” We know from studying history how true this statement is, and the age-old field of archaeology helps us to better understand, through discovery and analysis, how ancient civilizations have shaped the modern world. This fascinating course, Archaeology: Detectives of the Past, explores the various techniques, methods, and theories of this field and illustrates how archaeologists conduct their studies. What is it like to uncover precious artifacts? How are they located and preserved? Find the answer to these questions and more as you learn how ancient discoveries can unlock the secrets of a long and colorful past.

Prerequisite: None

Length: One Semester

Art in World Cultures

Who do you think is the greatest artist of all time? Maybe Leonardo da Vinci? Michelangelo? Maybe a more modern artist like Claude Monet or Pablo Picasso? Or is it possible that the greatest artist of all time is actually someone whose name has been lost to history? In Art in World Cultures, you'll learn about some of the greatest artists in the world while creating your own art, both on paper and digitally. This course explores basic principles and elements of art and teaches you how to critique different art works art. And along the way, you will get to discover some traditional art forms from various regions of the world including the Americas, Africa, and Oceania.

Prerequisite: None

Length: Two Semesters

Astronomy: Exploring the Universe

The universe is truly the last unknown frontier and offers more questions than answers. Why do stars twinkle? Is it possible to fall into a black hole? Will the sun ever stop shining? Since humans first glimpse into the vastness of the night sky, we have been fascinated with the celestial world of planets and stars. Astronomy: Exploring the Universe introduces you to the engaging world of astronomy. By using online tools, you will examine such topics as the solar system, space exploration, and the Milky Way and other galaxies. The course also explores the history and evolution of astronomy including those basic scientific laws of motion and gravity that have guided astronomers as they made their incredible discoveries of the universe.

Prerequisite: None

Length: One Semester

Biotechnology 1a: Introduction

How is technology changing the way we live? Is it possible nature can provide all the answers to some of science's most pressing concerns? In Biotechnology 1a: Introduction, you'll learn the basics of biotechnology and evolutionary theory, explore the various ways we store and preserve food, and discover the process of fermentation and microbiology. This course will also cover the importance of breeding plants and hybridization and how early breeding programs led to the study of genetics and an understanding of the function of genes. Finally, you'll delve into early industrial discoveries and explore the developments in biotechnology during the industrial revolution.

Prerequisite: None

Length: One Semester

Biotechnology 1b: Unlocking Nature's Secret

The fusion of biology and technology creates an amazing process and offers humanity a chance to significantly improve our existence, while simultaneously creating new challenges. In Biotechnology 1b: Unlocking Nature's Secrets, you'll build on your knowledge from Biotechnology 1a and learn how this field seeks to cure such deadly diseases as cancer and malaria, develop innovative medicine, and effectively feed the world through improved agricultural systems. Learn about some of the challenges biotechnology faces today, such as the growth of antibiotic resistant bacteria and questions about the safety of commercially produced genetically modified organisms (GMOs). You'll research new biotechnologies and learn how they are changing the world we live in, including the environmental benefits of industrial biotechnology.

Prerequisite: Biotechnology 1a: Introduction

Length: One Semester

Careers in Criminal Justice

Most of us have watched a sensationalized crime show at one time or another, but do we really know how things work behind those dreaded prison bars? Do we really understand all the many factors in our justice proceedings? The criminal justice system is a very complex field that requires many seriously dedicated people who are willing to pursue equal justice for all. The Careers in Criminal Justice course illuminates what those different career choices are and how the juvenile justice system, the correctional system, and the trial process all work together to maintain social order. Find out more about what really happens when the television show ends and reality begins.

Prerequisite: None

Length: Two Semesters

Coding 1a: Introduction to Programming

Have you ever wanted to create your own web page or wondered how your favorite websites were built? Maybe you want to know more about how computers and technology are affecting the world around us. In Coding 1a: Introduction to Programming, you will explore the role technology plays in our lives as well as study the fundamentals of computer science, review hardware and software, and learn how the internet functions. You will also discover how to create and build your own website using HTML and CSS and learn basic and complex commands and sequences as you become familiar with programming languages like JavaScript and Python Programming. This course also covers data collection methods, access rights, protocols, and security.

Prerequisite: None

Length: One Semester

Required Materials:

- Students will need to create a free account for the following sites: <https://www.pythonanywhere.com> and [/trello.com](https://trello.com)
- Students will use the following site to create flowcharts: <https://www.draw.io/>
- They can interact with these websites through any typical web browser.

Concepts of Engineering and Technology

What if you could do the impossible? Engineers understand a lot of things, but the word impossible definitely isn't one of them. Through Concepts of Engineering and Technology, you'll learn how the momentum of science is continually propelling engineers in new directions towards a future full of insight and opportunity. This course explores the different branches of engineering and how problem-solving, sketching, collaboration, and experimentation can change the very fiber of our human lives. This ever-increasing knowledge can also lead to serious ethical dilemmas and the need to discuss where the boundaries of science lie (or even if there should be boundaries). By examining astounding engineering feats and complex ongoing issues, you, too, will begin to question whether the word impossible really exists.

Prerequisite: None

Length: One Semester

Cosmetology 1: Cutting Edge Styles

We all want to look our best, but did you know there is actually a science behind cutting your hair and painting your nails? In Cosmetology 1: Cutting Edge Styles, you will learn all about this often entertaining field and how specialized equipment and technology are propelling our grooming into the next century. Just like all careers, cosmetology requires certain skills and characteristics, all of which are thoroughly explored in this course. You will learn about various beauty regimes related to hair, nails, skin, and spa treatments, and discover how to create your own business model quickly and efficiently while still looking fabulous, of course!

Prerequisite: None

Length: Two Semesters

Cosmetology 2: The Business of Skin and Nail Care

Helping people put their best face forward is a growing, vibrant industry which needs skilled and personable professionals well-versed in the latest trends and technological advances. In Cosmetology 2: The Business of Skin and Nails, experience what the day-to-day life of a cosmetologist is like. You will discover that cosmetology is much more than knowing and applying techniques. Additionally, you will explore skin care and facials, learn how to give manicures and pedicures and how to apply artificial nails, and gain an understanding of different hair removal techniques. Discover the next steps towards launching a rewarding and creative career in cosmetology.

Prerequisite: Cosmetology 1: Cutting Edge Styles

Length: One Semester

Required Materials:

- A computer with:
- Internet access
- A word processing program and a slide-show program
- A friend or family member to be your model
- A camera with:
- Sound—a cell phone camera is fine
- Video recording capabilities
- Trash can
- Trolley for products and tools
- Disposable Latex or Nitrile Gloves
- Clean sheets and towels
- Examples of work outfits – both appropriate and inappropriate
- Five beauty products of any kind from your own bathroom (to research their ingredients)
- Optional (for those doing labs/activities by hand):
- Large butcher paper or poster board
- Printer
- Markers, colored pencils, crayons

Basic Manicure & Pedicure Materials (in addition to General Materials):

- A desk (technician table)
- Seating:
- A technician chair
- A client chair
- Low to floor stool
- Footrest or ottoman
- Tub large enough for feet
- Bowl
- Client Cushion or rolled towel
- Nail Brushes
- Nail Clippers
- Nail Nippers
- Toenail Clippers
- Toenail Nippers
- Nail Board
- Wooden Pusher
- Cotton balls or gauze
- Polish Remover
- Cuticle remover
- Massage lotion or oil
- Base Coat
- Colored Nail Polish (at least 2 different colors)
- Top Coat
- Disinfection container

- Disinfectant (or water to stand in for chemical)

- Cleaning brush

Nail Enhancement Materials (in addition to General Materials):

- Abrasive boards

- Buffer block

- Nail Dehydrator

- Nail Tip Adhesive

- Nail Tips

- Nail forms

- Tip Cutter

- Monomer/Polymer application brush

- Dappen dishes

- Nail primer

- Monomer liquid

- Polymer powder

- Adhesive-backed fabric

- Small piece of plastic

- Small scissors

- Tweezers

- Wrap Resin

- Wrap Resin Accelerator

- Cleansing solution

- Gel Brush

- Lint-free cleansing wipes

- Nail tips and resin

- Nail dehydrator

- UV or LED gel lamp

- UV or LED gel

- UV or LED gel polish

- UV or LED bonding gel or gel primer

Facial Materials (in addition to General Materials):

- A facial table (if you don't have one, have your client lie down on a bed or in a recliner)

- Magnifying lamp (or a flexible lamp and a magnifying glass)

- Headband, head covering, or towel with fastener

- Cotton pads

- Facial gown (you may substitute a large shirt or apron)

- Paper and Pencil

- Bowls

- Antiseptic lotion

- Cleansers and Makeup Removers

- Exfoliant

- Masks

- Toner

- Massage cream or lotion

- Moisturizers and/or sun-protective lotion

- Gauze

- Mask brush

- Paper towels

- Spatulas

- Sponges

- Tissues

- Facial steamer (optional)

Eyebrow Materials (in addition to General Materials):

- Roll of disposable paper

- Headband, head covering, or towel with fastener
 - Cotton pads
 - Eyebrow brush
 - Wax heater
 - Wax
 - Wax remover
 - Tweezers
 - Fabric strips (if using soft wax)
 - Soothing or antiseptic lotion
 - Gentle cleanser and makeup remover
 - Toner
 - Spatulas or wooden applicators
 - Eyebrow and lash tint or dye (if legal in your state)
- Makeup Application Materials (in addition to General Materials):

- Makeup Cape
- Headband or hair clip
- Cotton pads, puffs, and swabs
- Sponges, Spatulas, and tissues
- Makeup Palette
- Disposable brushes for lip and mascara
- Eyelash curler and comb
- Assorted makeup brushes (for concealer, eye shadow, eyeliner, powder, brows, blush)
- Pencil Sharpener
- Cleansers
- Concealers
- Eye shadows
- Eyeliner
- Face powders
- Foundations
- Lip Colors
- Lip Liners
- Mascara
- Moisturizers
- Sunscreen
- Toner

Resume & Portfolio Materials (in addition to General Materials):

- Copies of your diplomas, certificates, and awards
- Photos from practice services you have performed
- Letters of reference or teacher recommendations

Creative Writing

For many hundreds of years, literature has been one of the most important human art forms. It allows us to give voice to our emotions, create imaginary worlds, express ideas, and escape the confines of material reality. Through creative writing, we can come to better understand ourselves and our world. This course can provide you with a solid grounding in the writing process, from finding inspiration to building a basic story. Then, when you are ready to go beyond the basics, learn more complicated literary techniques to create strange hybrid forms of poetry and prose. By the end of this course, you can better discover your creative thoughts and turn those ideas into fully realized pieces of creative writing.

Prerequisite: None

Length: One Semester

Criminology: Inside the Criminal Mind

Understanding the criminal mind is not easy. Why do certain people commit horrible acts? Can we ever begin to understand their reasoning and motivation? Perhaps. In *Criminology: Inside the Criminal Mind*, you will be given the rare opportunity to climb inside the mind of a criminal and examine the ideas and motivations at work. The mental state of a criminal can be affected by many different aspects of life—psychological, biological, sociological—all of which have differing perspectives and influences. You will investigate not only how these variables affect the criminal mind but also how the criminal justice system remains committed to upholding the law through diligence and an uncompromising process.

Prerequisite: None

Length: One Semester

Culinary Arts 1a: Introduction

Food, glorious food! It both nourishes and satisfies us, and it brings people together through preparation, enjoyment, and celebration. If you've ever wanted to learn more about cuisine and how your creativity and appreciation can be expressed by preparing food, Culinary Arts 1a: Introduction is perfect for you. Learn about the history and development of the food service industry, the basics of nutrition and different dietary needs, and laws and regulations governing food service. You will also develop fundamental culinary arts skills, including how to read and follow recipes, understand weight and measurements used in the food service industry, and how to be safe and sanitary in the kitchen.

Prerequisite: None

Length: One Semester

Required Materials:

- A digital camera or camera phone

Unit Three

- A medium-size skillet
- A flat spatula
- A gas or electric range
- 4 large flour tortillas
- 16 oz shredded cheddar cheese (2 cups)
- 1 cup sliced green chilies
- 1 Tbsp vegetable oil
- Sour cream and/or guacamole for toppings (optional)

Unit Four

- Kitchen mixer
- 7 egg whites
- 2 tsp vanilla
- ¼ tsp salt
- 1 tsp cream of tartar
- 14 Tbsp sugar
- Food thermometer

Unit Six

- Medium-size frying pan
- Tongs
- Spoon
- Paper towel
- Knife
- Gas or electric range
- 1 chicken breast and thigh with skin
- 6 Tbsp flour
- 1 tsp paprika
- 2 oz vegetable oil (¼ cup)
- Salt and pepper to taste

Culinary Arts 1b: Exploring Careers in Culinary Arts

Food is fundamental to life. Not only does it feed our bodies, but it's often the centerpiece for family gatherings and social functions with friends. Enhance your knowledge of the endless varieties of food, and explore what it takes to develop real talent as a chef. Through hands-on activities and in-depth study of the culinary arts field, Culinary Arts 1b: Exploring Careers in Culinary Arts will help you hone your cooking skills and give you the opportunity to explore the variety of careers available in the culinary arts industry. You will also learn the skills required to open, market, and manage a successful restaurant as you explore new technologies in food service.

Prerequisite: Culinary Arts 1a: Introduction

Length: One Semester

Required Materials:

- A digital camera or camera phone

Unit One

- Fresh shrimp (any quantity)
- Saucepan
- Gas or electric range

Unit Four

- Table or flat surface
- Large plate
- 1 small plate
- 2 glasses
- 2 spoons
- 2 forks
- 2 butter knives
- 1 napkin

Unit Five

- 1 medium-size frying pan
- 1 medium-size bowl
- 1-cup or 2-cup measuring cup
- Spatula
- 1 9x13 casserole dish
- Gas or electric range
- 8 slices of bread, cubed
- 2 cups milk
- 10 eggs
- 1 lb ground sausage
- 1 ½ cups shredded cheddar cheese
- Butter or cooking spray for greasing casserole dish

Unit Six

- Kitchen mixer with flat beater attachment
- Rubber spatula
- Spoon
- Baking tray lined with parchment paper
- Cling film (i.e. plastic wrap)
- 6 oz brown sugar (¾ cup)
- 3.5 oz butter (7 Tbsp)
- 4 Tbsp molasses
- 1 egg
- 13 oz flour (about 1 ½ cups)
- 2 tsp baking soda
- ½ tsp ground cloves
- 1 tsp cinnamon

- ¼ tsp salt

Culinary Arts 2: Baking, Pastry, and More!

Whether you aspire to be a world-class chef or just want to learn the skills needed to create your own dishes, Culinary Arts 2: Baking, Pastry, and More! will help you build a strong foundation and grow your knowledge of this exciting industry. In this course, you will explore baking and desserts, learn how to prepare proteins, and study nutrition and safety in the kitchen. You will also enhance your understanding of sustainability in the food industry, learn to prepare meals from a global perspective, and dissect the business of cooking, from managing a kitchen to successfully running a catering company. Discover the delights that await you on this delicious culinary adventure!

Prerequisite: Culinary Arts 1b: Exploring Careers in Culinary Arts

Length: Two Semesters

Required Materials:

- Smartphone or other way to take videos/photographs
- Presentation software (Microsoft Powerpoint, etc.)
- Stove
- Oven
- Baking and roasting pans/sheets
- Pots and frying pans
- Measuring spoons, cups and jugs
- Metal mixing bowls
- Wooden spoon/rubber spatula
- Baking parchment
- Serving plates
- Cutlery
- Water
- Salt

Unit 1

- Any dry ingredient (flour, sugar, etc.)
- Any liquid ingredient (eggs, milks, etc.)
- Kitchen equipment for maintenance (e.g., mixer or blender) with owners manual if possible
- Cleaning materials (dish soap, sanitizer, cleaning sponge, clean cloth)

Unit 2

- Bread flour
- Leavening agents (including yeast)
- Butter or preferred oil
- Pre-prepared bread mix
- Bread pans

Unit 3

- Flour
- Sugar
- Sweet and savory pie fillings (fruit, meats, etc.)
- Butter and shortening
- Eggs
- Pie pan

Unit 4

- Flour
- Butter
- Sugar
- Eggs
- Cream
- Cake pan

Unit 5

- Freezer
- Chocolate
- Thermometer
- Double boiler
- Baking parchment
- Pastry bag with variety of tips
- Fruit
- Sugar
- Garnishing tool of choice

Unit 6

- Tools of choice for molecular gastronomy

Unit 7

- Writing, printing, and/or drawing materials for props and planning video
- Gluten free alternative ingredient

Unit 8

- Three fair trade ingredients

Unit 9

- Two proteins of choice (fish, beef, etc.)

Unit 10

- Ingredients from various cultures
- Large serving plate or dish
- Cutlery for serving
- Writing materials
- Printer access

Unit 11

Materials or program for designing menus

- Writing materials
- Materials or program for presentation diagrams

Cybersecurity 1a: Introduction

Ever wonder what it's like to be a hacker? Or think about who is trying to steal your passwords while you're shopping online using the free Wifi at your local coffee shop? Can someone be watching your personal, private information? Can anything be kept "secret" online? We depend more and more on the technologies we interact with every day. This creates the need for increased system and network security measures. And, it means we all need to know more about how to protect valuable and vulnerable information. This course introduces you to the tools, technologies, and methods needed to protect online information and addresses how these issues are impacting safety and rights on a global and personal level. Learn what exciting career possibilities await you in the new and high-demand field of cybersecurity.

Prerequisite: None

Length: One Semester

Required Materials:

- Slide-show presentation program
 - Word processing program
- Software: Virtual Box: <https://www.virtualbox.org/wiki/downloads>

In order to run VirtualBox on your machine, you need:

- CPU: Recent Intel or AMD processor
- Memory: 2+GB RAM
- Hard disk: About 4GB free hard disk space
- Supported Operating System: Windows, Mac OS X, Linux, Solaris and OpenSolaris.

Other Materials

- USB memory stick (Recommended to be at least 4 GB)

Optional Materials

(The following materials will only be needed if student chooses to do some activities/labs by hand.)

- Printer
- Blank paper (a variety of sizes)
- Markers, crayons, pens, pencils

Note: Your state's standards for this Cybersecurity course may require students to purchase and to install security equipment. Check with your school's administration to determine if this is necessary for course completion. This course provides alternate activities that could address these standards

Cybersecurity 1b: Defense Against Threats

Ever wonder what it's like to be a hacker? Or think about who is trying to steal your passwords while you're shopping online using the free Wi-Fi at your local coffee shop? Unmask the cybersecurity threats around you by understanding hackers and identifying weaknesses in your online behavior. Learn to avoid the various types of cyber attacks, including those to your social media accounts, and to predict the potential legal consequences of sharing or accessing information that you do not have rights to. Dig into these crimes in depth by taking a look at cyber forensics and other cybersecurity careers. In a world where such threats have no boundaries, cybersecurity will undoubtedly play an increasingly larger role in our personal and professional lives in the years to come.

Prerequisite: Cybersecurity 1a: Foundations

Length: One Semester

Required Materials:

- Slide-show presentation program
- Word processing program

Software: Wireshark: <https://www.wireshark.org/#download>

In order to run Wireshark on your machine, you need:

- Hard disk: USB memory stick (Recommended to be at least 4 GB)
- Memory: 2+GB RAM
- Supported Operating System:

Windows, Mac OS X

Software: Virtual Box: <https://www.virtualbox.org/wiki/downloads>

In order to run VirtualBox on your machine, you need:

- CPU: Recent Intel or AMD processor
- Memory: 2+GB RAM
- Hard disk: About 4GB free hard disk space
- Supported Operating System: Windows, Mac OSX, Linux, Solaris and OpenSolaris

Other Materials

- USB memory stick (Recommended to be at least 4 GB)

Optional Materials

(The following materials will only be needed if student chooses to do some activities/labs by hand.)

- Printer
- Blank paper (a variety of sizes)
- Markers, crayons, pens, pencils

Note: Your state's standards for this Cybersecurity course may require students to purchase and to install security equipment. Check with your school's administration to determine if this is necessary for course completion. This course provides alternate activities that could address these standards.

Digital Photography 1a: Introduction

Have you ever wondered how photographers take such great pictures? Have you tried to take photographs and wondered why they didn't seem to capture that moment that you saw with your eyes? The Digital Photography I course focuses on the basics of photography, including building an understanding of aperture, shutter speed, lighting, and composition. Students will be introduced to the history of photography and basic camera functions. Students will use the basic techniques of composition and camera functions to build a portfolio of images, capturing people, landscapes, close-up, and action photographs.

Prerequisite: None

Length: One Semester

Required Materials:

- Manual camera or digital camera with manual settings (the camera needs to allow for the mode, shutter speed, and aperture to be adjusted)

A Smartphone may be used for most required tasks, however, appropriate applications will need to be installed to allow the student to make the necessary adjustments to the camera mode, shutter speed, and aperture.

- Tripod (or necessary item(s) to create a stable foundation such as a table)
- Reflector (white paper, poster board, sheets, or a wall can also serve as a reflector)
- Image editing software
- Access to a slideshow application, such as PowerPoint

Digital Photography 1b: Creating Images with Impact

In today's world, photographs are all around us, including in advertisements, on websites, and hung on our walls as art. Many of the images that we see have been created by professional photographers. In this course, we will examine various aspects of professional photography, including the ethics of the profession, and examine some of the areas that professional photographers may choose to specialize in, such as wedding photography and product photography. We will also learn more about some of the most respected professional photographers in history and we will learn how to critique photographs in order to better understand what creates an eye catching photograph.

Prerequisite: Digital Photography 1a: Introduction

Length: One Semester

Required Materials:

- Manual camera or digital camera with manual settings (the camera needs to allow for the mode, shutter speed, and aperture to be adjusted)

A Smartphone may be used for most required tasks, however, appropriate applications will need to be installed to allow the student to make the necessary adjustments to the camera mode, shutter speed, and aperture.

- Tripod (or necessary item(s) to create a stable foundation such as a table)
- Reflector (white paper, poster board, sheets, or a wall can also serve as a reflector)
- Image editing software
- Access to a slideshow application, such as PowerPoint

Digital Photography 2: Discovering Your Creative Potential

In today's world, we are surrounded by images. We are continually seeing photographs as they appear in advertisements, on websites, in magazines, and on billboards; they even adorn our walls at home. While many of these images have been created by professional photographers, it is possible for your photos to take on a more professional look after you discover how to increase your creative potential. In Digital Photography 2: Discovering Your Creative Potential, you will examine various aspects of the field including specialty areas, ethics, and famous photographers throughout history. You will also learn how to effectively critique photographs so you can better understand composition and go on to create more eye-catching photographs on your own.

Prerequisite: Digital Photography 1b: Creating Images with Impact!

Length: One Semester

Required Materials:

- Digital camera: "point and shoot" or above

A Smartphone may be used for most required tasks, however, appropriate applications will need to be installed to allow the student to make the necessary adjustments to the camera mode, shutter speed, and aperture.

- One frame (of your choice) to display a photograph on the wall
- 3M strip (or something similar)
- Image editing software capable of the following:
 - cropping
 - changing a photo to black and white
 - adjusting color and brightness
 - resizing images
 - applying filters and special effects like texture or glitter
 - creating layers

Early Childhood Education 1a: Introduction

As children, we see the world differently than we do as teenagers and adults. It is a world full of magical creatures and strange, exciting things. In Early Childhood Education 1a: Introduction, you'll learn how you can have an impact on the most important years of human development. Explore child-care roles and responsibilities and discover why early childhood education matters. You'll learn the rules and regulations of child-care facilities, how to maintain a safe, clean, and healthy environment, and understand how to plan meals and menus for children. You will also study the various stages of early childhood development, including physical, cognitive, language, and social growth and how to recognize developmental milestones and delays.

Prerequisite: None

Length: One Semester

Early Childhood Education 1b: Developing Early Learners

What makes childhood such a wondrous time of learning and exploration? What can caregivers do to encourage this? In Early Childhood Education 1b: Developing Early Learners, you will learn more about the childhood experience and how to create fun, stimulating, and educational environments for children. Discover how to get children excited about learning and, just as importantly, to feel confident about their abilities. Learn to effectively communicate with children, how to create good behavior, and how to discipline youth of different ages. You will also learn how to encourage language development in young children and how to create a literacy-rich environment. Finally, build an educational plan that will help you meet your career goals and explore professional development opportunities that will assist you on your path.

Prerequisite: Early Childhood Education 1a: Introduction

Length: One Semester

Entrepreneurship: Starting Your Business

What does it really take to own your own business? Does the sound of being your own boss make you feel excited or anxious? Either way, Entrepreneurship: Starting Your Business will get you started in the right direction. This course explains the ins and outs of such an enterprise, giving you the confidence needed to be your very own boss. You will discover what is needed to operate a personal business from creating a plan, generating financing, and pricing products to marketing services and managing employees. If you've ever dreamed of being a true entrepreneur but feel daunted by the prospect, this is your chance to learn all you need to know.

Prerequisite: None

Length: Two Semesters

Required Materials:

- Students need a video camera or recording device for their projects.

Fashion and Interior Design

Do you have a flair for fashion? Are you constantly looking for new ways to decorate or design your room? If so, Fashion and Interior Design is the course for you. Explore the world of design and begin to understand the background and knowledge needed to develop a career in this exciting field. Try your hand at designing through a project-based process, learning how color, composition, and texture can all affect great aesthetics. You'll develop the essential communications skills necessary to build a successful business and begin to develop the kind of portfolio that will lead to future career opportunities. Perhaps it's time to get your stylish foot in the door?

Required Materials

- Clothing items
- Sewing machine
- Digital camera
- Thread
- Fabric
- Clothing Patterns
- Measuring tape
- Sketchpad
- Paper
- Scissors

Prerequisite: None

Length: Two Semesters

Forensic Science 1: Secrets of the Dead

Fingerprints. Blood spatters. Gunshot residue. If these things intrigue you rather than scare you, Forensic Science 1: Secrets of the Dead may be for you. This course offers you the chance to dive into the riveting job of crime scene analysis. Learn the techniques and practices applied during a crime scene investigation and how clues and data are recorded and preserved. You will better understand how forensic science applies technology to make discoveries and bring criminals to justice as you follow the entire forensic process—from pursuing the evidence trail to taking the findings to trial. By careful examination of the crime scene elements, even the most heinous crimes can be solved.

Prerequisite: None

Length: One Semester

Forensic Science 2: More Secrets of the Dead

Every time a crime is committed, a virtual trail of incriminating evidence is left behind just waiting to be found and analyzed. In Forensic Science 2: More Secrets of the Dead, you'll learn even more about the powerful science of forensics and how it has changed the face of crime and justice in our world. You will learn some basic scientific principles used in the lab, such as toxicology, material analysis, microscopy, and forensic anthropology and find out how scientists use everything from insects to bones to help them solve crimes. Discover how advanced techniques and methodical processes can lead to catching even the craftiest criminal. The best way to battle crime these days is not with a weapon, but with science.

Prerequisite: Forensic Science 1: Secrets of the Dead

Length: One Semester

Forensics: The Science of Crime

We watch with interest as crime scenes are dramatized on television and in film, and sit on the edge of our seat as various members of the justice system solve the most baffling cases. But what about the science behind the crime? Forensics: The Science of Crime explores the role science and technology plays in this fascinating and growing career. In this course, you'll learn the specialized skills and techniques used during a crime scene investigation and how evidence and data is expertly collected, preserved, and analyzed. With a strong focus on the innovative science used in the field as well as participation in interactive activities, you will follow the entire forensic process – from examining evidence to taking the findings to trial – and learn how the professionals are utilizing science to bring criminals to justice.

Prerequisite: None

Length: Two Semesters

Forestry and Natural Resources

Whether you are a treehugger or not, everyone loves the beauty and serenity of a healthy forest. Our precious woodland species not only supply us with aesthetic beauty but also play a valuable role in nature. Trees uphold a great deal of our wildlife ecosystem while providing us humans with needed lumber, paper products, and even food. But these forests cannot protect themselves and depend greatly on humans for conservation. In Introduction to Forestry and Natural Resources, you will learn more about this meaningful relationship and how environmental policy, land use, water resources, and wildlife management all factor into current forestry issues. After better understanding these variables and how they affect the majesty of our forests, you may just be hugging these gentle giants after all.

Prerequisite: None

Length: One Semester

Required Materials:

- A digital camera or camera phone
- Approximately 1 cup of soil
- A clear glass jar with a lid
- Water to fill the jar
- A ruler or tape measure
- Marker or tape
- Supplies for an experiment of the student's choice
- Samples of water from three different water sources
- 3 clear glass containers with lid

Game Design 1a: Introduction

Are you a gamer? Do you enjoy playing video games or coding? Does the idea of creating and designing your own virtual world excite you? If so, this is the course for you! Tap into your creative and technical skills as you learn about the many aspects involved with designing video games. You will learn about video game software and hardware, various gaming platforms, necessary technical skills, troubleshooting and internet safety techniques, and even the history of gaming. And to top it all off, you'll even have the opportunity to create your very own plan for a 2D video game! Turn your hobby into a potential career and go from simply being a player in a virtual world to actually creating one!

Prerequisite: None

Length: One Semester

Required Materials:

- Computer
- internet access
- slideshow program
- word processing program
- Unity LTS Release 2017.4.0f1
- OS: Windows 7 SP1+, 8, 10, 64-bit versions only; Mac OS X 10.9+. Server versions of Windows & OS X are not tested.
- GPU: Graphics card with DX10 (shader model 4.0) capabilities.
- Timing device (smartphone, stopwatch, or kitchen timer)
- Photo and video equipment
- May be a digital camera, a phone with a camera or a computer camera
- Several (10-20) pieces of blank paper
- Pencil and/or pen

Optional Materials

For students who prefer to complete activities/lab by hand:

- Poster board or butcher paper
- Markers, crayons, colored pencils
- A printer

Gothic Literature: Monster Stories

Vampires, ghosts, and werewolves have lived in our collective imagination since the 18th century, and they continue to influence the world of fiction even today. Gothic Literature: Monster Stories focuses on the major themes found in Gothic literature and demonstrates the techniques writers use to produce a thrilling psychological experience for the reader. The themes of terror versus horror, the power of the supernatural, and the struggle between good and evil are just a few of the classic Gothic subjects explored in this course. Are you brave enough to go beyond the fear and find an appreciation for the dark beauty of Gothic stories?

Prerequisite: None

Length: One Semester

Great Minds in Science: Ideas for a New Generation

Sometimes there are simply more questions than answers. Does life exist on other planets? How extreme is the human ability to survive? Will the issue of global warming ever be solved? Today, scientists, explorers, and writers are working to answer such questions by using extensive inquiry to find innovative solutions. Similar to such famous minds from history as Edison, Einstein, Curie, and Newton, the scientists of today are finding ways to revolutionize our lives and the world. Great Minds in Science: Ideas for a New Generation takes an in-depth look at the extraordinary work of these individuals and demonstrates how their ideas may very well shape the world of tomorrow.

Prerequisite: None

Length: Two Semesters

Health Science 1: The Whole Individual

We know the world is filled with different health problems and finding effective solutions is one of our greatest challenges. How close are we to finding a cure for cancer? What's the best way to treat diabetes and asthma? How are such illnesses as meningitis and tuberculosis identified and diagnosed? Health Science 1: The Whole Individual provides the answers to these questions and more as it introduces you to such health science disciplines as toxicology, clinical medicine, and biotechnology. Understanding the value of diagnostics and research can lead to better identification and treatment of many diseases, and by learning all the pertinent information and terminology you can discover how this amazing field will contribute to the betterment human life in our future.

Prerequisite: None

Length: Two Semesters

Required Materials:

- A video camera / recording equipment

Health 1: Life Management Skills

Imagine the healthiest people you know . . . what's their secret? While some health traits are genetically determined, the truth is we all have the ability to make positive changes in our physical lives. In Health 1: Life Management Skills, you will learn how to promote better health by decreasing stress and finding a fuller vision of your life. Explore different lifestyle choices that can influence your overall health—from positively interacting with others, to choosing quality health care, to making sensible dietary choices. You will have the opportunity to build your own plan for improvement and learn how to create the type of environment that will ensure your overall health, happiness, and well-being.

Prerequisite: None

Length: One Semester

Health Science: Nursing

Nursing is an in-demand career, perfect for someone looking for a rewarding and challenging vocation in the healthcare sector. With a strong focus on patient care, a nurse must be skilled in communication, promoting wellness, and understanding safety in the workplace. In Health Science: Nursing, you will explore communication and ethics, anatomy and physiology, and the practice of nursing. Learn how to build relationships with individuals, families, and communities and how to develop wellness strategies for your patients. From emergency to rehabilitative care to advances and challenges in the healthcare industry, discover how you can launch a fulfilling career providing care to others.

Prerequisite: None

Length: Two Semesters

Required Materials:

- Computer with word processing program like MS Word, Excel-type program, and slide show program like PowerPoint
- Computer with access to internet
- Brochure maker software (optional)
- Video Recording device: smartphone, digital camera with audio, computer camera, or any device that can record both video and sound.
- First aid kit and supplies:
 - Alcohol and cotton swabs or alcohol wipes
 - Syringe or object to mimic syringe (pencil)
 - Bandage materials: sterile gauze, tape, large bandages
 - Space blanket
 - Antiseptic cream/gel
 - Scissors
 - Cold pack
 - Surgical Gloves
 - Surgical Gown (or clothing that is similar)
 - Object like a piece of fruit to demonstrate asepsis
 - Clean towels or pieces of cloth
 - Thermometer
 - Bathroom scale
 - Yardstick or measuring tape
 - Stopwatch or watch with timer or second hand
 - Friend or family member to act as your “patient”
 - Practice dummy: a large pillow or stuffed animal is a good substitute
 - Automated External Defibrillator or a box with two strings attached; the strings will need adhesive bandages or tape on the ends

Health Science: Public Health

What is public health? Who is in control of our health systems and who decides which diseases get funding and which do not? What are the human and environmental reasons for health inequality? Health Science: Public Health answers all of these questions and more. You will study both infectious and non-communicable diseases as well as learn how we conquer these on a community and global level through various methods, including proper hygiene, sanitation, and nutrition. Explore the role current and future technologies play worldwide as well as consider the ethics and governance of health on a global scale. Discover unique career opportunities, and fascinating real-life situations.

Prerequisite: None

Length: Two Semesters

Required Materials:

- Computer
- with internet connection
- with access to a word-processing program
- with access to a slideshow presentation program
- with the ability to do screen shots or use the Snipping Tool
- with access to Dropbox
- Device with Photo- and Video-Recording

Capabilities:

- cell phone, digital camera, or computer camera
- Poster-Board or Large Butcher Paper
- Craft Materials:
 - markers, glue, pencils, pens, scissors (only necessary for those who choose to create handmade projects rather than digital when given the option; however, there is always a digital option for every lab/activity that involves creating a presentation)
- Toy Doll or Stuffed Animal for Demonstrations
- Watch, Digital Timer, or the Timer on a Cell Phone

Optional Materials

There are ways to complete the labs and activities without these materials (as explained in individual labs and activities); however, if it is possible to obtain these materials, they will be helpful:

- Human Volunteer
- friend or family member
- Scale
 - to take a person's weight
- Measuring Tape
- Thermometer
 - to take a person's temperature
- Blood Pressure Cuff
- Printer with Paper and Black and White Ink (and Preferably Colored Ink)
- Protective Clothing: Gown, Mask, and Gloves

Health Science 2: Patient Care and Medical Services

Are you looking for a job that's challenging, interesting, and rewarding? These three words describe many of the different careers in health care, and Health Science 2: Patient Care and Medical Services will show you how to become part of this meaningful vocation. Promoting wellness, communicating with patients, and understanding safety in the workplace are just a few of the essential skills you will learn, all the while becoming familiar with some of the more prominent areas in the field, such as emergency care, nursing, infection control, and pediatrics. You'll learn about some of the inherent challenges faced by this age-old profession and how you can become a significant part of the solution.

Prerequisite: Health Science 1: The Whole Individual

Length: Two Semesters

History of the Holocaust

"Never shall I forget that night, the first night in camp, which has turned my life into one long night, seven times cursed and seven times sealed." Elie Wiesel, a Holocaust survivor, wrote these words about his experiences in a Nazi concentration camp. History of the Holocaust will take you through the harrowing details of anti-Semitism, the power of the Nazi party, the persecution of European Jews and other groups, and the tremendous aftermath for everyone involved in World War II. You'll explore the causes of the Holocaust, the experiences of Jews and other individuals during this time, and what has been done to combat genocide since WWII. "For the dead and the living, we must bear witness."

Prerequisite: None

Length: Two Semesters

Hospitality and Tourism 1: Traveling the Globe

Think about the best travel location you've ever heard about. Now imagine working there. In the 21st century, travel is more exciting than ever, with people traversing the globe in growing numbers. Hospitality and Tourism 1: Traveling the Globe will introduce you to a thriving industry that caters to the needs of travelers through managing hotels, restaurants, cruise ships, resorts, theme parks, and any other kind of hospitality you can imagine. Operating busy tourist locations, creating marketing around the world of leisure and travel, spotting trends, and planning tasteful events are just a few of the key aspects you will explore in this course as you locate your own career niche in this exciting field.

Prerequisite: None

Length: One Semester

Hospitality and Tourism 2a: Hotel and Restaurant Management

If you love working with people, a future in hospitality may be for you. In Part 1 of Hospitality and Tourism 2a: Hotel and Restaurant Management, you will learn about what makes the hotel and restaurant industries unique. Learn about large and small restaurants, boutique and resort hotels, and their day-to-day operations. Evaluate the environment for these businesses by examining their customers and their competition. As well, you will discover trends and technological advances that makes each industry exciting and innovative. In Part 1, you can explore a variety of interesting job options from Front Desk and Concierge services to Maître d and food service.

Prerequisite: None

Length: One Semesters

Required Materials:

- Computer with:
- Internet access
- Slideshow program like Keynote or PowerPoint
- Word processing program like Microsoft Word
- Video recording device
- Digital camera, cell phone, or computer with video capabilities
- Audio recording device
- Computer, cell phone app, or handheld voice recorder
- A friend or family member to assist with various activities/labs
- A real or fake telephone to use as a prop

Optional Materials

(only needed if student will not create labs/activities digitally)

- Craft materials:
- Crayons, markers, colored pencils
- Glue
- Scissors
- Poster board or butcher paper
- Printer

Human and Social Services 1

Those working in the field of social services are dedicated to strengthening the economic and social well being of others and helping them lead safe and independent lives. In Human and Social Services 1, you will explore the process of helping, body, mind, and family wellness, and how you can become a caring social service professional. If you are interested in an emotionally fulfilling and rewarding career and making a difference in the lives of others, social and human services may be the right field for you.

Prerequisite: None

Length: Two Semesters

Required Materials:

- Computer with internet access and a word processing program
- Video recording device: smartphone, digital camera with audio, computer camera, or any other device than can record both video and sound

Optional Materials

- Drawing software
- Brochure maker software
- Multimedia-type programs
- Paper and drawing tools
- Digital scanner to scan hand-drawn images
- Donation box

Human Geography: Our Global Identity

Modern humans have been roaming the earth for about 200,000 years. How do the places we live influence the way we live? How do geography, weather, and location relate to our customs and lifestyles? In Human Geography: Our Global Identity, you will explore the diverse ways that different people have physically influenced the world around them and how they, in turn, are changed by their surroundings. Discover how beliefs and ideas spread through time, shaping and changing the cultures they encounter. In this course, you'll gain tremendous insight into human geography and begin to better understand the important relationship between humans and their environments.

Prerequisite: None

Length: One Semester

International Business: Global Commerce in the 21st Century

Imagine meeting with suppliers at an office in Europe while calling your saleroom that's back in Asia. Imagine investing in foreign markets and visiting partners in exotic locales. With the evolution of current technology, our world is more connected than ever before, and the business community today is larger than ever. International Business: Global Commerce in the 21st Century will demonstrate just how you can gain the knowledge, skills, and appreciation to live and work in the global marketplace. You will begin to understand how both domestic and international businesses are affected by economic, social, cultural, political, and legal factors and what it takes to become a true manager of a global business in the 21st century.

Prerequisite: None

Length: One Semester

Journalism 1a: Introduction

Are you a storyteller at heart? Are you always the first one to know what's going on at school or in your town and excited to share the latest breaking news? If so, you are the kind of person every online, print, and broadcast news outlet is searching for, and Journalism 1a: Introduction is the perfect course for you! Explore the history of journalism and see how social media and the digital world has changed the way news media operates. Learn the basics of press law as well as the code of ethics journalists should follow. Finally, understand how to make your writing and speaking more powerful, and discover the importance of pictures and images when telling a story.

Prerequisite: None

Length: One Semester

Journalism 1b: Investigating the Truth

If you want to turn your writing, photography, and collaborative skills into an exciting and rewarding career, Journalism 1b: Investigating the Truth is where to begin. Learn how to write a lead that grabs your readers, discover the roles of sources and how to interview them effectively, and explore the best options for researching your story in a digital world. You will also understand the role editors and producers play in the revision process, learn how to prepare your posts for publication, and how to follow the publication process - from the flow of a work day to the layout of a newspaper or a news broadcast.

Prerequisite: Journalism 1a: Introduction

Length: One Semester

Law and Order: Introduction to Legal Studies

Imagine if there were no laws and people could do anything they wanted. It's safe to say the world would be a pretty chaotic place! Every society needs some form of regulation to ensure peace in our daily lives and in the broader areas of business, family disputes, traffic violations, and the protection of children. Laws are essential to preserving our way of life and must be established and upheld in everyone's best interest. In *Law and Order: Introduction to Legal Studies*, you'll delve deeper into the importance of laws and consider how their application affects us as individuals and communities. Through understanding the court system and how laws are actually enacted, you will learn to appreciate the larger legal process and how it safeguards us all.

Prerequisite: None

Length: One Semester

Learning in a Digital World

The digital world seems to change every day, and touch more of our lives. We use technology to communicate with friends and family, find never-ending entertainment options, follow our favorite sports teams and fashion trends, and do our school work. In *Learning in a Digital World* you will get the tools to navigate this exciting and always changing world. Learn about real-world issues and how to solve real-world problems through interactive and hands-on assignments. Discover what it means to be a responsible digital citizen, expand your digital literacy, and become a successful online student. Consider the best ways to find, create, and share information, learn to maximize information and communication technologies, and explore digital content creation, from emails and blogs to social media, videos, and podcasts.

Prerequisite: None

Length: One Semester

Required Materials:

- Digital camera – either camera phone, iPad, computer camera – as long as image can be recorded and uploaded to computer
- Paper and colored pencils if student chooses to hand draw certain activities

Life Skills: Navigating Adulthood

What do you want out of life? How do you achieve your dreams for the future? These can be difficult questions to answer, but with the right tools, they don't have to be. This course will encourage you to learn more about yourself and help you to prepare for the future. You will explore goal setting, decision making, and surviving college and career. You will also discover how to become a valuable contributing member of society. Now is the time to take action. It's your life, make it count!

Prerequisite: None

Length: One Semester

Introduction to Manufacturing: Product Design and Innovation

Think about the last time you visited your favorite store. Now picture the infinite number of products you saw. Have you ever wondered how those things made it to the shelves? Whether it's video games, clothing, or sports equipment, the goods we purchase must go through a manufacturing process before they can be marketed and sold. In *Manufacturing: Product Design and Innovation*, you will learn about different types of manufacturing systems as well as career opportunities, including engineers, technicians, and supervisors. As a culminating project, you will plan your own manufacturing process and create an entirely original product! If you thought manufacturing meant mundane assembly lines, this course will show you how exciting, creative, and practical this industry can be.

Prerequisite: None

Length: One Semester

Introduction to Military Careers

Most of us have seen a war movie; maybe it had a hotshot aviator or a renegade private or a daring Special Forces operative. But outside of these sensationalized portrayals, do you really understand how the military works or what it can do for you? The military offers far more career diversity than most people imagine, and Introduction to Military Careers will provide the information you need to gain a broader understanding of how to find the right fit. You will learn about the five military branches—Air Force, Army, Coast Guard, Marines Corps, and Navy—and examine which jobs you might like to pursue. From aviation, to medicine, to law enforcement, the military can be an outstanding place to achieve your dreams in a supportive and well-structured environment.

Prerequisite: None

Length: One Semester

Marine Science 1a: Introduction

What is marine science and what role does it play in our daily life? In Marine Science 1a: Introduction, you'll explore the development of oceans and the role water plays in shaping our environment and climate. Learn about the oceanic and freshwater processes, changes in ecosystems, and the connection between water and weather. You will also learn about energy in the ocean, including the principles of fluid dynamics, the role of hydrostatic pressure, the law of conservation of energy, and the measurable properties of waves. Through the use of scientific inquiry, research, measurement, and problem solving, you will conduct various scientific procedures that will lead to an increased level of knowledge about Marine Science.

Prerequisite: None

Length: One Semester

Marine Science 1b: Secrets of the Blue

Have you ever wondered about the secrets of the deep, and how the creatures below the ocean's surface live and thrive? In Marine Science 1b: Secrets of the Blue, you will further explore the aquatic cycles, structures, and processes that generate and sustain life in the sea. Learn about the importance of adaptation for survival and the role of natural selection in evolution. What populations survive and thrive in the ocean? You'll also learn how humans interact with the environment, the role we play on marine systems and ecosystems, and recognize the scientific and ethical questions that arise during advanced experiments. You will also learn about the exciting career opportunities that exist in the world of Marine Science.

Prerequisite: Marine Science 1a: Introduction

Length: One Semester

Music Appreciation: The Enjoyment of Listening

Have you ever heard a piece of music that made you want to get up and dance? Cry your heart out? Sing at the top of your lungs? Whether pop, classical, or anything in between, music provides a powerful way for people to celebrate their humanity and connect with something larger than themselves. Music Appreciation: The Enjoyment of Listening not only will provide a historical perspective on music from the Middle Ages to the 21st century, but it will also teach you the essentials of how to listen and really hear (with a knowledgeable ear) the different music that's all around you. Learning how to truly appreciate sound and melody is the best way to ensure a continued love of this delightful art form.

Prerequisite: None

Length: One Semester

Mythology and Folklore: Legendary Tales

Since the beginning of time, people have gathered around fires to tell stories of angry gods, harrowing journeys, cunning animals, horrible beasts, and the mighty heroes who vanquished them. Mythology and folklore have provided a way for these colorful stories to spring to life for thousands of years. Mythology and Folklore: Legendary Tales will illustrate how these famous anecdotes have helped humans make sense of the world. Beginning with an overview of mythology and different types of folklore, you will journey with age-old heroes as they slay dragons, outwit gods, defy fate, fight endless battles, and outwit clever monsters with strength and courage. You'll explore the universality and social significance of myths and folklore and see how these powerful tales continue to shape society even today.

Prerequisite: None

Length: One Semester

National Security

Do you know what it takes to keep an entire nation safe? It not only requires knowledge of how to handle disasters, but it also demands a cool head and tremendous leadership abilities. In National Security, you will have the opportunity to learn about the critical elements of the job, such as evaluating satellite information, analyzing training procedures, assessing military engagement, preparing intelligence reports, coordinating information with other security agencies, and applying appropriate actions to various threats. Put yourself in the position of the country's decisive leaders and develop your own knowledge base and skill set necessary to meet the requirements of our nation's most demanding career.

Prerequisite: None

Length: One Semester

Nutrition and Wellness

Have you ever heard the phrase "your body is your temple" and wondered what it means? Keeping our physical body healthy and happy is just one of the many challenges we face, and yet, many of us don't know how to best achieve it. Positive decisions around diet and food preparation are key to this process, and you will find the essential skills needed to pursue a healthy, informed lifestyle in Nutrition and Wellness. Making sure you know how to locate, buy, and prepare fresh delicious food will make you, and your body, feel amazing. Impressing your friends and family as you nourish them with your knowledge? That feels even better!

Prerequisite: None

Length: Two Semesters

Peer Counseling

Are you the person that people come to for advice? Does it seem that your friends always talk to you about their problems? If so, Peer Counseling may be the perfect course for you. It offers ways for you to explore this valuable skill and better understand how it can make a difference in the lives of others. Helping people achieve their personal goals is one of life's most rewarding experiences, and Peer Counseling will show you the way to provide support, encouragement, and resource information. Learn how to observe others as a Peer Counselor as you carefully listen and offer constructive, empathic communication while enhancing your own communication skills.

Prerequisite: None

Length: One Semester

Personal and Family Finance

We all know money is important in life. But how important? In fact, the financial decisions you make today may have a lasting effect on your future. Rather than feeling anxious about money feel empowered by learning how to make smart decisions! Personal and Family Finance will begin the conversation around how to spend and save your money wisely, investing in safe opportunities and the days ahead. Learning key financial concepts around taxes, credit, and money management will provide both understanding and confidence as you begin to navigate your own route to future security. Discover how education, career choices, and financial planning can lead you in the right direction to making your life simpler, steadier, and more enjoyable.

Prerequisite: None

Length: Two Semesters

Personal Fitness

What does being fit really mean? Is it just based on physical appearance or is it something deeper? Though we strive to be healthy and make sensible choices, it's difficult to know how to achieve this. It's not only about losing weight or lifting a heavy barbell; in Personal Fitness you will learn about body functions, safety, diet, goals, and strategies for longevity. Human beings, in both body and mind, are complex and highly sensitive organisms that need the right attention to physically excel and feel great. Being fit is about living life to the fullest and making the most of what you have—yourself! Explore the world of healthy living and see how real fitness can be achieved through intention, effort, and just the right amount of knowledge.

Prerequisite: None

Length: One Semester

Personal Psychology 1: The Road to Self-Discovery

Have you ever wondered why you do the things you do? Have you asked yourself if self-knowledge is the key to self-improvement? Are you interested in how behavior changes as we age? Psychology can give you the answers! In Personal Psychology 1: The Road to Self-Discovery, you will trace the development of personality and behavior from infancy through adulthood. You will come to learn more about perception and consciousness and better understand the role of sensation. Are you ready to explore the world of human behavior? Come explore all that psychology can offer to help you to truly understand the human experience.

Prerequisite: None

Length: One Semester

Personal Psychology 2: Living in a Complex World

Why do you sometimes remember song lyrics but can't remember where you left your phone, your keys, or even your shoes? How does language affect the way we think? Why is your personality so different from (or so similar) your brother's or sister's personality? Personal Psychology 2: Living in a Complex World will you to explore what makes you 'you.' Why do some things motivate you more than others? How can you determine your IQ? If you've ever wanted to dive right into the depths of who you are and how you got to be you, jump on board and start your exploration now!

Prerequisite: Personal Psychology 1: The Road to Self-Discovery

Length: One Semester

Introduction to Philosophy: The Big Picture

Go on an exciting adventure covering over 2,500 years of history! Along the way, you'll run into some very strange characters, like the dirty barefoot man who hung out on street corners pestering everyone with questions, or that eccentric fellow who climbed inside a stove to think about whether he existed. Despite their odd behavior, these and other philosophers of the Western world are among the world's most brilliant and influential thinkers and originated the fundamental ideas of Western civilization. Philosophy: The Big Picture asks some of the same questions these great thinkers pondered, so by the time you've "closed the book" on this course, you will better understand yourself and the world around you—from atoms to outer space and everything in between.

Prerequisite: None

Length: One Semester

Principles of Agriculture, Food and Natural Resources

Did you know that the world's population could be as high as 11 billion people by the year 2050? And certainly, as our population is growing, so too are our food needs. Even today, millions of people around the world experience hunger. How can we balance growing populations and keeping everyone fed? This is where the importance of agriculture, food, and natural resources comes in! Through the study of Principles of Agriculture: Food and Natural Resources, you will gain a stronger sense of how food ends up on the plate and how we can maximize the foods and natural resources the earth provides. You'll learn more about agriculture's history, animal husbandry, plant science, and natural resources, and you'll be better prepared for your part in sustaining the world.

Prerequisite: None

Length: Two Semesters

Required Materials:

- A digital camera or camera phone
- Supplies for an experiment of the student's choice

Principles of Public Service: To Serve and Protect

Ambulances scream along, heading toward those in need. But who makes sure someone is there to answer the 9-1-1 call? When you take a pill, who has determined that drug is safe for the public? All of these duties are imperative to our comfort and success as a society. Public service is a field that focuses on building a safe and healthy world, and in Principles of Public Service: To Serve and Protect you will be introduced to its many different career choices. The protection of society is not only one of our greatest challenges, it also provides ways for people to work together to ensure safety and provide indispensable services. If you've ever contemplated being one of these real-life heroes, now is the time to learn more!

Prerequisite: None

Length: One Semester

Public Speaking 1a: Introduction

Does the thought of speaking in front of people makes you break out in hives? Maybe you want tips on how to make that first great impression? In both cases, Public Speaking 1a: Introduction may be just what you need. In this course, you will learn from famous orators, like Aristotle and Cicero, understand the influence of rhetoric, and discover how to recognize bias, prejudice, and propaganda. You will also learn how to plan a speech, build an argument, and communicate effectively, while collaborating with others. Grab your notes and get ready to conquer public speaking!

Prerequisite: None

Length: One Semester

Public Speaking 1b: Finding Your Voice

If you've learned the basics and are ready to expand your public speaking skills, Public Speaking 1b: Finding Your Voice is for you. In this course, you'll master the fundamentals of public speaking through practice and eventually learn to speak confidently in front of large groups. Explore the use inductive and deductive reasoning, learn how to prepare a speech outline, and discover how to write your own speech using correct and emotive language. This course will also help you to develop self-efficacy and self-esteem, reduce your fear of public speaking, and teach you how to use body language effectively. You'll also learn how to stand back and critically examine your own work in order to identify areas for improvement.

Prerequisite: None

Length: One Semester

Real World Parenting

Do you love children? Maybe you dream of being a parent someday. But perhaps you are also asking yourself, just how, exactly, do you learn to parent? Learning how to care for children while teaching them confidence and accountability is not an easy feat. In Real World Parenting, you'll learn that being a parent is much more than simply feeding, bathing, and protecting a child. Creating a positive environment, nurturing, fostering education, and serving as a role model are all critical aspects as well. You'll learn how to be a positive force in the development of your future children as well as others around you.

Prerequisite: None

Length: One Semester

Renewable Technologies

Cars that run on used vegetable oil. Electricity produced from your garbage. A windmill made from spare bicycle parts that pumps water to crops. Energy is life. So, how do we address the world's growing concerns about energy sources? Where will it come from in the future? How can energy be something sustainable, renewable, and accessible? Renewable Technologies begins to uncover the development of new energy technologies and explores how recent approaches to generating, storing, and creating this precious resource have evolved. By gaining a larger understanding of this challenge, we, as thoughtful people, can implement real change and unlock the solution needed for a safer, cleaner, and more enduring world.

Prerequisite: None

Length: One Semester

Restaurant Management

Have you ever dreamed of running your own eatery? Maybe you've thought of collaborating with a famous chef to create an unforgettable dining experience? What goes on behind the restaurant dining room is a very different world than what goes on out front and really determines the success or failure of an establishment. Restaurant Management will show you exactly what's needed to run a successful restaurant, including ordering supplies, hiring quality workers, maintaining inventory, and managing a large staff. Understanding such concepts as food safety, hygiene, customer relations, marketing, and using a point-of-sale system are crucial to being an effective restaurateur. Whether you are hoping to operate a casual sit-down eatery, oversee a fine dining establishment, or buy a food franchise, this course is the perfect first step.

Prerequisite: None

Length: One Semester

Required Materials:

- A digital camera or camera phone
- Ingredients and tools to make a simple food dish of the student's choice
- Stove/grill/oven/microwave

Introduction to Social Media: Our Connected World

Have a Facebook account? What about Twitter? Whether you've already dipped your toes in the waters of social media or are still standing on the shore wondering what to make of it all, learning how to interact on social media platforms is crucial to surviving and thriving in this age of digital communication. In Social Media: Our Connected World, you'll learn the ins and outs of such social media platforms as Facebook, Twitter, Pinterest, Google+, and more and how to use them for your benefit—personally, academically, and, eventually, professionally. If you thought social media platforms were just a place to keep track of friends and share personal photos, this course will show you how to use these resources in much more powerful ways.

Prerequisite: None

Length: Two Semesters

Social Problems 1: A World in Crisis

War, crime, poverty, global warming—our world often seems full of dire warnings and predictions. How can we make sense of it all and still dare to step outside each day? Social Problems 1: A World in Crisis will explore some of the biggest challenges facing our world today and prepare you to tackle them head-on. You'll learn what led to these social problems, what effects they have on our lives and societies, and what possible solutions exist for solving them. Whether you want to save the world from the next pandemic or better understand the effects of the media on society, this course will help you develop a plan of action!

Prerequisite: None

Length: One Semester

Social Problems 2: Crisis, Conflicts, and Challenges

It may seem like we live in a sometimes scary and ever-changing world. Everywhere we look—from the homeless living on the streets, to world-wide health epidemics, to the often negative effects of our global world—problems seem to appear at every corner. In Social Problems 2: Crisis, Conflict, and Challenges, you'll explore more of the challenges we face and learn what we can do to reduce the effects of these conflicts and problems. From drug abuse to terrorists to the changing nature of communities in our digital world, we can better face and solve these problems when we have a deeper understanding of their causes and influences on our lives.

Prerequisite: Social Problems 1: A World in Crisis

Length: One Semester

Sociology 1: The Study of Human Relationships

Human beings are complex creatures; however, when they interact and begin to form relationships and societies, things become even more complicated. Are we more likely to act differently in a group than we will when we're alone? How do we learn how to be "human"? Sometimes it can feel as if there are more questions than answers. Sociology 1: The Study of Human Relationships seeks to answer these questions and many more as it explores culture, group behavior, and societal institutions and how they affect human behavior. You'll learn how social beliefs form and how this shapes our lives. How does this happen? Join us and find out!

Prerequisite: None

Length: One Semester

Sociology 2: Your Social Life

Why do people disagree on so many big issues? Where do culture wars come from? Maybe you've wondered this as you've looked through your social media feed or read the latest online article about groups fighting over different social issues. Sociology 2: Your Social Life takes a powerful look at how social institutions like families, religion, government, and education shape our world and how collective behavior and social movements can create change. Although the reality of the battles isn't always pretty, gaining a clearer picture of the different sides can help you better understand how our lives are shaped by entertainment, social institutions, and social change.

Prerequisite: Introduction to Sociology 1: The Study of Human Relationships

Length: One Semester

Sports and Entertainment Marketing

Whether you are watching a famous athlete make an unbelievable play or witnessing a sensational singing performance, the world of sports and entertainment is never boring. Although it may seem impossible for you to be a part of this glittery world, it's not! The Sports and Entertainment Marketing field offers careers that combine entertainment with traditional marketing, but with a whole lot more glamour. Explore basic marketing principles while delving deeper into the multibillion dollar sports and entertainment industry. Learn how professional athletes, sports teams, and famous entertainers are marketed as commodities and how the savvy people who handle these deals can become very successful. This course will show you exactly how things work behind the scenes of a major entertainment event and how you can be part of the act.

Prerequisite: None

Length: Two Semesters

Theater, Cinema & Film Production

Lights! Camera! Action! Let's explore the enchanting world of live theater and its fascinating relationship to the silver screen. In Theater, Cinema, and Film Production, you'll learn the basics of lighting, sound, wardrobe, and camerawork while examining the magic that happens behind all the drama. Delve into the glamorous history of film and theater, and examine the tremendous influence these industries have had on society and culture over the years. During this unit, you'll discuss and analyze three classic American films—Casablanca, Singin' in the Rain, and The Wizard of Oz—to help you learn how to critique and appreciate some of the most famous dramas of all time.

Prerequisite: None

Length: Two Semesters

Required Materials:

You will be required to have access to the standard editions of the three films used in this course:

- Singin' in the Rain (1952)
- Wizard of Oz (1932)
- Casablanca (1942)

If you do not already have access to these movies, you may consider other sources such as your local library.

Note: Timestamps referenced throughout the course apply to standard editions of the applicable film and may not align with any extended/modified versions.

The Lord of the Rings: An Exploration of the Films & Its Literary Influences

Hobbits, Orcs, wizards, dashing knights, and powerful elves are all part of the magic created in J.R.R. Tolkien's famously epic tale, The Lord of the Rings. For years, the vivid characters within this beloved story could exist only in the readers' minds—until it was adapted into a movie that allowed fans to finally see, through the eyes of Hollywood magic and brilliant technology, the manifestation of these characters onscreen. What does it take to transport these well-known images like Gollum and the Shire from dusty pages to the giant screen? In The Lord of the Rings: An Exploration of the Films and Its Literary Influences, you will see first-hand how classic literature can become modern film and bring the fantasy alive for a whole new generation of believers.

Prerequisite: None

Length: One Semester

Required Materials:

You will be required to have access to the standard (non-extended) editions of the three Lord of the Rings films:

- The Lord of the Rings: The Fellowship of the Ring
- The Lord of the Rings: The Two Towers
- The Lord of the Rings: The Return of the King

If you do not already have access to these movies, you may consider other sources such as your local library.

Note: Timestamps referenced throughout the course apply to standard editions of the applicable film and may not align with any extended/modified versions.

Veterinary Science: The Care of Animals

Lions and tigers and bears (oh my!) Whether you want to step into the wild side of veterinary medicine or just take care of the furry dogs and cats down your street, Veterinary Science: The Care of Animals will show you how to care for domestic, farm, and wild animals and diagnose their common diseases and ailments. Learn how different veterinary treatments are used and developed to improve the lives of animals and, as a result, the lives of those people who treasure them. If you have always been drawn to the world of our furry, scaly, and feathered friends, this may be just the course for you!

Prerequisite: None

Length: One Semester

World Religions: Exploring Diversity

From Taoism, to Islam, to Christianity, religion inevitably affects us all in some way. On one level, religion can help us commune with and honor our spiritual natures, but it can also divide people and create great strife in the world. World Religions: Exploring Diversity will explore the various characteristics of faith and introduce the fundamentals of the major religions, including Judaism, Islam, Christianity, Buddhism, Confucianism, Hinduism, Shintoism, and Taoism. You'll trace how these powerful faiths have influenced cultures over thousands of years and helped to shape the face of humanity. After this course, you'll have a clearer understanding of how religion continues to affect the larger world.

Prerequisite: None

Length: Two Semesters

Introduction to Women's Studies: A Personal Journey Through Film

Maybe you grew up watching movies with female characters like Cinderella, Belle, Snow White, or Ariel. Maybe you've wondered why there are stereotypes about women being bad drivers or ignorant about sports. Maybe you want to know about feminism and the women's movement. Women's Studies: A Personal Journey Through Film can help you answer these questions. Though it focuses on the experience of women, it's appropriate for anyone who wants to learn to critically examine films while learning about the history of the women's movement and how gender, race, and social class influence us. Women have earned their right to stand up and be recognized as equal partners and reap the benefits of their hard work. As the anonymous quote goes, "History is Herstory too."

Prerequisite: None

Length: One Semester

Required Materials:

You will be required to have access to the standard editions of the films used in this course:

- Mona Lisa Smile (2003)
- Fried Green Tomatoes (1991)
- Far From Heaven (2002)
- Snow White and the Seven Dwarfs (Disney Animation – 1937)
- Beauty and the Beast (Disney Animation – 1991)
- Mean Girls (2004)
- The Help (2011)
- A League of Their Own (1992)

If you do not already have access to these movies, you may consider other sources such as your local library.