

# **High School Course Catalog**

The following is a comprehensive list of available course content. The school will only offer selected courses from this list each term. HQ requirements will be met prior to opening a course for the term. Core content that is below high school grade level will only be assigned as an elective to fill educational gaps for students.

## Arizona High School Graduation Requirements

The State Board of Education is responsible for setting statewide minimum requirements for graduation from high school, which can be found in Arizona Administrative Code R7-2-302. Districts and charter schools may, at their discretion, establish graduation credit requirements for their students in addition to the statewide requirements. The statewide minimum course of study requires students to take a minimum of 22 credits:

- Four credits of English or English as a Second Language;
- Three credits in social studies to include one credit of American history, including: Arizona history; one credit of world history/geography; one-half credit of American government, including Arizona government; and one-half credit of economics.
- Four credits of mathematics to minimally include Algebra 1, Geometry, Algebra 2 (or a personal curriculum), and a fourth course that contains high school content.
- Three credits of science in preparation for proficiency at the high school level on the statewide science assessment.
- One credit of fine arts or career and technical education and vocational education.
- Seven general elective credits of additional courses prescribed by the School.

Please note that the School requires students to take Career Explorations.

## English Core Classes

### English 9A/English I S1

Duration: 75 Hours

Credits: 0.5

Course Description: Freshman English

This is the first half of Freshman English. High School level review of the writing process covering pre-writing, identifying and narrowing a topic, drafting, editing, publishing, writing complete sentences, correct word choices, writing topic sentences, writing analogies, using the library, writing biographical sketches, ideas and opinions, writing essays, writing short stories, poetry, plays, and folk literature.

Reading section contains lessons about common expressions, connotation and denotation, Greek and Latin words, poetry, word recognition, and story details and sequence; Usage section contains lessons about punctuation, clauses and phrases, and usage problems; Vocabulary section reviews vowel sounds and spelling.

930L

The Strange Case of Dr. Jekyll and Mr. Hyde by Robert Louis Stevenson

A Tale of Two Cities by Charles Dickens

1010L

### English 9B/English 1 S2

Duration: 75 Hours

Credits: 0.5

Course Description: Freshman English

This is the second half of Freshman English. High School level review of the writing process covering pre-writing, identifying and narrowing a topic, drafting, editing, publishing, writing complete sentences, correct word choices, writing topic sentences, writing analogies, using the library, writing biographical sketches, ideas and opinions, writing essays, writing short stories, poetry, plays, and folk literature.

Reading section contains lessons about common expressions, connotation and denotation, Greek and Latin words, poetry, word recognition, and story details and sequence; Usage section contains lessons about punctuation, clauses and phrases, and usage problems; Vocabulary section reviews vowel sounds and spelling.

930L

The Odyssey by Homer

Romeo and Juliet by William Shakespeare

1010L

English 10A/ English II S1

Duration: 75 Hours

Credits: 0.5

Course Description: Sophomore English

This is the first half of Sophomore English. Covers journal, resume, and newspaper writing, review of the writing process, writing sentences and paragraphs, specialized writing projects including writing analogies, correspondence, learning logs, story endings, expository, descriptive, and persuasive essays, creative writing including poetic text, short stories, and scripts.

Reading section contains lessons about fact and opinion, folklore, inferences, story elements, and words in context; Usage section contains lessons about parts of speech, parts of sentences, and verbals; Vocabulary section reviews blends and silent letters.

960L

Great Expectations by Charles Dickens

The Adventures of Huckleberry Finn by Mark Twain

980L

English 10B/English II S2

Duration: 75 Hours

Credits: 0.5

Course Description: Sophomore English

This is the second half of Sophomore English. Covers journal, resume, and newspaper writing, review of the writing process, writing sentences and paragraphs, specialized writing projects including writing analogies, correspondence, learning logs, story endings, expository, descriptive, and persuasive essays, creative writing including poetic text, short stories, and scripts.

Reading section contains lessons about fact and opinion, folklore, inferences, story elements, and words in context; Usage section contains lessons about parts of speech, parts of sentences, and verbals; Vocabulary section reviews blends and silent letters.

960L

Julius Caesar by William Shakespeare

The Jungle by Upton Sinclair

980L

English 11A/English III S1

Duration: 75 Hours

Credits: 0.5

Course Description: Junior English

This is the first half of Junior English. Review of the writing process, using strategy, sequence, drafting, proofreading, publishing, identifying and writing sentence types, writing paragraphs for various purposes, chronological and spatial importance, writing analogies, newspaper stories, sketches, essays, summarizing, and creative writing.

Reading section includes American literature, context clues, farce and satire, and foreign terms; Usage section includes lessons about infinitives, clauses, verb tenses, and usage problems; Vocabulary section reviews consonants, syllables and pronunciation, and digraphs.

990L

The House of the Seven Gables by Nathaniel Hawthorne

The Last of the Mohicans by James Fenimore Cooper

960L

English 11B/English III S2

Duration: 75 Hours

Credits: 0.5

Course Description: Junior English

This is the second half of Junior English. Review of the writing process, using strategy, sequence, drafting, proofreading, publishing, identifying and writing sentence types, writing paragraphs for various purposes, chronological and spatial importance, writing analogies, newspaper stories, sketches, essays, summarizing, and creative writing.

Reading section includes American literature, context clues, farce and satire, and foreign terms; Usage section includes lessons about infinitives, clauses, verb tenses, and usage problems; Vocabulary section reviews consonants, syllables and pronunciation, and digraphs.

990L

Moby Dick by Herman Melville

The Red Badge of Courage by Stephen Crane

960L

English 12A/English IV S1

Duration: 75 Hours

Credits: 0.5

Course Description: Senior English

This is the first half of Senior English. Covers selecting and narrowing a topic, identifying audience, writing introductions and conclusions, writing strategies, the writing process, journal writing, writing persuasive, descriptive, expository, and narrative paragraphs, writing story endings, summarizing, expressing ideas and opinions, writing short stories, poetry, drama, and folk literature.

Reading section includes British literature, drama, etymology, genres and literature, literary devices, and propaganda and bias; Usage section reviews clauses and diagramming; Vocabulary section reviews root words and sounds of various letters.

1030L

Pride and Prejudice by Jane Austen

Jane Eyre by Charlotte Bronte

1040L

English 12B/English IV S2

Duration: 75 Hours

Credits: 0.5

Course Description: Senior English

This is second half of Senior English. Covers selecting and narrowing a topic, identifying audience, writing introductions and conclusions, writing strategies, the writing process, journal writing, writing persuasive, descriptive, expository, and narrative paragraphs, writing story endings, summarizing, expressing ideas and opinions, writing short stories, poetry, drama, and folk literature.

Reading section includes British literature, drama, etymology, genres and literature, literary devices, and propaganda and bias; Usage section reviews clauses and diagramming; Vocabulary section reviews root words and sounds of various letters.

1030L

**English Elective**Reading Essentials I

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

This class focuses on the pronunciation and forming of words to increase reading proficiency. There is a strong emphasis on forming and recognizing parts of words such as prefixes, suffixes and roots. Students will explore how to recognize main ideas and cause and effect when reading independently. This course focuses on using critical thinking skills and context clues to predict outcomes and draw conclusions. Students will gain an overview of literary terms and styles.

Reading Essentials II

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

This class teaches students to read and recognize purpose through the use of literary terms and techniques such as propaganda and bias. There is a strong focus on reading comprehension, identifying main ideas, and use of story elements. Students are introduced to the use of mood, tone and figurative language in reading; as well as an advanced look at pronunciation and the formation and roots of word.

AZMERIT ELA 9 Prep

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Course is designed to review reading skills to improve student academic performance. Topics of this course include literary structure, vocabulary, writing structure, and grammar and usage.

AZMERIT ELA 10 Prep

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Course is designed to review reading skills to improve student academic performance. Topics of this course include literary structure, vocabulary, writing structure, and grammar and usage.

AZMERIT ELA 11 Prep

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Course is designed to review reading skills to improve student academic performance. Topics of this course include literary structure, vocabulary, writing structure, and grammar and usage.

Exploring Literature

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

In this course students will be exposed to a variety of reading selections, ranging from classics to contemporary literature. Students will meet with the course instructor at the beginning of the class and develop a list of appropriate readings. Students will read a minimum of three books during the class. Students will focus on how the themes found within the readings apply to situations within their own lives. Students will be assessed in the form of written exams, book reports, and at least one oral report in the presence of their peers.

### Creative Writing

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Focuses on the fundamentals of grammar and usage to strengthen writing skills. Journal assignments and expository and narrative writing are required. Topics include vocabulary; spelling; coordination and subordination; simple, compound, and complex sentences; and the construction of clearly written paragraphs and essays.

## **Mathematics Core**

### Algebra IA

Duration: 75 Hours

Credits: 0.5

Course Description:

Algebra IA: Review of mathematic concepts to include algebraic expressions and equations, writing numbers in exponential form, using standard and scientific calculators, integers, absolute values, review of additive identity, like terms, using reciprocals to solve problems, evaluating expressions using order of operations, inverse operations, eliminating fractions, identification of the x and y axes, linear equations, graphing with constants, rules of exponents, binomials, trinomials, using the FOIL method, factoring out monomials, trinomial squares, and quadratic equations.

### Algebra IB

Duration: 75 Hours

Credits: 0.5

Course Description:

Algebra IB: Continuing coursework from the Algebra I, Part A title that covers finding solutions of linear systems of equations by graphing, eliminating variables, motion problems, using negative one as a factor, identifying the least common multiple of expressions, ratio and proportion, using inequalities to solve problems, equations with absolute values, irrational numbers, radical expressions, finding the value of a function, using vertex and axis of symmetry or the T-table, problem solving involving joint and combined variation, and identifying and evaluating the discriminant of a quadratic equation.

### Geometry 1A

Duration: 75 Hours

Credits: 0.5

Course Description:

Introduces basic geometric terms commonly used and also covers geometric concepts including angles, perpendicular and parallel lines, rays and transversals, measuring line segments, lines, segments, sides and vertices of angles, acute, obtuse, and right angles, parallel and skew lines, acute, obtuse, and right triangles, calculating perimeter, volume and area of trapezoids, polygons, proportional ratios, pyramids, cones, spheres, chords, circumference, tangents, and angle measurement.



### Geometry IB

Duration: 75 Hours

Credits: 0.5

Course Description:

Introduces basic geometric terms commonly used and also covers geometric concepts including angles, perpendicular and parallel lines, rays and transversals, measuring line segments, lines, segments, sides and vertices of angles, acute, obtuse, and right angles, parallel and skew lines, acute, obtuse, and right triangles, calculating perimeter, volume and area of trapezoids, polygons, proportional ratios, pyramids, cones, spheres, chords, circumference, tangents, and angle measurement.

### Functional Approach to Algebra A

Duration: 75 Hours

Credits: 0.5

Course Description:

This course is designed to provide varied approaches to solving real-world application problems. The curriculum focuses on identifying functional relationships including determining dependence, identifying and analyzing rate of change, making predictions from data, and using data to generalize and develop equations to predict trends. The primary focus is on developing linear functions and solving linear equations, linear inequalities, and linear systems. Developing quadratic functions and solving quadratic equations are covered and exponential functions are introduced.

### Functional Approach to Algebra B

Duration: 75 Hours

Credits: 0.5

Course Description:

This course is a continuation of Functional Approach to Algebra A. Functional Approach to Algebra B provides students with more approaches to the real-world application of algebra. The continued focus of this course is on functional relationships and the various uses of a rate of change. This course moves on to writing and solving equations, linear models in two variables, linear inequalities, systems of equations and inequalities. Polynomials, their applications, and the factoring of polynomials are examined. Quadratics, their roots, factors, zeros, and solutions are introduced, followed by the quadratic formula, laws of exponents, exponential functions, and functions of inverse variation.

### Algebra IIA

Duration: 75 Hours

Credits: 0.5

Course Description:

Continuing coursework from the Algebra I, Part B title that covers finding solutions of linear systems of equations by graphing, eliminating variables, motion problems, using negative one as a factor, identifying the least common multiple of expressions, ratio and proportion, using inequalities to solve problems, equations with absolute values, irrational numbers, radical expressions, finding the value of a function, using vertex and axis of symmetry or the T-table, problem solving involving joint and combined variation, and identifying and evaluating the discriminant of a quadratic equation.

Algebra IIB

Duration: 75 Hours

Credits: 0.5

Course Description:

Continuing coursework from the Algebra II, Part A which includes combining and multiplying real numbers, order of operations, connecting words and numbers through expressions, developing a plan to solve a problem, combining like terms, definition and examples of ordered pairs, grids, quadrants, abscissa, defining linear equations, graphing equation systems, three-variable equations, matrix multiplication, transformation, point and matrix transformations, polynomial types, zero as an exponent, finding higher variables, factoring numerators, and solving complex rationals.

College Algebra IA

Duration: 75 Hours

Credits: 0.5

Course Description:

Continuing coursework from the Algebra II, Part B which includes Factoring Out Monomials, Difference of Squares, Factoring Trinomials, Rational Expressions, Complex Rationals, Negative Exponents, Rational Exponents, Factoring by Grouping, Methods of Factoring, Rational Operations, Binomial Theorem, Linear Equations, Slope of a Line, Slope-Intercept Equations, Fitting Equations to Data, Compound Inequalities, and Solving by Graphing.

College Algebra IB

Duration: 75 Hours

Credits: 0.5

Course Description:

Continuing coursework from College Algebra, Part A which includes Graph Linear Functions, Parallel & Perpendicular, Absolute Value Equations, Quadratic Functions, Graphing Parabola, Relations and Functions, Relations and Functions in the Coordinate Plane, Identifying Linear Equations, The Coordinate Plane, The Pythagorean Theorem, Circles, Ellipses, Hyperbola, Geometry-Trigonometric Functions, Trigonometry-Reciprocal Functions, Logarithmic Functions, and Graphs of Exponential and Logarithmic Functions.

Trigonometry

Duration: 75 Hours

Credits: 0.5

Course Description:

Trigonometry covers geometry concepts review, angles, angle terminology, reference angles, definition of sine, cosine, and tangent, definition and value of secant, cosecant, and cotangent, calculating sides of right triangles, using trigonometry to solve real world problems, the Law of Sine and Cosines, symmetry identities, verifying trigonometric identities, sum and difference for sine, cosine, and tangent, using co function identities, graphing trigonometry functions, principal values, arc length, area of circular sectors, simple harmonic motion, and frequency.

### Trigonometry Honors

Duration: 75 Hours

Credits: 0.5

Course Description:

Trigonometry covers geometry concepts review, angles, angle terminology, reference angles, definition of sine, cosine, and tangent, definition and value of secant, cosecant, and cotangent, calculating sides of right triangles, using trigonometry to solve real world problems, the Law of Sine and Cosines, symmetry identities, verifying trigonometric identities, sum and difference for sine, cosine, and tangent, using co function identities, graphing trigonometry functions, principal values, arc length, area of circular sectors, simple harmonic motion, and frequency. This honors course has an increased level of difficulty over standard courses.

### Calculus 1A

Duration: 75 Hours

Credits: 0.5

Course Description:

Calculus IA is core math course which begins with a review of Algebra. This course covers calculating x-values and corresponding values, limits, notation, continuous functions, asymptotes, negative and positive infinities, graphing tangents, secants, and cosecants, derivatives, Leibniz notation, constant functions and derivatives, functions that are products, the derivative as a reciprocal of sine, acceleration as a derivative of velocity, maximum and minimum values of given functions at closed intervals, and using related rates to determine the volume of cones.

### Calculus 1B

Duration: 75 Hours

Credits: 0.5

Course Description:

Calculus IB is a core math course which begins with a review of Algebra, This course covers continuing course work from Calculus IA, including in depth skills of derivatives and integrals and their applications, determining graphing data, and anti-derivatives with negative exponents. It will cover and expand other course concepts such as continuing functions, graphing tangents, secants, and cosecants. Many problems are atypical and require students to synthesize new solutions.

Consumer/Senior Math A

Duration: 75 Hours

Credits: 0.5

Course Description:

Focuses on learning, reviewing and applying arithmetic skills utilized in post-secondary education, at home and in business. Students learn how to budget, spend, invest, and make every day financial decisions. Topics include budgeting, computing income and property taxes, investing in the stock market, finding interest rates, analyzing statistics, and balancing financial accounts. Course work includes Probability, Probability of Compound Events, Geometric Sequences, Analyzing Function Graphs, Solving Radical Equations, Linear Equations, Slope-Intercept Equations, Graphing Linear Inequalities, Surface Area and Volume of Spheres, Pyramids, Prisms, and Cones, Conditional Statements, Inductive Reasoning, and Deductive Reasoning.

Consumer/Senior Math B

Duration: 75 Hours

Credits: 0.5

Course Description:

Focuses on learning, reviewing and applying arithmetic skills utilized in post-secondary education, at home and in business. Students learn how to budget, spend, invest, and make every day financial decisions. Topics include budgeting, computing income and property taxes, investing in the stock market, finding interest rates, analyzing statistics, and balancing financial accounts. Course work includes Probability, Probability of Compound Events, Geometric Sequences, Analyzing Function Graphs, Solving Radical Equations, Linear Equations, Slope-Intercept Equations, Graphing Linear Inequalities, Surface Area and Volume of Spheres, Pyramids, Prisms, and Cones, Conditional Statements, Inductive Reasoning, and Deductive Reasoning.

**Mathematics Elective**Math Fundamentals IA

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Math Fundamentals I A covers the basic foundations of mathematical concepts which include working the fundamental operations involving whole numbers and fractions, decimals and percents, ratio and proportion, interpretation of graphs, metric and nonmetric geometry, combinations and permutations and introduction to algebra.

Math Fundamentals IB

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Math Fundamentals I B covers the intermediate foundations of mathematical concepts which include fundamental operations involving algebraic expressions, first degree equations and inequalities in one unknown, functions and graph and systems of equations.

Pre-Algebra A

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Pre-Algebra A covers number notation, the multiplicative property of zero, operational symbols, inverse operations of multiplication and division, rules for solving equations by adding and subtracting integers, factors and exponents, fractions, graphing on the coordinate plane, slope and intercept, decimals and percent, statistics, scatter plots, the counting principle, definitions of basic geometric terms, circles, area, volume, sine and cosine ratios, and the Pythagorean Theorem.

Pre-Algebra B

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Pre-Algebra B is a review of mathematical concepts covered in Pre Algebra A and includes expressions and equations, equations with integers, solving inequalities, graphing, statistics and graphing, probability, algebra with geometry, polygons and circles, area and volume and special triangles.

AZMERIT Algebra I Prep

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Course is designed to review mathematical concepts to improve student academic performance. Topics of this course include exponents and factors, absolute value, slope-intercept equation, Pythagorean Theorem, transversals, integers, inequalities, rational numbers and probability.

AZMERIT Geometry Prep

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Course is designed to review mathematical concepts to improve student academic performance in Geometry.

AZMERIT Algebra II Prep

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Course is designed to review mathematical concepts to improve student academic performance. Topics of this course include exponents and factors, absolute value, slope-intercept equation, Pythagorean Theorem, transversals, integers, inequalities, rational numbers and probability.

Personal Finance

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

An important aspect of every individual's future is the ability to plan and implement sound and responsible financial goals. The Personal Finance course will educate students in a variety of financial and monetary subjects, including consumer services and protections.

1060L

Real World Math

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Engaging Students through Global Issues promotes student engagement by providing real-world data on global issues with a focus on practical solutions. The concentrate of this course is on foundational algebra concepts. Lessons focus on salaries, taxes, purchasing to financial literacy and build both mathematical knowledge and global perspective.

## Science

### Biology A

Duration: 75 Hours

Credits: 0.5

Course Description:

This is the first half of comprehensive Biology. It covers all aspects of the core high school science course including biological processes and principles. The objectives addressed are those that are tested on national and state achievement tests. Comprehensive Biology lessons are designed to move the student beyond the level of basic knowledge into critical thinking and learning activities.

910L

### Biology A Honors

Honors Duration: 75 Hours

Credits: 0.5

Course Description:

This is the first half of comprehensive Honors Biology. It covers all aspects of the core high school science course including a rigorous emphasis on biological processes and principles. The objectives addressed are those that are tested on national and state achievement tests. Comprehensive Biology lessons are designed to move the student beyond the level of basic knowledge into critical thinking and learning activities. This is an honors course and requires higher test scores to demonstrate mastery of the lessons. A Science Project will be required to be completed by the student as part of the course requirements of this class.

910L

### Biology B

Duration: 75 Hours

Credits: 0.5

Course Description:

This is the second half of comprehensive Biology. It covers all aspects of the core high school science course including biological processes and principles. The objectives addressed are those that are tested on national and state achievement tests. Comprehensive Biology lessons are designed to move the student beyond the level of basic knowledge into critical thinking and learning activities.

### Biology B Honors

Duration: 75 Hours

Credits: 0.5

Course Description:

This is the second half of comprehensive Honors Biology. It covers all aspects of the core high school science course. The objectives addressed are those that are tested on national and state achievement tests. Comprehensive Biology lessons are designed to move the student beyond the level of basic knowledge into critical thinking and learning activities. This is an honors course and requires higher test scores to demonstrate mastery of the lessons. A Science Project will be required to be completed by the student as part of the course requirements of this class. 910L

Earth and Space Science A

Duration: 75 Hours

Credits: 0.5

## Course Description:

This is the first half of Earth and Space Science. Topic areas include an introduction to earth and space themes, comparison and uses of pie charts, review of the elements and their properties, observations of events and phenomena in the universe, sunspots, the solar system, satellites, earthquakes, the cycles of the moon, balloons, airplanes, development of rockets, the Apollo missions, characteristics of different atmospheric layers, cloud cover, weather terms and cycles, high and low pressure, types of fronts, climatology, oceanography, underground water, topography, weathering and erosion, dinosaurs, and natural resources.

970L

Earth and Space Science A Honors

Duration: 75 Hours

Credits: 0.5

## Course Description:

This is the first half of Honors Earth and Space Science. Topic areas include an introduction to earth and space themes, comparison and uses of pie charts, review of the elements and their properties, observations of events and phenomena in the universe, sunspots, the solar system, satellites, earthquakes, the cycles of the moon, balloons, airplanes, development of rockets, the Apollo missions, characteristics of different atmospheric layers, cloud cover, weather terms and cycles, high and low pressure, types of fronts, climatology, oceanography, underground water, topography, weathering and erosion, dinosaurs, and natural resources. This is an honors course and requires higher test scores to demonstrate mastery of the lessons. A Science Project will be required to be completed by the student as part of the course requirements of this class.

970L

Earth and Space Science B

Duration: 75 Hours

Credits: 0.5

## Course Description:

This is the first half of Earth and Space Science. Topic areas include an introduction to earth and space themes, comparison and uses of pie charts, review of the elements and their properties, observations of events and phenomena in the universe, sunspots, the solar system, satellites, earthquakes, the cycles of the moon, balloons, airplanes, development of rockets, the Apollo missions, characteristics of different atmospheric layers, cloud cover, weather terms and cycles, high and low pressure, types of fronts, climatology, oceanography, underground water, topography, weathering and erosion, dinosaurs, and natural resources.

970L



### Earth and Space Science B Honors

Duration: 75 Hours

Credits: 0.5

#### Course Description:

This is the second half of Honors Earth and Space Science. Topic areas include an introduction to earth and space themes, comparison and uses of pie charts, review of the elements and their properties, observations of events and phenomena in the universe, sunspots, the solar system, satellites, earthquakes, the cycles of the moon, balloons, airplanes, development of rockets, the Apollo missions, characteristics of different atmospheric layers, cloud cover, weather terms and cycles, high and low pressure, types of fronts, climatology, oceanography, underground water, topography, weathering and erosion, dinosaurs, and natural resources. This is an honors course and requires higher test scores to demonstrate mastery of the lessons. A Science Project will be required to be completed by the student as part of the course requirements of this class.

970L

### Physical Science A

Duration: 75 Hours

Credits: 0.5

#### Course Description:

Physical Science offers several distinctive components: an in depth examination of the biological functions of vision and sound in relation to physical laws, the impact of scientific discoveries on technology and society, and an overview of natural hazards, including the environment. The Physical Science course covers the fundamentals of chemistry, matter, energy, and various scientific fields. The lessons are designed to move the student beyond the level of basic knowledge and start training their minds in critical thinking.

### Physical Science A Honors

Duration: 75 Hours

Credits: 0.5

#### Course Description:

Physical Science offers several distinctive components: an in depth examination of the biological functions of vision and sound in relation to physical laws, the impact of scientific discoveries on technology and society, and an overview of natural hazards, including the environment. The Physical Science course covers the fundamentals of chemistry, matter, energy, and various scientific fields. The lessons are designed to move the student beyond the level of basic knowledge and start training their minds in critical thinking. This is an honors course and requires higher test scores to demonstrate mastery of the lessons. A Science Project will be required to be completed by the student as part of the course requirements of this class.

### Physical Science B

Duration: 75 Hours

Credits: 0.5

Course Description:

Physical Science B is a continuation of Physical Science A but it focuses more on critical thinking and labs. The Physical Science B course continues to cover the fundamentals of chemistry, matter, energy, and various scientific fields. The lessons and labs are designed to move the student beyond the level of basic knowledge into training their minds in critical thinking and discovery through learning activities.

### Physical Science B Honors

Duration: 75 Hours

Credits: 0.5

Course Description:

Physical Science B is a continuation of Physical Science A but it focuses more on critical thinking and labs. The Physical Science B course continues to cover the fundamentals of chemistry, matter, energy, and various scientific fields. The lessons and labs are designed to move the student beyond the level of basic knowledge into training their minds in critical thinking and discovery through learning activities. This is an honors course and requires higher test scores to demonstrate mastery of the lessons. A Science Project will be required to be completed by the student as part of the course requirements of this class.

### Physics

Duration: 75 Hours

Credits: 0.5

Course Description:

Physics emphasizes concept development and how these concepts apply to the students' experiences and the world around them. Topics of physics include introduction to physics and physics vocabulary, motion (straight, two-dimension, projectile), acceleration, gravity, momentum, gas laws, and circuits (series, parallel, and combined).

### Physics Honors

Duration: 75 Hours

Credits: 0.5

Course Description:

Physics emphasizes concept development and how these concepts apply to the students' experiences and the world around them. Topics of physics include introduction to physics and physics vocabulary, motion (straight, two-dimension, projectile), acceleration, gravity, momentum, gas laws, and circuits (series, parallel, and combined). This is an honors course and requires higher test scores to demonstrate mastery of the lessons. A Science Project will be required to be completed by the student as part of the course requirements of this class.

## Social Studies Core

### AZ American History Geo A

Duration: 75 Hours

Credits: 0.5

Course Description:

The story of America is written in the rich history of the accomplishments of its people. America represents a multitude of cultures that together form a unified nation that has prospered for over two hundred years. This course is designed to bring the history of America to life by connecting the events of the past to today's world. Students will examine history by using the themes of culture, economics, geography, global connections, government, science/technology, and sociology/anthropology.

1060L

### AZ American History Geo B

Duration: 75 Hours

Credits: 0.5

Course Description:

America represents a multitude of cultures that together form a unified nation that has prospered for over two hundred years. This course is designed to bring the history of America to life by connecting the events of the past to today's world. Students will examine history by using the themes of culture, economics, geography, global connections, government, science and technology, and sociology and anthropology. U.S. History II is a second semester course that continues to show how events of the past are connected to today's world. Beginning with post World War I, this course examines significant events such as the Great Depression, World War II, the Civil Rights Movement, and the 2008 presidential election. Students will be guided through twentieth and twenty-first century events that have shaped our nation's society.

1040L

### Economics

Duration: 75 Hours

Credits: 0.5

Course Description:

High school level course that covers the definition of economics, microeconomics, producers and consumers, capitalism, socialism, communism, the world's economy from 1500 to present day, colonization, balance of trade, the Great Depression, the U.S. economy from 1600 to present day, economic causes of the Revolutionary War, railroads, corporations, monopolies, labor unions, the New Deal, recession, inflation, classical theorists, the American microeconomic system, applied economics, social programs, challenges of the global economy, welfare reform debate, and the budget deficit.

1120L

Government

Duration: 75 Hours

Credits: 0.5

## Course Description:

This high school level course contains the topic areas of government functions, population, territory, sovereignty, the origin of government, the English Bill of Rights, the founding of the original thirteen colonies, the Proclamation of 1763, the First Continental Congress, the Articles of Confederation, the origin and principles of the Constitution, the Bill of Rights, executive, legislative, and judicial powers, the Magna Carta, taxes, the U.S. Senate, impeachment, how a bill becomes a law, the U.S. House of Representatives, elections, the President, the Presidential Cabinet, executive agencies, fiscal and monetary policy, and elections.

1140L

World History Geo A

Duration: 75 Hours

Credits: 0.5

## Course Description:

World History Geo A: Includes an overview of history, artifacts, Ice ages, Ancient Egypt, the Hanging Gardens of Babylon, the Ten Commandments, Greek civilization, Alexander the Great, philosophers, the Roman Empire, Julius Caesar's rise and fall, Roman gods, the development of commerce, the Irish and Anglo-Saxons, Vikings, the Crusades, feudalism, Henry I, Edward III, Joan of Arc, Isabella and Ferdinand, Africa, the Americas, North American civilizations, the Renaissance, the Reformation, the American Revolution, the Boston Tea Party, the First Continental Congress, the Constitution, and post-Napoleonic France.

920L

World History Geo B

Duration: 75 Hours

Credits: 0.5

## Course Description:

World History Geo B: Covers China, Japan, isolationism, Asia, Charles Townshend, the transcontinental railroad, socialism, science in the 1800s, pioneers in medicine, Romanticism, Impressionism, the Romanov Dynasty, Moscow, Catherine the Great, Latin America, Spanish colonization, Queen Victoria, the U.S. in the 1800s, German Unification, the Age of Imperialism, European influence in Africa, Indian resistance to British rule, the rise of nationalism, Allied forces, World War II, League of Nations, decline of trade, increase of women's rights, the Russian Revolution, Vladimir Lenin, tensions between the Soviet Union and the United States, the Berlin Wall, Vietnam, fighting in Cambodia, western Europe, NATO, the United Nations, and eastern Europe.

1040L

## **Social Studies Electives**

### Civics

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Civics is the study of citizenship and government. This course provides students with a basic understanding of civic life, politics, and government, and a short history of government's foundation and development in this country.

### Anthropology

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Anthropology presents students with an introduction to the four main disciplines of studying human origins and development: physical anthropology, linguistic anthropology, archeology, and ethnography. The course will emphasize cultural anthropology. Topics of study include traditional societies (their religion, art, music, family and kinship systems), the development of early civilizations, and the dynamics of social change.

### Psychology

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

This course covers key content areas, which make up the modern science of psychology. Students will investigate why human beings think and act the way they do. Content areas include research methods, learning, sensation and perception, human development, abnormal, personality and social psychology. Other topics studied are drug and alcohol abuse, treatment of psychological disorders, and coping with stress.

### Sociology

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

This course emphasizes how the groups, or social structures, that we belong to influence the way we think, feel, and act. The course content looks at groups rather than individuals, and how those groups, whether they be gender, race, or religion, fit into society. Major themes include family, civilizations, education, religion, deviance and social control, inequalities of gender and age, family and marriage, and issues such as crime, punishment, and social justice.

## Career and Technology Education/Fine Arts

### Art Appreciation S1

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Art Appreciation S1 is a survey of the visual arts of painting, sculpture, architecture, and the principles of design. The course will enable students to develop an understanding of how an artist has the power to inspire and inform the viewer by making a personal, social, political, or religious statement. Students will also explore the history and art of both past and present world cultures.

1070L

### Art Appreciation S2

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Art Appreciation S2 provides the opportunity for a deeper exploration of the visual arts of painting, sculpture, architecture, and design. The course will enable students to expand their understanding of how an artist has the power to inspire and inform the viewer by making a personal, social, political, or religious statement. Students will explore the impact art played in shaping history and current culture.

1070L

### Career Exploration

Duration: 75 Hours

Credits: 0.5

Course Description: CTE

The choice of a career is an integral aspect of the personal and social development of an individual, and being prepared for a job search increases the chances of success. The A+LS™ Career Exploration course prepares students to deal with the various aspects of the job search, such as resume writing, job interviewing, thank you letters, and prospective job offers.

1090L

### Interviewing Skills

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Interviewing Skills builds on the knowledge gained in Career Essentials to prepare students to take the next step in securing a position in the career or educational field of their choice. Topics include preparing for the interview, stages of the interview, verbal and nonverbal communication, and practice questions. Students will practice being interviewed and interviewing others.

### Cinema

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Watch and summarize the plot of three approved Academy Awarded Movies (Oscar for Best film or Actors). Students will watch all three movies and will write an essay about each. For the final exam students will compare and contrast all three movies by writing an essay explaining what similar traits made all three Award winning movies, and contrast the different methods used to achieve the same goals of making an Academy Award winning film.

### Drawing

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Drawing students, through self-directed investigations, develop themes to produce an original body of artwork. The students analyze and interpret art history and culture, develop a personal portfolio, analyze a wide range of artwork, and work toward mastery of drawing media.

### IT Security

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Students conduct laboratory investigations, using scientific methods during computer investigations and make informed decisions using critical thinking and scientific problem solving. Various systems that are used are Nmap, MetaSploit, Aircrack, and WireShark. Students will study a variety of topics that include network packet monitoring, exploitation discovery, packet injection, SQL injection, and XXS. Students will apply security concepts and perform laboratory experimentation for at least 40% of instructional time using safe practices.

### IT Fundamentals+

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

IT Fundamentals class focuses on the knowledge and skills required to identify and explain the basics of computing, IT infrastructure, software development, and database use.

### Work Study

Credits: 0.5 – 1.0

Course Description: CTE/Fine Arts Elective

Students can earn credit by working on a job site and learning through experience. A student must have taken or currently be enrolled in Career Essentials to be eligible for work experience credit. Written assignments and job evaluations must be completed. Students may earn a .5 credit by completing 75 hours in an 18-week period. Students may earn a full credit by continuing their work experience and completing 150 hours in a 36-week period. Course is limited to Juniors and Seniors and can be repeated for a maximum of 2.0 credits.

Service Learning

Credits: 0.5 – 1.0

Course Description: CTE/Fine Arts Elective

Students can earn credit by volunteering for a non-profit organization and learning through experience. A student must have taken or currently be enrolled in Career Essentials to be eligible for service learning credit. Written assignments and performance evaluations must be completed. Students may earn a .5 credit by completing 75 hours in an 18-week period. Students may earn a full credit by continuing their service learning and completing 150 hours in a 36-week period. Course is limited to Juniors and Seniors and can be repeated for a maximum of 2.0 credits.

**Career Technical Education (Workshop CTE)**

You must attend a workshop location for these classes.

Introduction to Auto Technology 1

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Students will learn about all aspects of automotive technology. In this course students will understand about the overall vehicle, how it works and how to diagnose problems and make basic repairs.

Introduction to Auto Technology 2

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Students will continue learn about all aspects of automotive technology. In this course students will gain a deeper understanding about the overall vehicle, how to diagnose problems and make advanced repairs.

Auto Technology 1

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Prerequisite: Successful completion of Introduction to Auto Technology 1-2. In this course of the Auto Technology program the student will learn how to diagnose more advanced automotive problems and how to make these repairs.

Auto Technology 2

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Prerequisite: Successful completion of Auto Technology 1. In this course of the Auto Technology program the student will continue to learn how to diagnose more advanced automotive problems and how to make these repairs.



### Culinary Arts 1

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Students in Culinary Arts 1 will, in a laboratory setting, acquire hands-on skills and experience needed to demonstrate the application of creative food preparation. The focus will be on the development of food preparation skills required to be a success in the culinary and related industries. Other focus points include proper food handling, safety and sanitation, use of weights and measurements, use of tools and equipment, knife skills, culinary language terminology, ingredient identification and their function. Students will be required to comply with industry-specific personal presentation and dress code. Students gain valuable leadership and employment skills.

### Culinary Arts 2

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

Students in Culinary Arts 2 builds on Culinary Arts 1. Students will, in a laboratory setting, acquire hands-on skills and experience needed to demonstrate the application of creative food preparation. The focus will be on the development of food preparation skills required to be a success in the culinary and related industries. Other focus points include proper food handling, safety and sanitation, use of weights and measurements, use of tools and equipment, knife skills, culinary language terminology, ingredient identification and their function. Students will be required to comply with industry-specific personal presentation and dress code. Students gain valuable leadership and employment skills.

### Woodworking 1

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

This course is aimed at any student interested in learning about the world of work. The students will learn how to work with a variety of machines and processes found in the carpentry trades. During this course, students will learn how to plan, select and use materials, including tools and machines to produce a finished product. Emphasis will be on safety and quality of workmanship.

### Woodworking 2

Duration: 75 Hours

Credits: 0.5

Course Description: CTE/Fine Arts Elective

This course builds on Woodworking 1. The students will learn advanced techniques to work with a variety of machines and processes found in the carpentry trades. During this course, students will learn how to plan complex projects, select and use materials, including tools and machines to produce a finished product. Emphasis will be on safety and quality of workmanship. The final project will include designing and building a functional, finished product.

## General Electives

### College Readiness and High School Review

Duration: 150 Hours

Credits: 1.0

Course Description: Elective

This course is designed for students leaving high school and looking for a comprehensive review of High School Math, Reading, Writing, Science and Social Studies. This course will prepare students for the rigors of college course work by giving them the ability to review those vital skills linked to each core subject area. The students will review reading comprehension skills, note-taking, organization skills, time management, test taking strategies, outlining and writing essays, developing hypotheses, researching various topics, and other skills used in college courses. This course is a one credit course and with hard work should be completed in six weeks.

### Humanities I

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Humanities I lessons focus on the performing arts of music, dance, theater, opera, motion pictures, and television. Humanities, along with the social sciences and natural sciences, represent the knowledge that humans have created throughout history. Focusing on the philosophical, spiritual, and artistic aspects of life, Humanities explore the artistic and cultural accomplishments of individuals in the following academic areas: literature, religion, painting, sculpture, architecture, photography, art history, music, theater, film, dance, and the Classics of Ancient Greece and Ancient Rome.

1090L

### Humanities II

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Humanities II explores the influential subject areas of language, philosophy, ethics, literature, and religion. Humanities, along with the social sciences and natural sciences, represent the knowledge that humans have created throughout history. Focusing on the philosophical, spiritual, and artistic aspects of life, Humanities explore the artistic and cultural accomplishments of individuals in the following academic areas: literature, religion, painting, sculpture, architecture, photography, art history, music, theater, film, dance, cultural studies of civilizations, philosophy, languages, ethics, and the Classics of Ancient Greece and Ancient Rome.

1090L

### Lifetime Fitness

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

The importance of being physically fit will determine the quality of an individual's lifestyle. The lessons in this title will focus on elements of lifetime physical fitness. Lessons include the importance of a lifetime plan of physical activity, exercise, and good nutrition. As students' progress through the lessons on Lifetime Fitness, they will understand how all parts of the body interact to allow physical fitness to take place.

### Independent Physical Education

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

This pass/fail course requires student participation in weekly cardiovascular, aerobic, muscle-toning, and other activities. Students fulfill course requirements by keeping weekly logs of their physical activity. The course promotes the value of lifetime physical activity. Students must engage in an 18 week fitness program to receive credit.

### Medical Math

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Medical math introduces students to how math skills are applied in the medical field. Students are introduced to medical conversion tables and units of measure. Students are given real life medical situations to solve using math skills.

### Medical Terminology

Duration: 75 Hours

Credits: 0.5

Course Description: Elective

Medical Terminology introduces students to the various medical terms they will encounter in medical field. Students will learn how terms are used and applied in the medical field.

### Skills Development

Duration: 75-150 Hours

Credits: 0.5 – 1.0

Course Description: Elective

Skills Development is used to prepare students for future math and language arts classes. The course uses pre-assessment tests to determine a student's level of core knowledge in Math and Language Arts. Once testing is complete students will be automatically assigned coursework in areas that they were deficient. The number of lessons varies depending on the assessment test results. Students should plan on the list to be between 75 and 185 lessons. If more than 120 hours and 150 lessons are completed students will have the opportunity to earn a full 1.0 credits.

## Health

Course Description: Elective

Health is designed to move the student from a narrow focus to a broad perspective of health. With an emphasis on nutrition and exercise, students also learn about health risks, types of illnesses, functions of the major systems of the body, and health career options.

### Outdoor Adventure 1

Duration: 75-150 Hours

Credits: 0.5 – 1.0

Course Description: Elective

Students learn outdoor skills through a variety of classroom and hands-on experiences.

### Outdoor Adventure 2

Duration: 75-150 Hours

Credits: 0.5 – 1.0

Course Description: Elective

Students learn outdoor skills through a variety of classroom and hands-on experiences.

### Outdoor Adventure 3

Duration: 75-150 Hours

Credits: 0.5 – 1.0

Course Description: Elective

Students learn outdoor skills through a variety of classroom and hands-on experiences.

### Outdoor Adventure 4

Duration: 75-150 Hours

Credits: 0.5 – 1.0

Course Description: Elective

Students learn outdoor skills through a variety of classroom and hands-on experiences.

## Modern Languages

### Spanish IA

Duration: 75 Hours

Credits: 0.5

Course Description: Foreign Language

The Spanish I A course is a comprehensive, completely integrated course for grades 9-12. Spanish I A is designed to help students comprehend and communicate the Spanish language as well as gain a better awareness of Spanish-speaking cultures.

### Spanish IB

Duration: 75 Hours

Credits: 0.5

Course Description: Foreign Language

The Spanish I B course is a comprehensive, completely integrated course for grades 9-12. Spanish I B is designed to help students advance on the skills obtained in Spanish IA by building on the fundamental concepts. This class is designed to help students comprehend and communicate the Spanish language as well as gain a better awareness of Spanish-speaking cultures.

### Spanish IIA

Duration: 75 Hours

Credits: 0.5

Course Description: Foreign Language

The Spanish II A course is a comprehensive, completely integrated course for grades 9-12. Spanish II A is designed to help students advance on the skills obtained in Spanish IA and IB by building on the fundamental concepts. This class is designed to help intermediate students comprehend and communicate the Spanish language as well as gain a better awareness of Spanish-speaking cultures.

### Spanish IIB

Duration: 75 Hours

Credits: 0.5

Course Description: Foreign Language

The Spanish II B course is a comprehensive, completely integrated course for grades 9-12. Spanish II B is designed to help students advance on the skills obtained in Spanish IIA by building on the fundamental concepts. This class is designed to help intermediate students comprehend and communicate the Spanish language as well as gain a better awareness of Spanish-speaking cultures.