

**2020 – 2021**  
**SELIGMAN HIGH SCHOOL**  
**COURSE CATALOG**



# English

## English I

**A: AZ01001/ B: AZ01039**

Grades: 9	Full Year	1 Credit
<i>Prerequisite: None</i>		MEETS ENGLISH REQUIREMENT

This course is for 9th grade students and builds on students' prior knowledge of language arts skills. Emphasis is placed on grammar and usage, academic vocabulary, speaking and listening skills, as well as reading literary and informational text. Writing activities will give students practice in organizing and developing various styles of composition, such as: narrative, argument, expository, research, and response to literature.

## English II

**A: AZ01002/ B: AZ01040**

Grades: 10	Full Year	1 Credit
<i>Prerequisite: English I</i>		MEETS ENGLISH REQUIREMENT

This course is for 10th grade students and builds on students' prior knowledge of language arts skills. The curriculum is a balance between reading various types of text and composition. Through the study of literature, informational text, and media, students can improve comprehension and analysis skills. Writing activities will give students practice in organizing and developing various styles of composition with an emphasis on understanding an author's intent and being able to write a supported argument.

## English III

**A: AZ01003/ B: AZ01045**

Grades: 11	Full Year	1 Credit
<i>Prerequisite: English II</i>		MEETS ENGLISH REQUIREMENT

This course is for 11th grade students and continues to develop reading, writing, and language skills, as well as speaking and listening experiences. Emphasis is placed on reading diverse texts at more critical levels. In addition to writing activities designed to accompany the reading material, attention is placed on refining students' abilities to write clearly with specific purpose in multiple forms and patterns.

## English IV

**A: AZ01004/ B: AZ01004**

Grades: 12	Full Year	1 Credit
<i>Prerequisite: English III</i>		MEETS ENGLISH REQUIREMENT

This course is for 12th grade students and continues to develop reading, writing, and language skills, as well as speaking and listening experiences. The course is designed to blend reading text and composition into a cohesive whole. Emphasis is placed on analytical and evaluative composition skills in combination with reading diverse critical texts. Students will continue to develop vocabulary and language skills as they write compositions in multiple forms and patterns.

## Creative Writing

**AZ01104**

Grades: 10,11,12	Full Year	1 Credit
<i>Prerequisite: English I</i>		MEETS ENGLISH REQUIREMENT

This course offers students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the courses is on writing; however, students may also study exemplary representations and authors to obtain a fuller appreciation of the form and craft, such as such as poetry or playwriting.

# Mathematics

## Algebra I

**A: AZ02052/ B: AZ02054**

Grades: 9,10,11,12

Full Year

1 Credit

*Prerequisite: None*

MEETS MATH REQUIREMENT

This course includes the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

## Algebra II

**A: AZ02056/ B: AZ02059**

Grades: 10,11,12

Full Year

1 Credit

*Prerequisite: Algebra I, Geometry*

MEETS MATH REQUIREMENT

Algebra II course topics include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

## Geometry

**A: AZ02072/ B: AZ02076**

Grades: 9,10,11,12

Full Year

1 Credit

*Prerequisite: Algebra I*

MEETS MATH REQUIREMENT

This course emphasizes an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangle

## Pre-Calculus

**AZ02110**

Grades: 11,12

Full Year

1 Credit

*Prerequisite: Algebra II*

MEETS MATH REQUIREMENT

Pre-Calculus courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

## Business Math

**AZ02154**

Grades: 11,12

1 Semester

0.5 Credit

*Prerequisite: Algebra I, Geometry*

MEETS MATH REQUIREMENT

This course will reinforce general math skills, emphasize speed and accuracy in computations, and use these skills in a variety of business applications. Students will reinforce general math topics (e.g., arithmetic, measurement, statistics, ratio and proportion, exponents, formulas, and simple equations) by applying these skills to business problems and situations; applications might include wages, hourly rates, payroll deductions, sales, receipts, accounts payable and receivable, financial reports, discounts, and interest.

**Consumer Math****AZ02157**

Grades: 11,12	1 Semester	0.5 Credit
<i>Prerequisite: Algebra I, Geometry</i>		MEETS MATH REQUIREMENT

This course will reinforce general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

# Science

**Earth Science****AZ03001**

Grades: 9,10,11,12	Full Year	1 Credit
<i>Prerequisite: None</i>		MEETS SCIENCE/LAB REQUIREMENT

Earth Science is a laboratory course focusing on the study of geologic structures and forces, the waters on our planet, and the atmospheric forces that shape our world. This course explores oceanography, geology, astronomy, meteorology, and geography. Students will learn about scientific inquiry, plate tectonics, and geologic time, and will have a clear understanding of the dynamic forces at work in the world around them, becoming better caretakers of the planet.

**Biology****AZ03051**

Grades: 9,10,11	Full Year	1 Credit
<i>Prerequisite: None</i>		MEETS SCIENCE/LAB REQUIREMENT

This course is designed to provide information regarding the fundamental concepts of life and life processes. It includes such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

**Anatomy****AZ03054**

Grades: 10,11,12	1 Semester	0.5 Credit
<i>Prerequisite: Biology</i>		

Anatomy courses present an in-depth study of the human body and biological system. Students study such topics as anatomical terminology, cells, and tissues and typically explore functional systems such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems.

**Chemistry****AZ03101**

Grades: 10,11,12	Full Year	1 Credit
<i>Prerequisite: Algebra I</i>		MEETS SCIENCE/LAB REQUIREMENT

Chemistry courses involve studying the composition, properties, and reactions of substances. This course explores such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

## Physics

**AZ03151**

Grades: 11,12	Full Year	1 Credit
<i>Prerequisite: Algebra II</i>		MEETS SCIENCE/LAB REQUIREMENT

Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

## Physical Science

**AZ03159**

Grades: 9,10,11,12	1 Semester	0.5 Credit
<i>Prerequisite: None</i>		

This course involves the study of the structures and states of matter. This course includes such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions.

# Social Studies

## World History

**AZ04051**

Grades: 10	Full Year	1 Credit
<i>Prerequisite: None</i>		MEETS SOCIAL STUDIES REQUIREMENT

This course provides students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. It also includes geographical studies.

## U.S. History

**AZ04101**

Grades: 11	Full Year	1 Credit
<i>Prerequisite: None</i>		MEETS SOCIAL STUDIES REQUIREMENT

This course provides students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. It includes a historical overview of political, military, scientific, and social developments.

## Civics

**AZ04161**

Grades: 12	1 Semester	0.5 Credit
<i>Prerequisite: None</i>		MEETS SOCIAL STUDIES REQUIREMENT

This course examines the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system.

## Economics

**AZ04201**

Grades: 12	1 Semester	0.5 Credit
<i>Prerequisite: None</i>		MEETS SOCIAL STUDIES REQUIREMENT

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

# Art

## Graphic Design

**AZ05162**

Grades: 9, 10	Full Year	1 Credit
MEETS FINE ARTS OR ELECTIVE REQUIREMENT		

Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles. Course will incorporate AVID strategies for study, organization, and client/designer processes.

## Creative Art: Drawing & Painting (2D)

**AZ05155**

Grades: 9,10,11,12	Full Year	1 Credit
MEETS FINE ARTS OR ELECTIVE REQUIREMENT		

Drawing/Painting courses focus on the inter-relationships that occur between drawing and painting using a variety of media and techniques, emphasizing observation and interpretation of the visual environment. These courses typically include applying the elements of art and principles of design, along with a study of art and artists from a worldwide perspective, and instruction in the critique process. Advanced courses may encourage students to refine their creative process and develop their own artistic styles following and breaking from traditional conventions.

## Creative Art: Sculpture (3D)

**AZ055158**

Grades: 9,10,11,12	Full Year	1 Credit
MEETS FINE ARTS OR ELECTIVE REQUIREMENT		

This course promotes creative expression through three-dimensional works. It explores representational and abstract sculpture through subtractive (carving), additive (modeling), and assemblage techniques in one or more media. The course includes the production of representational and abstract sculptures while incorporating elements of art and principles of design, along with a study of historical and contemporary sculpture and sculptors from a worldwide perspective. These courses also provide instruction in the process of responding to art through analysis, critique, and interpretation for the purpose of reflecting on and refining work.

# Foreign Language

## Spanish I

**AZ06101**

Grades:	Full Year	1 Credit
<i>Prerequisite: None</i>	MEETS ELECTIVE OR FOREIGN LANGUAGE REQUIREMENT	

Designed to introduce students to Spanish language and culture, this course prepares students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on a variety of topics. They introduce the relationships among the products, practices, and perspectives of Spanish-speaking cultures.

## Spanish II

**AZ06102**

Grades:	Full Year	1 Credit
<i>Prerequisite: Spanish I</i>	MEETS ELECTIVE OR FOREIGN LANGUAGE REQUIREMENT	

Spanish II builds upon skills developed in Spanish I, preparing students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on concrete topics. This course introduces the relationships among the products, practices, and perspectives of Spanish-speaking cultures.

# Physical Education

## Fitness

**AZ08005**

Grades: 9,10,11,12	Full Year	1 Credit
<i>Prerequisite: None</i>	MEETS PHYSICAL EDUCATION REQUIREMENT	

This Fitness/Conditioning course will emphasize conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness. This is a moderately active course and appropriate clothing is required. May be repeated for elective credit.

## Physical Education

**AZ08001**

Grades: 9,10,11,12	Full Year	1 Credit
<i>Prerequisite: None</i>	MEETS PHYSICAL EDUCATION REQUIREMENT	

This course introduces students to the importance of physical activity in order to live a longer, healthier, enjoyable life; including flexibility training and cardiovascular and strength development. Team sports, dual and individual, are emphasized. The health related physical fitness test is administered once each semester. This is a moderately active course and appropriate clothing is required. May be repeated for elective credit.

# CTE: Agriculture

## Equine Science

**AZ18902**

Grade: 11	Full Year	1 Credit
<i>Prerequisite: Veterinary Science or Instructor Approval</i>	MEETS ELECTIVE REQUIREMENT	

This course is designed to spark students' interest in the equine industry and help provide them with skills that could be used in later classes as well as everyday life. Students will be competing in FFA events in which they can utilize their technical and leadership skills. Equine Science courses focus on the care and management of horses. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study. Students also have an opportunity to earn college credit by doing dual enrollment through Yavapai College.

**Veterinary Science****AZ18901**

Grade: 10	Full Year	1 Credit
<i>Prerequisite: Equine Science or Instructor Approval</i>		
MEETS ELECTIVE REQUIREMENT		

This course will open the doors to an in depth look at what it takes to become a veterinary assistant, with a chance for certification. Students will be competing in FFA events in which they can utilize their technical and leadership skills. Veterinary Science courses impart information about the causes, diagnosis, and treatment of diseases and injuries of animals, typically emphasizing domestic and farm animals. Course topics focus on anatomy and physiology, nutrition, behavior, and reproduction, but may also include other areas of study as appropriate.

**Agriculture Mechanics****AZ18403**

Grade: 12	Full Year	1 Credit
<i>Prerequisite: Intro. To Agriculture or Instructor Approval</i>		
MEETS ELECTIVE REQUIREMENT		

This course will open the doors to a diversified career path. Students will be learning the skills of arc and MIG welding, acetylene cutting, hot and cold metalworking, woodworking, power tools, paints and painting, plumbing, and sketching and drawing plans. Students will be constructing entry-level projects in woodworking and metalworking. Attainment of these skills will enable a student to seek employment in welding, equipment manufacturing and sales, body repair and steel fabricators. Students will have an opportunity to become active in the Seligman FFA. Agriculture Mechanics and Equipment courses provide students with the engineering and power technology principles, skills, and knowledge that are specifically applicable to the agricultural industry. Typical topics include the operation, maintenance, and repair of power, electrical, hydraulic, and mechanical systems.

**Introduction to Agriculture****AZ18900**

Grade:9	Full Year	1 Credit
<i>Prerequisite: None</i>		
MEETS ELECTIVE REQUIREMENT		

This entry-level course will open the doors to a diversified career path. It is an introduction to Agriculture and all the opportunities this broad industry provides. The students will be introduced to careers in agriculture, plant science, greenhouse environments, landscaping, animal science, soils, water quality, aquaculture, shop practices, and FFA leadership. This course is designed to spark students' interest in the agricultural industry and help provide them with skills that could be used in later classes as well as everyday life. Students will be competing in FFA events in which they can utilize their technical and leadership skills.

**Agriculture Science (Agricultural Leadership AZ18203, Sustainable/Alternative Agriculture AZ18310)**

Grades: 10-12	Full Year	1 Credit
<i>Prerequisite: None</i>		
MEETS ELECTIVE REQUIREMENT		

This course will open the doors to a diversified career path. One semester will focus on Ag. Leadership, Issues, and Communications (types of leadership, current ag. issues, communicating ag. issues stances effectively using different media), and one semester will center around Integrated Pest Management (entomology, crop and animal pest protection, environmental control strategies). This course is designed to spark students' interest in the agricultural industry and help provide them with skills that could be used in later classes as well as everyday life. Students will be competing in FFA events in which they can utilize their technical and leadership skills.



# Electives

## Digital Electronics

**AZ21909**

Grades: 9,10,11,12

1 Semester

0.5 Credit

*Prerequisite: None*

MEETS ELECTIVE REQUIREMENT

Digital Electronics courses teach students how to use applied logic in the development of electronic circuits and devices. Students may use computer simulation software to design and test digital circuitry prior to the actual construction of circuits and devices. Introduction to logic circuits used in computers and other digital equipment. Includes number systems, logic gates, combinatorial logic, simplification techniques, encoders, decoders, flip-flops, counters, registers, memory, and digital-to-analog and analog-to-digital converters.

## Robotics

**AZ21009**

Grades: 9,10,11,12

1 Semester

0.5 Credit

*Prerequisite: None*

MEETS ELECTIVE REQUIREMENT

Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

## Yearbook

**AZ11104**

Grades:

Full Year

1 Credit

This course provides students with the knowledge and skills necessary to produce the school yearbook and newspaper. Students may gain experience in several components (writing, editing, layout, production, and so on).

## Student Aide

**AZ22995**

Grades:10, 11, 12

Semester

0.25 Credit

*Prerequisite: Administrator and teacher approval*

Pass/Fail grade only

Students will be assigned to the office or to a teacher and serve as an assistant performing a variety of duties.