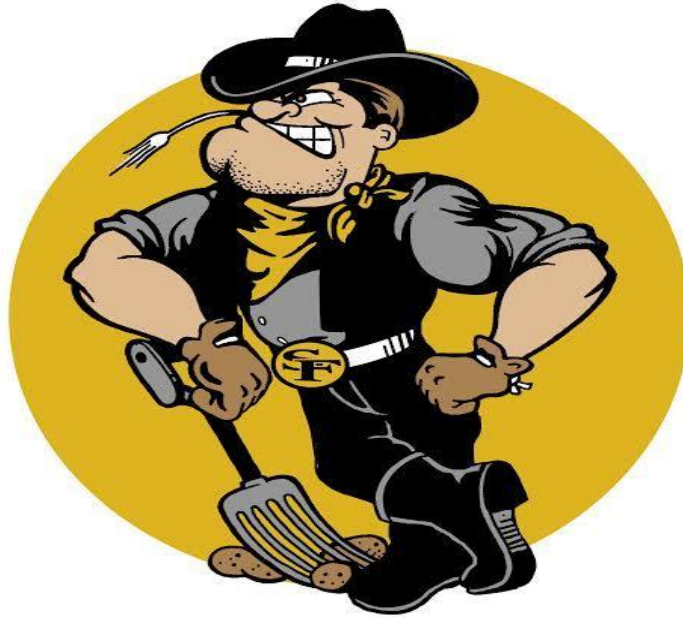


**SARGENT HIGH SCHOOL
COURSE DESCRIPTION BOOKLET
2026-2027**



Cultivating Character, Harvesting Champions

NOTE: Please understand that a course mentioned in this booklet may not be offered every academic year.

ENGLISH

ENGLISH 9 (Lower): 1.0 English credit. *Required.*

Description: Students in Freshman English will become clear, coherent, and proficient writers by the end of their freshman year. Students will work toward this goal through grammatical and usage analysis of writing assessments, journaling, writing coherent paragraphs (narrative, descriptive, expository, and persuasive), five-paragraph essays, and brief research assignments. Vocabulary word study is included in the context of their literature assignments. Students will read a variety of literary genres, including drama, fiction, non-fiction, short stories, essays, and poetry. Standard literature included in the freshman year includes *The Lord of the Flies*, *Night*, Shakespeare's *Romeo and Juliet*, *Of Mice and Men*, and a variety of short stories.

ENGLISH 10 (Lower): 1.0 English credit. *Required.*

Prerequisite: English 9

Description: Students in Sophomore English will continue to improve their writing skills, with greater emphasis on research writing. They will continue their study of Standard English and writing through journaling, essays, and larger research assignments. Students will continue reading classics of literature from a variety of genres, including drama, fiction, non-fiction, short stories, essays, and poetry. Standard literature included during the sophomore year includes *To Kill a Mockingbird*, Shakespeare's *Julius Caesar*, *Fahrenheit 451*, *The Great Gatsby*, and a variety of short stories.

ENGLISH 11 (Upper): 1.0 English credit. *Required.*

Prerequisite: English 9, 10

Description: Students in English 11 will study American literature from a historical perspective. Literary criticism and expository writing skills will continue to be worked on. Students will be engaged in analyzing the emerging and changing themes found throughout American Literature and reflect through writing and oral presentation their findings within each chronological event. Standard literature included during junior year includes *Into the Wild*, *The Catcher in the Rye*, and *The Old Man and the Sea*.

ENGLISH 12 (Upper): 1.0 English credit

Prerequisite: English 9, 10, 11

Description: Prepared graduates in English 12 will interpret and evaluate complex literature and a wide range of informational texts using various critical reading strategies. Through the exploration of these texts, students will understand how language influences the comprehension of narrative, argumentative, and informational texts. Students will also engage in writing a variety of texts. These will include: thoughtful, well-developed arguments that support knowledgeable and significant claims, anticipating and addressing the audience's values and biases; informative/explanatory texts to examine and convey complex ideas through the effective selection, organization, and analysis of content; engaging and significant real or imagined narratives that build toward a particular tone or outcome; synthesize multiple, authoritative literary and/or informational sources to answer questions or solve problems, producing well-organized and developed research projects that defend information, conclusions, and solutions. Students will complete these writing pieces by using a recursive writing process to produce, publish, and update individual or shared writing projects in response to ongoing

feedback. Throughout the entire course, students will integrate credible, accurate information into appropriate media and formats to meet an audience's needs by following collaborative guidelines to ensure a hearing of a full range of positions on a topic or issue, and evaluate responses. APA formatting will be introduced and focused on to further develop research skills through literary studies and exposure to different writing genres. As well as continued emphasis on skills to become real-world writers and preparedness for post-secondary livelihoods.

TSC ENG 121- English Composition I Concurrent Enrollment Class

Prerequisite: Administrative approval

Description: English 121 is a college-level course that emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a wide variety of compositions that stress analytical, evaluative, and persuasive/argumentative writing. This is a statewide Guaranteed Transfer course in the GT-CO1 category.

TSC ENG 122- English Composition II Concurrent Enrollment Class:

Prerequisite: Administrative approval and TSC ENG 121

Description: English 122 is a college-level course that expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and/or argumentative compositions. This course is approved as part of the Colorado Statewide Guaranteed Transfer curriculum GT-C02.

ASU ENG 101 - Communication Arts I Concurrent Enrollment Class

Prerequisite: Administrative approval

Description: This course is a college-level course designed to provide students with the reading, writing, and critical thinking skills necessary to produce effective college-level expository writing.

ASU ENG 102 - Communication Arts II Concurrent Enrollment Class

Prerequisite: Administrative approval and ASU ENG 101

Description: The emphasis in this course is upon source-based writing designed to develop skills in critical reading, thinking, and writing. A series of written assignments, including a fully documented paper and oral presentation, is required.

ENGLISH PROGRAM SCOPE AND SEQUENCE:

9th Grade: English 9

10th Grade: English 10

11th Grade: English 11

12th Grade: English 12 or TSC ENG 121/122 or ASU ENG 101/102

MATHEMATICS

ALGEBRA I: 1.0 mathematics credit. *Required.*

Description: Algebra I is designed to develop students' foundational understanding of algebraic concepts and problem-solving skills. This course focuses on the fundamental principles, such as numerical and algebraic expressions, equations in one variable, relations and functions, linear and nonlinear functions, creating linear equations, linear inequalities, systems of linear equations and inequalities, exponents and roots, exponential functions, polynomials, quadratic functions, and statistics.

GEOMETRY: 1.0 mathematics credit. *Required.*

Prerequisite: Algebra I

Description: This course emphasizes deductive reasoning, critical thinking, and problem-solving skills through the study of the following topics: Tools in Geometry: points, lines, planes, line segments, distance, midpoints, and bisectors; Angles and Geometric figures: angles, congruence, and angle relationships, two-dimensional figures, transformations in the plane, surface, and volume of three-dimensional figures. Logical Arguments and Line Relationships: conjecture and counterexample, statement, conditionals, and biconditionals, deductive reasoning, writing proofs, proving segments and angle relationships, parallel lines and transversal, slopes, and equations of lines, proving lines parallel, perpendicular, and distance; Transformations and Symmetry: reflections, translations, rotations, composition of transformations, tessellations, and symmetry. Triangles and Congruence: angles of triangles, congruent triangles, proving triangles congruent: ASA, AAS, proving right triangles congruent, isosceles and equilateral triangles, and triangles and coordinate proofs; Relationships in Triangles: perpendicular and angle bisectors, median and altitude, inequalities in one triangle, indirect proof, the triangle inequality, and inequalities in two triangles; Quadrilaterals: angles of polygons, parallelograms, tests for parallelograms, rectangles, rhombi and squares, trapezoids and kites; Similarity: dilations, similar polygons, similar triangles: AA, SSS and SAS, triangle proportionality, and parts of similar triangles. Right Triangles and Trigonometry: geometric mean, Pythagorean theorem and its converse, coordinate in space, special right triangles, applying trigonometry, the law of sines and cosines; Circles: circumference, angles, arcs, chords, inscribed angles; Measurement: area of quadrilateral, regular polygon, circles and sectors, cross section and solid revolution, applying similarity to solid figures, and density; and Probability: sample space, probability and counting, geometric probability, permutations and combinations, multiplication rule, addition rule, conditional probability and two-way frequency table.

ALGEBRA II: 1.0 mathematics credit. *Required*

Prerequisite: Algebra I, Geometry, and/or Teacher approval

Equipment: Graphing Calculator TI-83 or higher suggested

Description: Algebra II is a step beyond Algebra I, delving deeper into advanced algebraic techniques and mathematical principles. This course focuses on exploring relations and functions: linear equations, inequalities, and systems; quadratic functions; polynomials and polynomial functions; polynomial equations; inverse and radical functions; rational functions; inferential statistics; trigonometric functions; and trigonometric identities and equations.

ALGEBRA III: 1.0 mathematics credit

Prerequisite: Algebra I, Geometry, Algebra II

Description: Review, expand, and improve upon understanding of Algebra I, Geometry, and Algebra II, and then introduce elements of Precalculus. Topics include solving equations in one variable, modeling real-world situations, inequalities, absolute values, graphing equations, polynomial manipulation, systems of equations, circles, piecewise functions, complex numbers, solving quadratics, rational functions, properties of exponents and radicals, angles, arcs, triangles, trigonometric ratios and functions, logarithmic functions, and exponential functions

PRE-CALCULUS: 1.0 mathematics credit

Prerequisite: Algebra I, Geometry, Algebra II, or teacher approval

Equipment: Optional graphing Calculator TI-83 or higher required

Description: Integrates statistical and algebraic concepts, and previews calculus in work with functions and intuitive notions of limits. Enough trigonometry is available to constitute a standard pre-calculus course in the areas of trigonometry and circular functions. Analysis of functions, including exponential, logarithmic, logistic, trigonometric, and polynomial functions, will be emphasized.

CONSUMER MATH: 1.0 mathematics credit

Prerequisite: Algebra I, Geometry, Algebra II, or teacher approval

Description: Consumer Mathematics is a practical course that provides students with the mathematical skills needed for financial success. The first semester is titled Personal Finance, and the second semester is titled Business Finance. Personal Finance focuses on how math is applied in the real world, such as banking, calculating wages and income, saving money, budgeting, calculating simple and compound interest for an investment or loan payment, investing in the stock market, buying a house, house improvements, medical insurance, and buying a car and auto insurance. Business Finance covers the following topics: creating and selling products; advertising; federal taxes; tax returns; calculating costs and staffing requirements in a company; calculating selling price; product design and sales; travel agent: designing a trip; restaurant owner: menu design; shipping; experimental probability; and projecting profits.

AP CALCULUS A/B: 1.0 mathematics credit. *Weighted grade.*

Prerequisite: Algebra I, Geometry, Algebra II, or teacher approval

Description: Review of functions and applications. Study of limits leading to differential calculus and integral calculus. Applications, including optimization, volumes of solids of revolution, and work, will be included. Graphing calculator required.

Sargent Secondary Math Flowchart

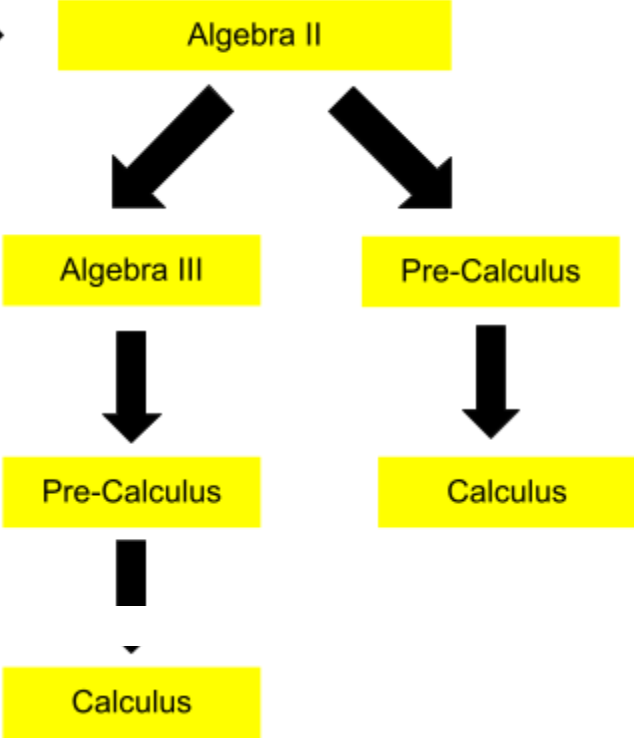


Students will follow this flowchart using the current data available and by teacher recommendations/approval.



Algebra 1 can be taken in 8th or 9th Grade.

Consumer Math.
Must have completed Alg I,
Geometry, and Alg II



SCIENCE

PHYSICAL SCIENCE/LAB: 1.0 Science credit. *Required.*

Lab Fee: \$15

Description: This class serves as an introduction to the topics of Physics and Chemistry.

Generally, one semester of coursework on each subject. Students will be expected to participate fully in several laboratory activities as well as classroom work.

BIOLOGY/LAB: 1.0 Science credit. *Required.*

Prerequisite: Physical Science

Lab Fee: \$15

Description: This course is designed to introduce students to fundamental topics regarding

Biology. This contains topics such as: the biosphere, population growth, cell structure, genetics/DNA, evolution, plant/animal biodiversity, and how humans interact with ecosystems.

EARTH SCIENCE/LAB: 1.0 Science credit

Lab Fee: \$15

Description: This course is designed to introduce students to fundamental topics regarding Earth and Space Science. This contains topics such as: matter, atomic structure, rocks/minerals, geology, weather processes, the water cycle, atmospheric/meteorological processes, oceans, plate tectonics, resource/environmental conservation, our solar system, and the universe.

AP BIOLOGY: 1.0 Science credit. *Weighted grade. Offered every other year.*

Prerequisite: Algebra 2 and Biology (or teacher approval)

Lab Fee: \$20

Description: The AP Biology course provides students with a college-level foundation to support future advanced coursework in biology. Students cultivate their understanding of biology through inquiry-based investigations, as they explore content such as: Chemistry of Life, Cells, Cellular Energetics, Cell Communication and the Cell Cycle, Heredity, Gene Expression and Regulation, Natural Selection, and Ecology.

CHEMISTRY: 1.0 Science credit.

Prerequisite: Algebra II or teacher approval.

Lab Fee: \$15

Description: Chemistry covers 4 major units: The structure and properties of matter, chemical bonding, chemical reactions, and Energy and Matter Interactions. This course is designed to prepare the student for a general chemistry course at the college level. Students will be expected to participate in classwork as well as many laboratory activities.

AP CHEMISTRY: 1.0 Science credit. *Weighted grade. Offered every other year.*

Prerequisite: Algebra 2 and Chemistry (or teacher approval)

Lab Fee: \$20

Description: The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of

chemistry through inquiry-based investigations as they explore content such as: atomic structure and properties, compound structure and properties, properties of substances and mixtures, kinetics, thermochemistry, equilibrium, acids and bases, and thermodynamics and electrochemistry.

HUMAN ANATOMY AND PHYSIOLOGY: 1.0 Science credit.

Prerequisite: Biology

Lab Fee: \$15

Description: Learn the anatomy and physiology of the human body, maladies that affect the body systems, and dissect animals that provide an analog to the human body

INTRO TO FORENSIC SCIENCE: 1.0 Science credit.

Prerequisites: Biology and Algebra II or teacher approval.

Lab Fee: \$15

Description: Forensic Science is a hands-on laboratory and project-based learning course that will lead the student through a foundation of law and criminal justice, history of forensics, and modern scientific advances in the field. Hair, fibers, DNA, ballistics, serology, poisons, drugs, arson, explosions, fingerprinting, forgery, and entomology are studied in detail. The scientific method, data analysis, and powers of observation and critical thinking to solve a problem are addressed in all aspects of the course. This course recognizes the growing interest in jobs within the sciences, the medical field, engineering, and law enforcement. These fields all overlap within the study of forensic science. In addition, the foundational aspect of this course will prepare students to then take college-level courses in physical sciences.

Course disclaimer

Before taking forensic science, both you and your parent/guardian must be aware of the topics covered as part of this course. In this course, you will study several controversial topics, which include the following crime scene situations and evidence:

Fingerprint analysis

Hair and fiber analysis

Blood spatter evidence

Handgun and bullet analysis

The effects of a fired bullet on objects and people

Detection of alcohol and drugs (legal and illegal) associated with a criminal/crime scene

Detection of poisons in blood

Impressions from weapons, footprints, and bite marks

Handwriting analysis as it relates to the forgery of documents

Arson, explosives, and hazardous materials

Decomposition of a body and forensic entomology

Cybercrime and the use of mobile devices by criminals and detectives

Case studies on infamous crimes and serial killers

You must be comfortable with these topics and understand that at several points during our study of these topics, you may encounter graphic images, videos, and illustrations in order to further

your understanding of certain topics. It is important to note that to convict criminals, one must first understand the circumstances of criminals, the crimes they commit, and the tools they use to commit them. This course is not a criminal's "how-to" guide, but the science behind how criminals are caught, and they are almost always caught!

AP PHYSICS: 1.0 Science credit. *Weighted grade.* **Offered every other year.**

Lab Fee: \$15

Prerequisite: Algebra II or teacher approval.

Description: This trigonometry-based physics class covers Newtonian Mechanics, kinematics, rotational motion, forces, energy, and waves. Students will be expected to participate in classwork and meet outside of class to complete a series of major labs. This course is designed to mimic a General Physics class in college and will be quite demanding.

Research I-IV: 1.0 Elective Credit

Lab Fee: \$15

Prerequisite: Teacher approval

Description: This course is designed to meet the needs of the student who wishes to conduct an extensive science inquiry into one scientific problem of their choice. The course of study will include locating and documenting twenty-five sources for research problems, making professional contacts with prominent scientists all over the world, and selecting at least one mentor for a project. In addition, the student must complete an extensive research plan and paper for the scientific problem. The student will enter his or her project in the SLV Regional Science Fair with a presentation board. A student in this course must be self-motivated and able to work independently.

SCIENCE PROGRAM SCOPE AND SEQUENCE:

9th Grade: Physical Science

10th Grade: Biology and Earth Science (optional)

11th Grade: Earth Science, Chemistry, Human Anatomy and Physiology, Intro to Forensic Science, AP Physics (when offered), AP Bio (when offered), AP Chem (when offered), Physics

12th Grade: Earth Science/Chemistry/Human Anatomy and Physiology, Intro to Forensic Science, AP Physics (when offered), AP Bio (when offered), AP Chem (when offered), Physics

SOCIAL STUDIES

WORLD GEOGRAPHY/ECONOMICS: 1.0 social studies credit. *Required.*

Description: This course examines the historical development of the various geographic regions of the world. It integrates the use of geographic tools and the 5 themes of geography with the history of each region. Regions examined include: Latin America, Europe, Russia, Sub-Saharan Africa, the Middle East, South Asia, East Asia, and Southeast Asia. Students will examine how society manages its resources, how people make decisions, how people interact in the marketplace, and how forces and trends impact the economy. With personal financial literacy, students will learn to apply economic knowledge to manage resources and make decisions using prioritization of the costs and benefits of every choice.

WORLD HISTORY: 1.0 social studies credit. *Required.*

Description: This course examines the historical, economic, and political development of the various regions of the world. Historical eras studied include: the Renaissance and Reformation, Exploration and Colonialism, Scientific and Industrial Revolution, Imperialism, WWI, and WWII. Students will also interpret primary sources and understand multiple perspectives in secondary sources. Students will also learn to write critical essays, understand cause and effect over time, and be able to compare developments from one period to another.

US HISTORY: 1.0 social studies credit. *Required.*

Description: This course examines the historical, economic, and political development of the United States from 1877 to the 1990's. Historical eras studied include: the Opening of the West, Industrialization, Imperialism and Reform, WWI and the 20's, the Depression and WWII, the Cold War and Civil Rights, Vietnam to Watergate, and the 80's and 90's.

AP US HISTORY: 1.0 social studies credit. *Weighted Grade.*

Prerequisite: Students should be able to read a college-level textbook and write grammatically correct, complete sentences.

Description: In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and reasoning about comparison, causation, and continuity and change. The course also provides eight themes that students explore throughout the course to make connections among historical developments in different times and places: American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures.

AMERICAN GOVERNMENT: 1.0 social studies credit. *Required.*

Description: This course examines the political development of the United States government and how it continues to change as our society evolves. The areas of study include: Foundations of the US Government, the Three Branches of Government, Rights and Responsibilities of Citizens, The Political System, Colorado State Government and Foreign Relations.

HISTORY PROGRAM SCOPE AND SEQUENCE:

9th Grade: World Geography/Economics

10th, 11th Grade: World History, US History, and/or AP US History

12th Grade: American Government/Financial Lit

WORLD LANGUAGES

SPANISH 1: 1.0 World Language Credit. *Required.*

Description: This beginning Spanish language course is designed to give students an introduction to the pronunciations, conversation essentials of grammar, written composition, and reading of materials with appropriate difficulty, in addition to working towards a solid foundation in basic grammar, vocabulary, and pronunciation the student will learn how to read a simple, authentic Spanish materials, list, describe, ask, and answer questions and express opinions to defend them in variety of oral and written activities. Also, the use of speech patterns, writing, and culture of the Spanish-speaking world through listening, speaking, reading, and writing. This course also includes an introduction to the geography and cultures of Spain and Latin America.

SPANISH 2: 1.0 World Language Credit.

Prerequisite: Spanish I or teacher approval

Description: This is a continuation of Spanish I. Further development of vocabulary and especially the use of verb tenses will be an essential part of the course. In addition to working toward a solid foundation in basic grammar, vocabulary, and pronunciation, the student will learn how to emulate authentic Spanish pronunciation; understanding simple spoken Spanish in connected sentences dealing with everyday situations. StudentE will learn how to ask and answer questions in the present, past, and future tense, dealing with basic vocabulary and common daily activities. This course includes more complex reading and writing, increased use of Spanish in classroom discussion, encouragement of self-expression, and increased study of cultural elements.

SPANISH 3: 1.0 World Language Credit.

Prerequisite: “C” average in Spanish II; teacher approval

Description: This Spanish language course will be a continuation of the grammar principles studied in the previous two years and will be accompanied by the reading of Spanish literature and various in-depth writing and speaking exercises. The student will study a more advanced spoken and written Spanish, emphasizing the wide range of grammatical structures and building vocabulary on contemporary issues through some translation and essay writing. This course also provides more extensive communication in the Spanish language, including a brief study of the history, art, and literature of the Spanish-speaking world.

SPANISH 4: 1.0 World Language Credit.

Prerequisite: “B” average in Spanish III; teacher approval

Description: This Spanish language course will be a great opportunity to continue the grammar principles studied in the previous three years and will be accompanied by the reading of Spanish literature and various in-depth writing and speaking exercises. The student will study a more advanced spoken and written Spanish, emphasizing the wide range of grammatical structures and building vocabulary on contemporary issues through some translation and essay writing.

PHYSICAL EDUCATION

PE: 1.0 Physical Education Credit

Prerequisite: None

Description: This class will focus on both the physical and mental aspects of physical fitness in relation to the cardiovascular system and its effects on the body. A class designed to help the student-athlete develop. Plyometric, parachutes, and other devices are available for the student.

WEIGHTS: 1.0 Physical Education Credit

Prerequisite: None, open to grades 10-12

Description: Students will engage in coordinated weight and cardiovascular-training programs that focus on good health and appropriate activities for high school students. Individualized programs designed to make students stronger, faster, and more flexible put weight on or take it off.

CTE Pathway Electives

AGRICULTURE

INTRODUCTION TO AGRICULTURE: 1.0 Elective Credit

Ag Fee: \$20

Description: An introductory course for first-year agriculture education students. This course introduces students to the foundational principles of agriculture, food, and natural resources. Students will gain knowledge in career development, leadership, personal development, communications, animal science, plant science, natural resources, food science, power/structure, and agribusiness.

PRINCIPLES OF ANIMAL AND VETERINARY SCIENCE: 1.0 Elective Credit

Ag Fee: \$20

Prerequisite: Intro to Agriculture

Description: Students will develop knowledge, skills, and understanding in the biological processes and physiological systems found in livestock and companion animal species, including anatomy and physiology, growth and development, muscular and skeletal systems, integumentary system, respiratory and circulatory systems, nervous system, lymphatic and endocrine systems, and excretory system. The scientific processes of observation, hypothesizing, data gathering, interpretation, analysis, and application will be included. Career opportunities and educational preparation will be examined. Learning activities are varied with classroom, laboratory, and field experiences.

ANIMAL PRODUCTION: 1.0 Elective Credit

Ag Fee: \$20

Prerequisite: Intro to Agriculture, Principles of Animal and Vet Science, and/or Ag Leadership/Ag Business

Description: Students will gain knowledge, skills, and understanding in a variety of systems of production as well as the care, management, and handling of livestock and companion animal species. Nutrients and nutrition, types of feed, balancing rations, herd health management, common diseases, parasites, disease treatment and prevention, reproductive management, routine administration techniques, and basic animal handling will be the topics covered in this course. Current animal agricultural issues will be researched and addressed. The scientific processes of observation, hypothesizing, data gathering, interpretation, analysis, and application will be included. Career opportunities and educational preparation will be examined. Learning activities are varied, with classroom, laboratory, and field experiences included.

PRINCIPLES OF AGRIBUSINESS (AG BUSINESS): 1.0 Elective Credit

Ag Fee: \$20

Prerequisite: Intro to Agriculture, Principles of Animal and Vet Science

Description: In this course, students will compare and contrast business models and identify the advantages and disadvantages to owners and customers within the agribusiness chains. Students will demonstrate an understanding of basic record-keeping skills and applications in an

agribusiness. Components include the general journal, balance sheet, cash flow statements, financial statements, reconciliation of accounts, net worth, income statements, and profit and loss statements. Students will understand how these records can inform business decisions within an agribusiness or Supervised Agriculture Experience (SAE) program. Instruction includes the use of economic principles such as supply and demand, budgeting, depreciation, Ag. finance, risk management, business law, and careers in agribusiness. Students will understand how these records can inform business decisions within an agribusiness or SAE program.

PRINCIPLES OF AG POWER, STRUCTURE, & TECHNICAL SYSTEM: 1.0 Elective Credit
Ag Fee: \$20

Prerequisite: Intro to Agriculture, Principles of Animal and Vet Science, and/or Ag Leadership/Ag Business/Animal Production

Description: Principles of Ag Power, Structure, and Technical System-A is an introductory course educating students to the basic skills and knowledge in construction and land management. This course covers topics including safety, project management, land site management, irrigation and drainage, and agricultural structures and components. Upon completion of this course, proficient students will be prepared for more advanced coursework in agricultural mechanics.

AG LEADERSHIP 1.0 Elective Credit
Ag Fee: \$20

Prerequisite: Intro to Agriculture, Principles of Animal and Vet Science, and/or Ag Leadership/Ag Business/Animal Production

Description: Ag Leadership is an educational path focused on developing the critical thinking, communication, and management skills necessary to guide the future of the agricultural industry. Students learn to navigate complex agricultural issues, direct diverse teams, and advocate for sustainable food and natural resource systems. Ultimately, it prepares individuals to become community pillars and innovative problem-solvers who can effectively bridge the gap between traditional farming heritage and modern global challenges.

WORK-BASED LEARNING IN AGRICULTURE: 1.0 Elective Credit
Ag Fee: \$20

Prerequisite: Teacher approval. Personalized learning plan required.

Description: This course is designed to prepare students to enter the workforce through on-the-job training in the form of a work-based learning experience and may be combined with class instruction. Students will build on prior knowledge and skills in the program of study aligned with their career and academic plan to further develop and apply employability and technical skills that prepare them for success in their future career and postsecondary education. Students will have the opportunity to develop skills through supervised practical experience on the job or in a classroom-based job environment.

AGRICULTURE PROGRAM SCOPE AND SEQUENCE:
9th Grade: Intro to Agriculture

10th Grade: Principles of Animal and Veterinary Science

11th Grade: Ag Business/Animal Production

12th Grade: Ag Business/Ag Leadership/Ag WBL/Principles of Ag Power, Structure, and Technical Systems

BUSINESS

INTRODUCTION TO BUSINESS 1.0 Elective Credit

Description: Introduces the application of fundamental business principles to local, national, and international forums. This course examines the relationship of economic systems, governance, regulations, and law upon business operations. It surveys the concepts of career development, business ownership, finance and accounting, economics, marketing, management, operations, human resources, regulations, and business ethics.

STRATEGIC MARKETING/GRAPHIC DESIGN 1.0 Elective Credit

Prerequisite: Teacher approval

Description: Semester 1 illustrates the connections between a market-driven strategy, customer satisfaction, and profitable growth. Students will examine how marketing strategies are developed and executed within both small and large organizations. The course will emphasize strategy development, implementation, and evaluation. Semester two focuses on the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos, and brochures.

INTRO TO ENTREPRENEURSHIP 1.0 Elective Credit

Prerequisite: Teacher approval

Description: Semester one explores the business skills, personality traits, and commitment necessary to successfully plan, launch, and grow an entrepreneurial venture. This course will cover the challenges and rewards of entrepreneurship. This course will cover the role of entrepreneurial businesses in the United States and the world and their impact on our national and global economy. In semester two, students in this course will demonstrate the culmination of learning within the business program. Students will demonstrate their understanding of business and management in a variety of simulated scenarios, applying theories, concepts, and problem-solving. Students will complete a capstone project that demonstrates their understanding of fundamental business concepts, including Accounting, Business Law, Ethics, Entrepreneurship, Computer Information Systems, Finance, Human Resources, Management, Marketing, Operations, Project Management, Risk Management, and Strategic Planning. The course covers the major aspects of small business management to enable the entrepreneur to successfully start a business in business organizations. Major topics include the accounting cycle for service and merchandising companies, including end-of-period reporting.

AP BUSINESS WITH PERSONAL FINANCE: 1.0 Elective Credit**Prerequisite:** Teacher approval

Description: Is an introductory, college-level business and personal finance course. Students explore the business disciplines of entrepreneurship, marketing, finance, accounting, and management through real-world business applications, case studies, and project-based learning. In addition, students learn and apply all the National Standards for Personal Financial Education.

AVIATION

INTRO TO AVIATION/AEROSPACE: 1.0 Elective Credit

Description: This course will provide an introduction to the aviation and aerospace industry and provide an entry-level examination of Aviation career opportunities. Students will explore the concepts and principles of Aviation and delve into general practices of the aerospace field. Areas of study include aviation history, pilot training, airplane structure, engines, basic aerodynamics, flight environment, airports, aviation weather, and navigation. In addition, the course exposes the student to the history of manned space flight.

AERODYNAMICS: 1.0 Elective Credit**Prerequisite:** Intro to Aviation

Description: This course studies the basic principles of aerodynamics, including airfoil shapes and aerodynamic forces, airplane performance, stability and control, strength limitations, and the application of these to specific flight situations. Included in these courses are flight performance with airflow in the sub-, trans-, and supersonic envelopes. Federal Aviation Administration: https://www.faa.gov/regulations_policies

PRINCIPLES OF FLIGHT: 1.0 Elective Credit**Prerequisite:** Intro to Aviation, Aerodynamics or teacher approval

Description: Principles of Flight builds on the fundamental knowledge and skills learned in Introduction to Aerospace while teaching students the essential competencies needed for flight under normal conditions. Upon completion of this course, proficient students will be able to apply knowledge, skills, and procedures in a variety of simulated flight environments. Moreover, students who complete this course will have the opportunity to move on to advanced study in Advanced Flight, where they will continue to prepare for the FAA Private Pilot written exam.

ADVANCED FLIGHT: 1.0 Elective Credit**Prerequisite:** Intro to Aviation, Aerodynamics, Principles of Flight, or teacher approval

Description: Advanced Flight is the capstone course in the Aviation Flight program of study, intended to prepare students for careers in aviation. While continuing to build upon the knowledge, skills, and competencies acquired in Introduction to Aerospace and Principles of Flight, students in Advanced Flight will receive rigorous instruction in preparation to take the Federal Aviation Administration (FAA) Private Pilot written exam. This course goes beyond the mastery of procedures under normal conditions learned in Principles of Flight. It introduces

students to the troubleshooting and diagnostic techniques used by pilots and other aircraft personnel to assess and correct malfunctions, make adjustments in hazardous weather conditions, and perform other crucial emergency procedures. Continued emphasis is placed on maintaining the safety of flight and developing sound judgment (“judgment training”) under these conditions. In addition, students will develop a keen understanding of advanced aerodynamics and the physics of flight to aid in decision-making and technical adjustments while working under simulated abnormal procedures.

AVIATION PROGRAM SCOPE AND SEQUENCE:

9th Grade: Intro to Aviation/Aerospace

10th Grade: Aerodynamics

11th Grade: Principles of Flight

12th Grade: Advanced Flight

ELECTIVES

AP COMPUTER SCIENCE: 1.0 Elective Credit. *Weighted grade.* **Offered every other year.**

Prerequisite: None

Lab Fee: \$15

Description: Computer Science embraces problem solving, hardware, algorithms, and perspectives that help people utilize computers to address real-world problems in contemporary life. Students completing the AP Computer Science Principles course and exam are well prepared to continue their study of computer science and its integration into a wide array of computing and STEM-related fields. This course introduces students to computer science through fundamental topics that include problem solving, design strategies and methodologies, organization of data, approaches to processing data, analysis of potential solutions, and the ethical and social implications of computing.

ART: 1.0 Elective Credit

Prerequisite: None

Art Fee: \$30

Description: This course is designed to give students a basic understanding and appreciation for art by exploring various materials and studio techniques. Equal time will be given to drawing, painting, ceramics, sculpture, and printmaking at the high school level, which will emphasize both skill development and creative thought process. Grading will be based on timely completion of work, craftsmanship, design, problem-solving, meeting project criteria, and work ethic. This course will meet the needs of all ability levels.

ADVANCED ART: 1.0 Elective Credit

Prerequisite: Art, open to 11th and 12th-grade students

Art Fee: \$30

Description: This class is intended for the highly motivated student who is willing to make a serious commitment to broaden their skills and experiences, engage in both research and discussions, and reflect on their strengths and weaknesses. Students must be able to work in a studio atmosphere and produce work that emphasizes personal expression and growth while being aware of artists and styles of the past.

ROCK BAND: 1.0 Elective Credit

Prerequisite: None

Description: In this hands-on music course, students learn the basics of playing a rock band instrument such as guitar, bass, drums, or keyboard. Emphasis is placed on learning foundational skills, practicing regularly, and performing as part of a group. Students will collaborate to play songs together, developing timing, listening skills, and stage presence. This is an active, participation-based class with limited seated time.

EARLY CHILD DEVELOPMENT COURSE: 1 Elective Credit

Prerequisite: Open to 10th, 11th and 12th grade students

Description:

EARLY CHILD DEVELOPMENT WORK STUDY: 0.5 Elective Credit (Pass/Fail - Does not count towards GPA)

Prerequisite: Approval by School and Daycare Administration. Open to 12th-grade students only. 2.0 GPA. 16 years of age

Description: The Sargent Day Care and Preschool Program provides juniors and seniors with the opportunity to work directly with preschool-aged children on campus. Students get to interact with children during the class period, and they help teachers with the day-to-day operations of running a classroom. Participation and attendance are a majority of their grade. High school students are responsible for one assignment a month on topics related to early childhood education.

WORK-STUDY: 0.5 Elective Credit (Pass/Fail - Does not count towards GPA)

Prerequisite: 12th-grade students only. Administrative approval. Must have at least a 2.0 GPA. Signed work-study contract required.

Description: By Sargent Board Policy, work-study is an elective senior course that provides "hands-on" training and educational experience in the field of a student's chosen vocation. This may be either a paid or volunteer position. All work-study programs must be pre-approved by the school counselor, principal, superintendent, and the Board of Education. Work-study may not exceed half the school day, including transportation time. A designated, on-the-job coordinator who reports directly to the counselor must supervise all work-study students.

STUDENT AIDE: 0.5 Elective Credit (Pass/Fail - Does not count towards GPA)

Prerequisite: Administrative/teacher approval. 11th and 12th-grade students only. 2.5 GPA

Description: This is an excellent opportunity for students to volunteer their talents and abilities in the service of the school. By doing so, they will learn the dynamics of an educational system and explore first-hand the rewards of working with a variety of staff and students in an elementary, junior high, or high school setting.

STUDY HALL//CONCURRENT COURSES: 0.5 Elective Credit

Prerequisite: Administration approval required.

OTHER CERTIFICATION PATHWAYS

University of Colorado

Certificate in Data Science Essentials

(Academic Support Provided at Sargent by Mr. Stickler)

Prerequisites: Students must have passed *Algebra II with a C- or higher* to begin the program. All courses must be taken at CU Denver, except *MATH 2830 – Introductory Statistics*, for which students may substitute an equivalent statistics course with a C- or higher from another higher education institution.

Description: Data Science is the field that uses statistics, programming, and analytical tools to collect, organize, analyze, and interpret data. It is about turning raw data into useful information we can use to make better decisions and solve problems in medicine, agriculture, business, and virtually everything that affects our everyday lives. The data science essentials certificate comprises four courses that will equip students with the skills and competencies needed to: Collect, organize, and clean data with the ability to analyze and interpret data using programming, statistics, and other analytical tools.

Pathway: *Probability and Statistics:* In order to ensure that students can accurately quantify the likelihood of various outcomes and quantify uncertainty related to estimation and prediction, students must have a fundamental knowledge of probability and statistics.

MATH 2830: Introductory Statistics (3 Credits)

Basic statistical concepts, summarizing data, probability concepts, distributions, confidence intervals, hypothesis testing. **Prerequisite:** *Intermediate Algebra in high school with a C- or higher.*

Programming: In order to ensure adequate programming skills for data science, students must develop strong programming skills in a programming language popular in data science

MATH 1376: Programming for Data Science (3 Credits)

Introduces scientific computing using Python. Topics will include programming skills such as assignment, control statements, loops, and functions. Applications will focus on mathematical and data science topics. **Prerequisites:** *MATH 1110 College Algebra or MATH 2830 Introductory Statistics (or their equivalents at another institution of higher education) OR Intermediate Algebra in high school with a grade of C- or higher.*

Data Manipulation and Visualization: In order to ensure that students are able to comfortably work with and visualize data, they must develop skills related to obtaining, manipulating, and visualizing data.

MATH 3376: Data Wrangling & Visualization (3 Credits)

Introduction to obtaining, restructuring, and visualizing complex data sets. Students will learn to manipulate many data types, store data in a variety of structures, and construct static and dynamic plots in a variety of contexts. **Prerequisites: MATH 1376 with a C- or higher and MATH 2830 (or its equivalent at another institution of higher education with a C- or higher).**

Data Modeling: In order to ensure that students are able to build reasonably complex models for explaining or identifying patterns in data, students need a course that focuses on the behavior of data (whether synthetic or observed) using tools like simulation, direct model building, association, or a complementary approach.

MATH 4830: Applied Statistics (3 Credits)

Review of estimation, confidence intervals, and hypothesis testing; ANOVA; categorical data analysis; non-parametric tests; linear and logistic regression. **Prerequisite: MATH 2830 with a C- or higher (or its equivalent at another institution of higher education with a C- or higher).**

University of Colorado Certificate in Professional Skills

(Academic Support Provided at Sargent by Mr. Stickler)

Description: This certificate is designed for undergraduate students seeking to acquire and enhance diverse workplace skills that are highly valued by today's employers. Students will learn to communicate effectively in data literacy. The learning goals of this certificate are that students will be able to:

- Communicate their ideas in a clear and organized manner.
- Use their compositional and analytical skills in a chosen professional writing field.
- Demonstrate proficiency in digital and media literacy or data literacy.
- Devise problem-solving strategies with the skills developed through the certificate.

Pathway: Communication 2050: Professional Presentations (3 Credits)

Math 2830: Introductory Statistics (3 Credits)

(Must have passed Algebra II)

Communication 3072: Media Writing Skills (3 Credits)

Math 4830: Applied Statistics (3 Credits)

(Must have taken Math 2830)

Trinidad State College
Qualified Behavioral Health Assistant Certificate
(All classes taught at Sargent by Mrs. Stickler and Mrs. Price)

*** Courses count as high school elective and concurrent course credit*

Description: Upon completion, students will be a QBHA as outlined by the Behavioral Health Administration (BHA) and eligible to serve as part of a Medicaid-reimbursed care team. Skills and competencies include: Understanding of Behavioral Health & Healthcare Systems, Therapeutic Communication Skills, Trauma-Informed Care and Cultural Competency, Case Management and Documentation, Crisis Intervention and Wellness, Empathy and Healthy Boundaries. Medicaid Competencies: Under supervision, QBHAs will be able to do elements of: Wellness Promotion, Education, Community Needs Assessment, Screening, Referral, Crisis Management, Case Management, Orientation to Services, and Individual & Group Interventions.

Pathway: PTE 1010 Introduction to Behavioral Health Care and Wellness *(3 Credits)*

BEH 1001: Mental Health Crisis and Intervention: Preparedness Empathy *(3 Credits)*

BEH 1030: Case Management and Clinical Documentation *(1 Credit)*

BEH 2030 Applied Therapeutic Communication Skills *(3 Credits)*

***Classes do not have to be taken in a particular order.*