

# SHARON SPRINGS CENTRAL SCHOOL DISTRICT:

## 9-12 COURSE CATALOG

### Science

**Living Environment (1):** Provide instruction designed to prepare students for the Regents Examination in Living Environment. Provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. Required Lab every other day.

**Earth Science (1):** Provide instruction designed to prepare students for the Regents Examination in Earth Science. Offer insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography. Required Lab every other day.

**Chemistry (1):** Provide instruction designed to prepare students for the Regents Examination in Chemistry. Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore 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. Required Lab every other day.

**Physics (1):** Provide instruction designed to prepare students for the Regents Examination in Physics. 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. Required Lab every other day

**Meteorology (1):** Meteorology courses examine the properties of the earth's atmosphere. Topics usually include atmospheric layering, changing pressures, winds, water vapor, air masses, fronts, temperature changes and weather forecasting.

**Intro to Food Science (1):** This course is designed to explore many of the areas of food production; from growing your own food to processing it and/or preparing it safely. This is a relatively new class and has found that there is great interest in canning, freezing, and preparing food, especially when you can sample what you make! We have prepared salsa, hamburgers, pizza, eggs, and will be making maple products with our dehydrator!

**Environmental Science (1 and dual college credit course with SUNY Morrisville):** This course can be taken for 3 college credits through SUNY Morrisville after paying a registration fee. In this class, students will study all aspects of the environment- air, land, water, as well as the living organisms that live in those environments. Labs and activities in water testing, recycling, composting are just to name a few of the things students will be doing!

**Ag. Science (1):** Nationally certified program which includes activities, projects and problems in the study of all facets of agriculture education (including FFA and SAE programs). Students in this class will have experience including our school garden, Ag. In the Classroom activities with our elementary classes, and career development activities!

**Plant/Animal Science(1):** Nationally certified program which is an inquiry based, hands on curriculum covering many areas of plant and animal science, including animal handling and safety, animal welfare, anatomy and physiology, animal systems, reproduction, nutrition and health. Students in this class will have animals in the classroom for labs and to care for and study and will be instrumental in setting up our Petting Zoo Program.

## Math

**Intro. To Algebra (1):** Provide instruction designed to prepare students for the Regents Examination in Algebra I (Common Core). Increase students' foundational math skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.

**Algebra Extension (1):** Provide instruction designed to prepare students for the Regents Examination in Algebra I (Common Core).

**Algebra (1):** Provide instruction designed to prepare students for the Regents Examination in Algebra I (Common Core). Include 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.

**Geometry (1):** Geometry (Common Core) courses provide instruction designed to prepare students for the Regents Examination in Geometry (Common Core). Emphasizing 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 triangles.

**Algebra 2/Trig (1):** Combine trigonometry and advanced algebra topics, and prepare students for the Regents Examination. Topics typically include right trigonometric and circular functions, inverses, and graphs; trigonometric identities and equations; solutions of right and oblique triangles; complex numbers; numerical tables; 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; and properties of higher degree equations.

**Pre-Calc/Calc (1):** Students can opt to take this course for college credit through \_\_\_\_\_ (fees apply). 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.

**Statistics (1):** Students can opt to take this course for college credit through \_\_\_\_\_ (fees apply). Introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.

**College Prep Math (1):** This course is designed for student who will be entering the work force following graduations as well as those pursuing a degree at a 2-year or 4-year institution. The course topics will include expressions and equations, functions, linear

systems, exponents, systems of equations, formulas, percent, and sales tax.

**Personal/Financial Management (1):** This course is designed to help student make financially responsible decisions and to make them financially conscientious members of society. Topics will include career planning, budget creation and management, bill paying, taxes, banking, auto purchase, life/health/auto insurance, investing and retirement, homeownership, credit cards and fraud.

## English

**English 9 (1):** Build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.

**English 10 (1):** courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.

**English 11 (1):** Common Core courses provide instruction designed to prepare students for the Regents Exam in English Language Arts (Common Core). Continue to develop students' writing skills,

emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

**English 12 (1):** This is a course that will help further develop literacy proficiency and writing abilities, and in doing so, help prepare students for college and life. Students are required to be reading and writing a lot. At the beginning of the year, students will be working on how to write an essay for a college application. This class also includes some creative writing and discussion. The goal of this class is to have each student ready to enter into a college English class and/or ready for a job.

**UHS English (1):** Students can opt to take this course for college credit through \_\_\_\_\_ (fees apply). In this course students will extend their literacy proficiency, with an emphasis on developing critical reading skills and strategies through the study of a variety of authors, genres, themes, historical periods, and national literatures. From this wide variety of texts students will develop articulate responses to literature in various forms. Multiple critical approaches will be explored including reader-response, formal, traditional, psychological, and sociological techniques. In accordance with the standards set forth at the University at Albany, students will demonstrate growth by oral, written, and “new media” responses to the readings. Students will become active learners in an engaged

environment that enables them to be producers as well as consumers of knowledge.

**Digital Journalism (1):** Through this course high school students will develop an understanding of the importance of journalism in a democratic society, understand what news is and learn the importance of accuracy in reporting, develop an understanding of ethics of journalism and the regulations governing the student press. Additionally, students will gain a greater sense of agency and pride as they exercise 21<sup>st</sup> century skills that are required for students to succeed in the workforce and academia in the coming decades.

## Social Studies

**Global 1 (1):** Required for graduation, this course is the first of a two-year Regents requirement. This course is study of World History through a Regional Approach. Course content includes: The Middle East & North Africa, Africa, Asia, and Latin America and the study of Ancient Greece and Rome This course prepares students to meet the learning standards in Social Studies (In addition to World History these Standards include: Geography, Economics & Government) and offers instruction in writing skills to ready them for the more rigorous, on-demand testing requirements of the Global History Regents Examination.

**Global 2 (1):** Required for graduation, this course is a continuation of the study of Global History 9. Course content includes: The Renaissance, the Age of Revolutions (1750-1914), A Half-Century of Crisis and Achievement (1900- 1945), The Twentieth Century Since 1945 and Global Connections and Interactions. Like

Global History 9, this course prepares students to meet the learning standards in Social Studies (In addition to the World History Standard, Geography, Economics and Government are addressed) and offers instruction in writing skills to ready them for the more rigorous, on-demand testing requirements of the Global History Regents Examination.

**U.S. History (1):** Provide instruction designed to prepare students for the Regents Exam in U.S. History. Provide students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.

**PIG (.5):** This semester course is required for graduation. It gives the students the opportunity to study the role that citizens play in a democratic society. There is study of the interaction of citizens and government and the processes by which public issues reach consensus.

**Economics (.5):** Provide students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

**Cont. Political and Social Issues (1):** This class studies the world around us and the

society that we live in. It introduces students to issues that influence our life in this global, multicultural society. Students will research current economic, political, social, and cultural problems, and explore how ongoing conflicts affect groups as well as individuals. The goal of this class is to raise awareness to the issues around them and provide a common language for discussing these issues.

## Art

**H.S. Art 1 (1):** This course gives students the opportunity to creatively express their ideas, develop awareness and perception of the world around them, strengthen higher-level thinking skills, improve art related technical skills, explore art history and other cultures art. Students will explore and experiment with the elements of art and principles of design in visual arts problems in many materials. A guided study of these as well as concentration in two and three-dimensional work in a variety of media are vital to this course.

**Sculpture (1):** This is a year-long introductory course in a variety of 3-D media and design developed to further the study of the Elements of Art, the Principles of Design, art history, and cultural art. Students explore ceramic and sculptural materials and tools to develop technical skills and interests.

The program offers “the student an outlet for self-expression in three-dimensional design in either a particular material or a variety of media. The course is designed to offer both aesthetic and technical experiences so that the student will be able to understand and appreciate this art form,

acquire dexterity, sensitivity, and mastery of technique to control the media, and learn to express him/herself in a resistant or plastic material.”

**Drawing and Painting (1):** This year-long course will develop basic skills and techniques in drawing and painting with a variety of materials. They will examine a number of natural and human-made objects and environments while exploring the art elements and principles of design. Students gain imaginative expression through art materials and tools as well as a better appreciation of self and others through the study of art, history, and culture. Creative solving problem, art theory, and portfolio preparation are part of the course work including short and long term projects and written assignments.

**Printmaking (1):** This year-long course for Graphic Design (printmaking) not to be confused with Graphic Arts (computer art) is to learn and apply tools and processes in the creation of reproducible graphic images (prints). Since paper was invented, humanity has used its surface to communicate with symbols, imagery, lettering, and more. Some of the processes and media the student will learn and use are: monotypes, linoleum, cardboard, woodblocks, foam, collagraph, and silkscreen.

## Music

**Band (.5):** Band is comprised of students grades 9-12. High School Band provides, through performance, continued instruction in the following areas: tone production, instrument technique and music reading

skills. It is a performance oriented class, and students will be exposed to a wide variety of musical styles.

**Choir (.5):** This year-long course is open to all students who would like to sing, regardless of experience. Students learn proper vocal production, self-confidence and self-discipline. They learn to sight-read music as well as learn basic music theory. Students in this class participate in concerts.

**Music Theory (1):** Provide students with an understanding of the fundamentals of music and include one or more of the following topics: composition, arrangement, analysis, aural development, and sight reading.

## Foreign Language

**Spanish 1 (1):** Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

**Spanish 2 (1):** Build upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken

slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

**Spanish 3 (1):** Focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

## **Business**

**Micro Computers (1):** This is a three credit hour course offered through SUNY Cobleskill primary focus on the use of the Microsoft Office Suite. The course objectives include: Understand basic computer terminology, demonstrate a proficient use of operating systems, and demonstrate a proficient use of the Microsoft Office and Apple domain software package; specifically using Word, Access, Excel, PowerPoint, Pages, Numbers and Keynote. Understand the practical uses of the computer and software so that they will incorporate it into their daily lives and become more proficient. Use the computer in adapting computer solutions to problems in a variety of fields or interests, developing an exercise-oriented approach allowing students to learn through doing and encourage motivation with independent study projects.

**Keyboarding (.5):** A half year course typically taken after Career and Financial

Management. Students learn to keyboard using the touch-typing method through a web based keyboarding program. This program is all inclusive teaching the alphabetic and numeric keyboard as well as the keypad. The program targets individual needs and access students based upon their speed and accuracy. In addition the program evaluates a student after every lesson giving them feedback on how to improve. Students also use Word to learn formatting business documents and reports, to further integrate accurate spelling, grammar and punctuation into all assignment, aptitude assessment, career investigation, job seeking, resume and cover letter, proper business letters, create letterheads, and review research documents.

**Career and Financial Management (.5):** This is a half year course is designed to address the realities of the working world. This course seeks to develop progressive skills and behaviors that will help young people integrate their role within the workplace, the home, and the community. This course is a building block for a foundation in a business major and is generally the first business course students will take. Topics include: economics, marketing, types of business ownership, business ownership and management, money management, credit, risk management, buying goods and services, career planning, the business cycle, entrepreneurship, business plans, management functions, global business, money and banking, advertising, investing, personal finance, and career exploration. This is a great course to introduce students to financial management.

**Accounting 1 (1):** This course is taught through SUNY Cobleskill for three college credits. The course is designed to provide students with an understanding of the accounting cycle for both a service and merchandising business. An introduction to fundamental theory, principles and procedures with emphasis on such topics as merchandise inventory, plant assets, promissory notes, accounting systems, payroll, internal control, bad debts, adjustments and financial statements.

**UHS Advanced Financial Accounting (1):** This course is the second college level class taken after ACCT 101 which is a prerequisite. Students must obtain an 85% or higher in ACCT 101 in order to take this course unless the professor agrees to accept less. This is a three credit hour class. This course is designed to meet the needs of internal management in the decision-making process. Emphasis will be on the interpretation of accounting data and various approaches to problem solving.

Topics covered will include: using cost data for pricing options, cost volume relationships, managerial cost controls, product costing including job order and process cost accounting, manufacturing accounting, branch accounting, departmental accounting, internal control and voucher system, Managerial Accounting and Cost Concepts, Job-Order Costing, Process Costing, Cost-Volume-Profit Relationships, Variable Costing and Segment Reporting: Tools for Management.

**UHS Business Law (1):** A three credit hour course offered through SUNY Cobleskill. This course is a study of contract law and

the Uniform Commercial Code relating to contracts, bailments and sales. It combines personal and business law and focuses on how the law is related to both areas. It is the foundation course offered as the first law class for all students.

## **Misc.**

**H.S. PE (.5):** Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.

**Health (.5):** Topics covered within Health Education courses vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

**Drivers Ed. (1):** Provide students with the knowledge and experience to become safe drivers on America's roadways. Topics in these courses cover legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs). Experience in driving a vehicle is an essential component of these course.

**Distance Learning Courses (.5 or 1):** These courses vary by year and student interest,

please see your school counselor for the  
current year courses.

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