# Gouverneur High School Course Offerings

# AGRICULTURAL SCIENCE



The agriculture program provides basic training in the science of agriculture. The skills and knowledge learned can be applied in many areas of the nation's largest industry, all the way from managing modern farm operations

to retail sales of agriculture products. *The agriculture science courses can be used to fulfill the 3<sup>rd</sup> credit of science required to graduate.* 

# Introduction to Agriculture, Food and Natural Resources – ½ credit

Introduction to Agriculture, Food, and Natural Resources course will introduce students to agricultural opportunities and various pathways of study within agriculture through hands-on activities, projects, and problem-solving. Serving as the prerequisite to all agricultural science pathways, students will focus on the history of agriculture, the science of plants, animals, natural resources, and agricultural mechanics. Students will also take time to understand the specific connections between their lessons, Supervised Agricultural Experience and FFA.

### Animal Science - 1 credit

Through hands-on laboratories and activities, students will explore the world of animal agriculture and companion animal ownership. During Animal Science, students will investigate animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets.

#### <u>Veterinary Science</u> – 1 credit Prerequisite: Animal Science

Focusing on the basics of both production and companion animal care, students in Veterinary Science will explore the various diseases and parasites animals face while also learning about feeding, sheltering, grooming, handling and providing general care to animals. Modeled for students who seek to study veterinary medicine after graduation or enter the workforce within the realm of animal care, class time utilizes a variation on hands-on learning activities, laboratories and discussion.

### Wildlife and Environmental Science - 1/2 credit

While studying the environment and ecosystems around us in Environmental & Wildlife Science, students will learn the importance of soil, land use, water and air quality. Additionally, classes will discover the significance of habitat management, population dynamics, wildlife species, wildlife harvesting and environmental laws and regulations. Students will take part in hands-on activities, laboratories and discussions to explore class topics.

### Ag Mechanics - 1/2 credit

The focus of Ag Mechanics/Agricultural Power and Technology (APT) is to expose students to mechanics, power, technology, and career options in the world of agriculture. Students will have experiences in various mechanical and engineering concepts with exciting hands-on activities, projects, and problems. Experiences will involve the study of energy, tool operation and safety, material properties, machine operation, and structural components. Students will acquire basic skills to operate, repair, engineer, and design agricultural tools and equipment.

The course includes: ◆Shop Safety ◆Tool Operation ◆Material Selection and Uses ◆Fabrication ◆Energy and Power Production ◆Machine Components and Design ◆Agricultural Structures, ◆Engineering Design Process, and ◆Technical Applications of Math and Science

## ART

The art program at GHS is intended to help the student to creatively express thoughts and feelings, make choices and rationally evaluate the aesthetic qualities in everyday life.

### Studio in Art – 1 credit

Studio in Art is the foundation course for the high school art curriculum.

The course emphasizes three areas: the understanding of art, the valuing of art, and the creation of art. To aid in the



understanding and valuing of art, students will explore the history and the cultural significance of art. Students will develop artistic and creative-thinking skills by experimenting with a variety of art materials and processes through teacher directed activities. Areas of study include drawing, painting, ceramics, sculpture, crafts, and printmaking.

Each student will be required to build a portfolio of completed works and maintain a visual journal (sketchbook). The portfolio will include handouts, concept plans, drafts, and finished projects. The journal, which will be checked and critiqued periodically, will be used to aesthetically record reflections and observations of experiences both inside and outside the classroom. At the end of the course students will be able to:

- demonstrate an increased knowledge of various art materials, themes, and cultural perspectives
- demonstrate creative thinking and observation skills to create artwork
- effectively utilize the elements of art and principles of design in creating personal artistic statements prepare, present, and display finished artwork
- competently critique and evaluate art



## Drawing and Painting I - ½ credit

Prerequisite: Studio Art

Drawing is an essential skill that influences the decision-making and product of every artist. Throughout history painting has influenced art movements, religion, politics, décor, and much

more. This course will explore drawing and painting techniques and media including graphite, charcoal, ink, watercolor, oil, and acrylic on various surfaces.

#### **Drawing and Painting II** – <sup>1</sup>/<sub>2</sub> credit Prerequisite: Drawing/Painting I

Drawing and Painting II is designed for the student who excelled in Drawing and Painting I and desires a higher level of study in these two areas of the Fine Arts. Students will further explore the techniques, media, and

styles they have learned previously. They will also begin to develop their own distinctive style, which will lead them to an individual art display at the end of the school year. Students will be expected to complete weekly homework drawings or written critique assignments. A final portfolio will also be required.



### <u>Sculpture</u> – ½ credit Prerequisite: Studio Art

This course gives the student the opportunity for self expression in three-dimensional form. It will also allow students to experience and experiment with sculptural techniques of carving, modeling, casting, and construction using a variety of materials. At the end of the course students will be able to:

- show proficiency when using a variety of materials and processes in three-dimensional design
- effectively utilize the elements of art and the principles of design in sculpture
- demonstrate an awareness of historical significance and contemporary trends in sculptural design

### Photo & Video Production - ½ credit Prerequisite: Studio Art

This course, for students in grades 10-12, will introduce students to the art of digital photography and video production. Students will learn how to properly operate a digital camera and camcorder in order to document their surroundings. Students will learn the basics of setting up a camera shot using composition, depth of field,



lighting, and other technical components to the camera or camcorder. They will also learn the programs, Photoshop and iMovie, to edit and assemble photos, audio, and videos based on in class projects.

#### <u>Ceramics I</u> - ½ credit (2023-24) Prerequisite: Studio Art



This course will allow students to develop skill and proficiency in working with clay as the medium. Extensive work will be done with the clay construction methods of slab, pinch, and coil and to create "hand-built" projects as well as an

opportunity to experience the challenge of throwing on the potter's wheel.

At the end of the course, students will be able to:

- discuss the variety of characteristics and uses of clay bodies: terra cotta, earthenware, stoneware, and porcelain
- understand the historical significance of clay and its relationship to the development of civilization
- identify and discuss the characteristics of leather hard, green ware, bisque ware and glaze ware

- demonstrate skill in hand building methods
- utilize glazes to create surface decoration for clay objects

Ceramics II - ½ credit (2023-24) Prerequisite: Ceramics I

Ceramics II will place greater emphasis on wheel-throwing technique, sculpture, and expanding the student's abilities gathered in Ceramics I. Advanced projects will be assigned that allow for creativity on the part of the student and also enrich his/her understanding of the craft.

### Computer Imaging and Design - 1/2 credit

(2023-24) Prerequisite: Studio Art

This course will introduce basic graphic skills and techniques with desktop publishing, advertising and graphic design, and computer manipulation. Gain insight into the utilization of technology in the artist's environment by studying Art



Movements, Principles of Design, Communication and Media Production. Exposure to computer art will enrich previously learned design skills and provide a creative foundation for the potential graphic artist /designer. Students will learn the basics of manipulating the 'elements of design' through the use of computer software, to create a visual world with endless opportunities, fostering their creative/artistic development.

### Wildlife & Botanical Illustration - 1/2 credit

(2023-24) Prerequisite: Studio Art

This course explores techniques necessary for illustrating wildlife, their environments, and botanical subject matter. A strong focus on current illustration practices and real world assignments will be emphasized. A variety of media will be explored including graphite, pen and ink, watercolor, colored pencils, and digital. Time will be spent outside the classroom gathering field sketches and references of various plant life around school.

## **Driver Education**

Driver Education - 1/2 credit

Students must be at least 16 and have a learner's permit before starting the course.

This semester-long course is divided into two parts – classroom instruction and practice driving. The classroom work broadens the knowledge gained in the driving phase with emphasis on automobile safety, car care, maintenance, and ownership. In practice driving, students develop good defensive driving habits and increase driving skills.

# ENGLISH

### English 9 - 1 credit

Students in English 9 learn how to carefully read, interpret, and analyze literature and nonfiction works of cultural and historical significance in preparation for text-analysis



and argument writing, and the practice of reading comprehension. English 9 introduces students to the New York State Common Core Standards to prepare students for the English Regents in grade 11.

### English 9 Honors - 1 credit

English 9 Honors is designed for those self-motivated students who demonstrate a genuine commitment to learning and sensitivity to literature. The course encompasses the same criteria as listed for English 9, but is taught on an accelerated level. Enrollees have been recommended based on specific criteria to engage in an advanced-level course that requires much reading, writing, and critical and analytical thinking. Students are expected to show a high level of independence and motivation. It is the expectation that students enrolled in English 9 Honors begin a trajectory toward an advanced course of study that leads to enrollment in English 10 Honors, AP English 11 (Advanced Placement Language and Composition), and SUPA English 12 (Practices of Academic Writing and Gender & Literary Texts).

### English 10 - 1 credit

English 10 prepares students for the New York State Common Core English Regents in grade 11. The content of the course is aligned with Gouverneur Central School English Curriculum and the New York State Common Core Standards for English Language Arts. Students will be given the opportunity to deepen their literary analysis skills through short stories, novels, poetry and plays of diverse and historical significance. Through understanding, interpreting and explaining complex literature students build maturity in written expression. Likewise, by developing persuasive writing skills through reading relevant non-fiction texts, students will implement the argument essay structure to substantiate logical, reasonable and coherent claims. Additionally, students sharpen their reasoning, critical thinking, and reading comprehension abilities through close reading, discussion and debate.

### English 10 Honors - 1 credit

English 10 Honors is designed for those self-motivated students who demonstrate a genuine commitment to learning and sensitivity to literature. The course encompasses the same criteria as listed for English 10, but the course is taught on an accelerated level, designed to offer students a challenging and critical approach to literature and composition. Enrollees have been recommended to enroll into English 10 Honors based on their performance in English 9 or 9 Honors. This is an advanced-level course that requires much reading, writing, and critical and analytical thinking. Students are expected to show a high level of independence and motivation in this course. It is the expectation that students enrolled in English 10 Honors continue toward an advanced course of study leading to enrollment in Advanced Placement English Language and Composition (English 11AP), and SUPA English 12.

### English 11 - 1 credit

Students in English 11 will be given the opportunity to analyze the use of literary and poetic elements, vocabulary, style, and voice through reading various novels, plays, poetry, and short stories. Writing will be integrated throughout the curriculum focusing on skills such as text analysis, development, organization, language use, and conventions. All lessons will be centered on the New York State English Language Arts Standards which require students to read, write, listen, and speak for information and understanding, literary response and expression, literary analysis and evaluation, and social interaction.

Students take the New York State Regents exam ELA (Common Core) at the end of the course.

### AP English 11 - 1 credit

The Advanced Placement Language and Composition 11 course is an introductory level college writing course. The purpose of this course is to help students "write effectively and confidently in their college courses across the curriculum and in their professional and personal lives" (The College Board *AP English Course Description*, May 2007, May 2008, p.6). The course is organized according to the requirements and guidelines of the current *AP English Course Description*, and, therefore, students are expected to read critically, think analytically, and communicate clearly.

The course will involve reading and evaluating non-fiction, fiction, and visual texts, synthesizing a variety of sources, reflecting and analyzing, developing vocabulary, plus improving writing style in a variety of essays. Students prepare for the AP English Language and Composition Exam and may be granted advanced placement, college credit, or both as a result of satisfactory performance. The course is constructed in accordance with the guidelines described in the *AP English Course Description*.

Students take the AP English exam in May and the NYS Regents exam in ELA (Common Core) at the end of the course.

### English 12 - 1 credit

English 12 provides students the opportunity to read from multiple genres such as sports literature, dystopia, mythology, and horror, and in different modes such as poems, plays, shorts stories, novels, and film. For all of the works, students will read for deeper understanding using the strategies learned throughout ELA courses. In studying the different works and themes, students will continue their analytical and argumentative work from previous years. Students will also be required to write a multi-step research paper and will construct a resume that will be used for Gateways to Careers.

### Practices of Academic Writing

(WRT 105) - ½ credit This course may be used to fulfill ½ of the English 12 requirement.

# Students may earn 3 college credits. See SUPA description page 12.

This course teaches students strategies of critical academic writing in various genres, including analysis, argument, and researched writing. The course challenges students to understand that effective communication requires people to be aware of the complex factors that shape every rhetorical context, including issues of power, history, difference, and community; and that writing as a process involves reflection and revision. This writing course is a site of active learning where students have responsibility for their own progress and for that of their peers. Students write formal papers for each major unit, in addition to various informal writing assignments and a culminating portfolio.

### Gender & Literary Texts

(ETS 192) – ½ credit This course may be used to fulfill ½ of the English 12 requirement.

# Students may earn 3 college credits. See SUPA description page 12.

Gender & Literary Texts is a course that explores the construction and representation of 'gender,' especially as it affects the production and reception of literary and other cultural texts. This course foregrounds readers' *interpretive* practices, i.e., how we read and make meaning in texts, particularly if we interpret them using

the premise that gender is a social construct – rather than a natural ahistorical "essence" that somehow "expresses" our true "selves."

To examine the ways in which literature participates in the social reproduction of gender, as well as the difference that gender makes in the production and reception of literary texts, students will practice extensive close reading, evidence-based analysis and argumentation, and independent inquiry. Raising awareness of how meanings are created through acts of critical reading, students will thus learn to analyze the ways texts construct categories of difference, including differences of gender, race and social class.

### From Pages to Pictures: Literature and Film -

<sup>1</sup>/<sub>2</sub> credit Grade 11 & 12

Students will have the opportunity to explore classic and contemporary literature of diverse and cultural relevance and compare the written work with the film adaptations. Through comparative analysis, discussion, short essays, personal reflections, and film review, students will deepen their critical thinking, presentation and writing skills. The content of this course is aligned with Gouverneur Central School English Curriculum and the New York State Common Core Standards for English Language Arts.

### The Graphic Novel and Visual Storytelling -

<sup>1</sup>/<sub>2</sub> credit Grades 11 & 12

Students will study graphic narrative: the combination of images and text to convey meaning. While the graphic novel will be the primary genre explored, other specific forms and genres such as comics, comic strips, and webcomics will also provide relevant material. The course will explore the comics medium as a mode of communication, using various texts as a way to acquire, practice, and master traditional and new literacies, including visual and critical media literacy. Through genre study, students will consider graphic novels as literature while analyzing the formal structure as it relates to the content.

# FOREIGN LANGUAGE



The Foreign Language curriculum provides the courses needed to fulfill graduation requirements and also courses needed for the Advanced Regents diploma. Communication is at the heart of foreign language study. Through the study of other languages, students gain a knowledge and understanding of the cultures that use that language. Learning languages provides connections to additional bodies of knowledge that may be unavailable to the monolingual English speaker. Through comparisons and contrasts with the language being studied, students develop insight into the nature of language and the concept of culture and realize that there are multiple ways of viewing the world. Together, these elements enable the students of language to participate in multilingual communities at home and around the world in a variety of contexts and in culturally appropriate wavs.

### Spanish I - 1 credit

This class is the continuation of Spanish 8. Students will earn one high school credit after successful completion of this course. This course is required for high school graduation. Students are required to take a locally-developed exam at the end of the course.

### Spanish II - 1 credit

The four basic skills of speaking, reading, listening, and writing are continued and developed. Students should be able to understand and use both spoken and written Spanish in normal, everyday situations as well as to continue the study of the language at a higher level. Most colleges require a minimum of Spanish II for admission.

### Spanish III - 1 credit

Vocabulary and structures are reviewed and expanded thoroughly. Emphasis is on increasing vocabulary, reading and speaking ability. Students will use the language for oral presentations and projects. Students are required to take a locally developed exam in lieu of the Regents exam as in the past at the end of the course.

### Intermediate Spanish (SPA 201) - 1 credit

# Students may earn 4 college credits. See SUPA description page 12.

Using film, TV/radio, and literary texts, this proficiency-based course reviews understanding of the formal structures of language, refines previously acquired linguistic skills, and builds awareness of Spanish culture. Students will use sources in a variety of media to develop oral, listening, writing, and reading skills. By the end of the course, students can be expected to communicate effectively in the language in order to give and get information; survive both predictable and complicated situations; narrate and describe in present, past, and future time; support opinions; and hypothesize. Classes are conducted in Spanish.

# HEALTH



Health - 1/2 credit

This course fulfills the NYS graduation requirements for ½ credit in Health. The course is aimed at students in grades 10-12. Students in this class will:

- understand ways to promote health and prevent disease
- demonstrate positive personal and socially responsible health behaviors
- recognize threats to their health and environment and offer appropriate strategies to minimize them
- understand the influence of culture, media, and technology in making decisions about personal and community health issues
- learn to use valid health information

Topics covered in the course include:

- first aid and safety
- HIV prevention
- disease prevention and early detection
- drugs including alcohol and tobacco use prevention
- family dynamics
- mental health and wellness
- death and dying
- healthy eating and proper weight management

# MATHEMATICS

The mathematics curriculum provides a variety of courses designed to fulfill the requirements for graduation and prepare students with math skills needed following high school.

### Fundamentals of Algebra - 1 credit

Students will be placed in this course based on past performance.

This is an algebra-based class designed to prepare students with fundamental skills necessary to be successful in Algebra I. This course will emphasize the development of skills and processes to solve problems and become more confident mathematically. Students will take Algebra I and the Regents exam at the end of the second year.

### Algebra – 1 credit

Topics include linear, quadratic, and exponential functions, solving equations and inequalities, and statistics, as outlined in the NYS Common



Core standards. Students are required to take the NYS Regents exam in Algebra (Common Core) at the end of the course.

### Practical Geometry - 1 credit

Prerequisite: Below 75 on Algebra I Regents exam, teacher recommendation.

This class will be a mixture of algebra and geometry. Only algebra skills required for geometry will be reinforced. The course will mainly consist of a limited number of geometry units taught at a slower pace, in-depth, and with mastery to help students succeed in Regents Geometry.

### <u>Geometry</u> – 1 credit

Prerequisite: Algebra

This is a one-year math course with a Regents exam given at the end. At the end of this class, students will be able to:

- use visualization and spatial reasoning to analyze characteristics and properties of geometric shapes
- identity and justify geometric relationships formally and informally
   apply transformations and symmetry to analyze problem
- apply transformations and symmetry to analyze problem solving situations
   apply coordinate geometry to analyze problem solving
- apply coordinate geometry to analyze problem solving situations
   determine what can be measured and how using
- determine what can be measured and how, using appropriate methods and formulas

Students take the NYS Regents exam in Geometry (Common Core) at the end of the course.

#### <u>Personal Finance</u> – 1 credit Prereguisite: Algebra

This course consists of units about Financial Decision Making, Employment & Income, Spending & Saving, Investing, Risk Management & Insurance, Budgeting, Credit & Debt, as well as Money Pitfalls.

#### <u>Algebra 2</u> – 1 credit Prerequisite: Geometry

The main focus of the course is the study of different types of functions including linear, quadratic, polynomials, rational, radical, exponential, logarithmic, and trigonometric functions. Properties of functions are emphasized such as domain, range, end behavior, and transformations. This course also includes data analysis using methods from probability and statistics.

Students take the NYS Regents exam in Algebra 2 (Common Core) at the end of the course.

### College Prep Math - 1 credit

Prerequisite: Two math credits

This course is designed for college-bound students who wish to enhance their mathematical skills while digging deeper into Algebra. Course topics include operations with real numbers, algebra, linear relations, coordinate Geometry, functions (exponential and logarithmic), trigonometry, and complex numbers. The intention of this course is to prepare students for the Accuplacer exam or equivalent college placement exam.

### Pre-Calculus -1 credit

Prerequisite: Algebra 2

Pre-Calculus focuses on strengthening the knowledge of functions and algebraic skills necessary for a Calculus class. Functions learned in Algebra I and II will be re-visited with new theorems and techniques, and new functions will be introduced. Algebraic skills such as solving equations, using exponents, and finding solutions of polynomials will be mastered. Trigonometry will be a big part of the course with an emphasis on trigonometric functions and applications. Snippets of Calculus content come up throughout the course and end on what is often the first topic taught in Calculus: limits.

## Elementary Probability & Statistics I

(MAT 125) - 1 credit

Prerequisite: A GPA of at least 80 is required to take this course per SUNY Potsdam.

Students may earn 3 college credits. See SUNY Potsdam College in High School description page 13.

This is a course in college statistics that provides students with knowledge of elementary probability and statistics. Students will learn basic concepts of descriptive statistics, data collection, probability, and random variables. These concepts prepare students for the second-semester course, which develops a working understanding of the use of a variety of inferential techniques. The sequence culminates in a data analysis project in which students develop and solve a statistical problem using the methods learned in the course.

### Calculus I (MAT 295) - 1 credit

Prerequisite: Pre-Calculus

Students may earn 4 college credits. See SUPA description page 12.

MAT 295 covers concepts of functions, limits, differentiation, integration, and includes applications of these concepts such as graph sketching, optimization, linearization, and the computation of areas, volumes, and arc lengths.

#### Google Sheets - ½ credit Grades 10, 11 & 12

Students will learn how to use Google Sheets which can come in handy throughout college, self employment, and other life situations as an adult. Students will learn about formatting, formulas, use of functions, creating diagrams/graphs, and even developing simple games. Sheets is a very robust app and few people know its capabilities. The knowledge learned about Google Sheets is transferable to Microsoft Excel.

Web Design Grades 10, 11 & 12

Students will learn how to read and write code for a website using HTML5. In the age where so many internet companies are marketing drag and drop capabilities, coding expands the possibilities of what you can create online. Knowing one coding language helps anyone learn another coding language much easier.

# **MISCELLANEOUS**

Menu Masters - ½ credit Grades 10, 11 & 12

Can you cook? Do you know how to prepare your breakfast, lunch, or dinner? Come out of this class with the knowledge and confidence to cook for yourself and others.

This class is designed to provide students with basic knowledge and skills to plan, budget, and create a home cooked meal. Students will:

- learn about the basic food groups;
- plan for daily, weekly, holiday meals;
- budget for meals to include coupons and smart shopping;
- make healthy choices for meals and for shopping on any budget;
- learn basic preparation, cooking and clean-up for various breakfast, lunch and dinner meals as well as for beverages and snacks;
- Be able to read and follow directions on the packaging,
- Be able to read and follow directions in a recipe

Students will also research and create a menu for a 6-7 course meal, prepare it, and then enjoy!

### Woodworking - 1/2 credit

Grades 10, 11 & 12

Do you know how to use various hand tools or power tools you might see in the garage? Can you hang a picture so it is straight and plumb? Gain knowledge and confidence in this class to be able to handle basic fixer upper duties around the house and develop skills to make some nice wood projects.

This course is designed to provide a basic understanding of woodworking tools, use and practice, under safe conditions. Students will:

- learn and follow basic safety precautions and practice in woodworking and in any workshop.
- read and measure using a tape measure and other basic hand tools to include: hammer, levels, squares, hand saws, etc.
- use power tools, sanders, saws, tables saws, planer, etc.
- research and develop a plan for a minor and/ or major project determined by the students choice, ability, and determination. Some possible choices include: book shelf, bird feeder, Adirondack chair, cornhole boards, etc.

# MUSIC

The curriculum provides a choice of courses, which can be taken for enrichment, enjoyment and general knowledge. The music department wants to broaden



the concept of music in life and emphasizes the emotional, aesthetic, intellectual and social values of music.

### Band - 1 credit

This large ensemble is for wind and percussion players in grades 9-12. The emphasis is on building musical skills and excellence in performance.

This ensemble is for students who have had some previous training on a band instrument.

### Orchestra - 1 credit

This ensemble is for string players in grades 9-12. The emphasis is on building musical skills and excellence in performance. This ensemble is for students who have had some previous training on a string instrument.

### Chorus - 1 credit

Chorus is for mixed voices. Emphasis is on skill building and excellence in performance. There are generally 2 required performances per year.

### Piano - 1/2 credit

This course will instruct students in the basics of piano, staff reading and musicianship. While no previous training is required, it would be beneficial.

### Guitar - 1/2 credit

This course will teach the basics of guitar: fingerings, chords, tablature reading, strumming. Students do not need to have any previous musical experience for this class nor do they need to own their own guitar.

### Music In Our Lives - 1 credit

Students in this course will learn about various styles of music, history of music, and general elements such as recognizing harmony, chords, and melodies. In this course, students will develop basic musical skills through performing on the guitar, ukulele, or piano; listening to, analyzing, and describing music; and discovering ways in which music enriches our lives. No prior musical experience is required.

# PHYSICAL EDUCATION

The mission of physical education at Gouverneur Central School supports the district's goals of allowing students to possess knowledge, skills, and abilities that will enable them to lead a healthy lifestyle. Furthermore, the program seeks the development of lifelong learners who readily participate in meaningful physical activity on a regular basis. Through our physical education program, teachers educate and foster the development of positive attitudes in students, which focus on active, healthy lifestyles. As a result, students will possess skills and make responsible decisions individually and within groups as students, family members, workers, and citizens.

### Physical Education - 1/2 credit each year

Upon exiting Gouverneur Central students will:

- develop the appropriate components of physical fitness
- know the implications of and the benefits from involvement in physical activities
- apply health and safety standards as related to self and others
- demonstrate appropriate social and personal behaviors relative to group and individual activities
- seek to develop a personal fitness program to achieve and maintain physical fitness

All students are required to complete 2 units of physical education prior to graduation. Report card grades are based on the following:

- cooperative skills and communication
- attendance and preparation
- safety awareness, fair play
- and good sportsmanship
  completion of required units including swimming and fitness testing (FITNESSGRAM), listening



and following directions, unit performance tasks, formative assessments, skill practice records and written work

### **PE Excelled** - ½ credit each year *Grades 11 & 12*

PE Excelled is an 11/12th grade elective class. It is designed for students who are passionate about being active in individual, team, and lifetime activities while enhancing the culture of thinking and learning. Many of the students that enroll in PE Excelled are interested in careers in physical and health sciences, education and/or athletics. Students are expected to maintain a high average and to participate daily to remain in the course.

## SCIENCE

The goal of the science department is to offer courses that are beneficial to all students. The curriculum will expose students to many diverse areas in preparation for facing the rapidly changing technological world.

### General Science - 1 credit

Students will be placed in this course based on past performance.

General Science is an introductory science class designed for 9<sup>th</sup> grade students. This course provides students with the opportunity to develop the knowledge, skills, and strategies necessary to be successful in a Regents level science class in the second year of high school as required for graduation.

### Living Environment/Lab - 1 credit

Topics include scientific inquiry, ecology, cells, immunology, genetics and evolution.

At the end of this course, students take the NYS Regents exam in Living Environment. Students are required to complete a minimum of 1200 minutes of laboratory requirements and submit a completed lab folder with written reports prior to taking the Regents exam. Four New York State required labs must also be completed in order to be eligible to take the Regents exam.

### Earth Science/Lab - 1 credit

Topics include changing environment, measurements of the Earth, Earth's motion, solar system, isolation and the seasons, energy exchanges in the atmosphere, climate, weather, erosion, formation of rocks, the dynamic crust, minerals & rocks, and plate tectonics.

At the end of this course, students take the NYS Regents exam in Earth Science. Students are required to complete a minimum of 1200 minutes of laboratory requirements and submit a completed lab folder with written reports prior to taking the Regents exam.

### Chemistry/Lab - 1 credit



Topics include matter, energy, atomic theory, quantum theory, periodic table, chemical bonding, physical behavior of matter, kinetics and equilibrium, acids and bases, oxidation/reduction, organic chemistry and nuclear chemistry. At the end of this course, students take the NYS

Regents exam in Chemistry. Students are required to complete a minimum of 1200 minutes of laboratory requirements and submit a completed lab folder with written reports prior to taking the Regents. Students will complete writing assignments to communicate current chemistry theory and practices.

**Forensic Science (CHE 113)** – 1 credit *Prerequisite: Chemistry* 

# Students may earn 4 college credits. See SUPA description page 12.

This course is intended to provide an introduction to understanding the science behind crime detection. Recent advances in scientific methods and principles have had an enormous impact upon law enforcement and the entire criminal justice system, and this course will present a number



of those methods that are relevant to crime detection and analysis. The course will emphasize the techniques used in evaluating physical evidence; laboratory exercises will include techniques commonly employed in forensic investigations.

Topics included are blood analysis, organic and inorganic evidence analysis, microscopic

investigations, hair analysis, DNA, drug chemistry and toxicology, fiber comparisons, paints, glass composition and fragmentation, fingerprints, soil comparisons, and arson investigations, among others.

### Physics/Lab - 1 credit

Physics is the study of the transfer of energy. In this course, students will demonstrate knowledge of how to measure physical characteristics of common mechanical, electrical, magnetic, optical and nuclear systems.

At the end of the course, students are required to complete a minimum of 1200 minutes of lab requirements and submit a completed lab folder with written reports prior to taking the Regents.

### **Anatomy & Physiology** – 1 credit

Prerequisite: A GPA of at least 80 is required to take this course per SUNY Potsdam.

#### Students may earn 4 college credits. See SUNY Potsdam description page 13.

This course offers the basic principles of human anatomy and physiology with a special emphasis on the mechanisms of homeostasis and the inter-relationships of structure and function.

### Environmental Science - 1 credit

Environmental Science is a class that introduces students to many areas of study concerning the environment. Topics include soil conservation, land surveying, water quality, forestry, wildlife management, navigation, and orienteering.

Students examine their surrounding ecosystem by completing a number of projects and labs. Hands-on activities include soil testing, using survey equipment, sampling water organisms, and using maps.

### Principles of Bioethics - 1/2 credit Grades 11 & 12

Students will be introduced to **ethics** as a discipline and what constitutes an ethical question and the idea that values serve as a basis for behavior and contribute to decision-making. The **Principles of Bioethics** are then introduced followed by the concept of stakeholders. Students learn how to generate options to resolve an ethical dilemma and learn how to write a strong justification for their position. New concepts are lavered on in each lesson: students practice known concepts while being introduced to new ones. This course is designed to help students develop their abilities to read, explicate, analyze, and evaluate bioethical interests, write and express themselves well about their own ethical positions, and think critically and analytically about ethical issues.

Topics to be investigated may include: animals in research, humans in research, medical and genetic data privacy, biohackers, bioterrorism, pandemics, ethics in law, professionalism, current events.

#### Sports Medicine - 1/2 credit Grades 11 & 12

Introduction to Sport Medicine is designed to give students the opportunity to gain a greater understanding of sports-related injuries. This course particularly concentrates on anatomy, injury prevention, recognition, evaluation and treatment of athletic injuries. This course also addresses specific issues related to sports nutrition, performance-enhancing drugs, and overall health of athletes. This course also provides students with a hands-on approach to injury treatment by learning various taping and wrapping techniques for a wide range of athletic injuries. This course is beneficial for student-athletes or any student pursuing a career in a health related field.

### General Biology I & II (BIO 121 & 123/124) - 1 credit

#### Students may earn 8 college credits. See SUPA description page 12.

This is a two-semester, eight-credit college course offered through Syracuse University. The course teaches modern biological concepts, including classification of organisms, ecology, human influences on natural ecosystems, microscopy, cells, organic and inorganic chemistry, animal development, genetics, energy, and plant structure and function. During a session, the students may be asked to carry out an experiment, view a demonstration. interpret experimental results, complete drawings to document observations, and so on.

## STEM



## STEM - 1 credit

This course is for students in 10-12<sup>th</sup> grade who wish to explore Science. Technology, Engineering, or Mathematics as a career. In addition to preparing students for

careers in STEM fields, this course prepares students for the many other jobs that draw on principles of STEM including critical thinking skills, problem solving, data analysis and the ability to analyze and draw conclusions based on facts. STEM provides students with opportunities to apply the design processes to experience ways in which technological knowledge and processes contribute to effective designs, abilities, and skills. Designing, researching, brainstorming, planning,

constructing, testing, and refining solutions provide firsthand opportunities for students to develop technology and engineering literacy. The course is designed around a project-based learning method of instruction where students work through an extended process of inquiry in response to a complex STEM question, problem, or challenge. Students will complete a series of engineering design projects utilizing a variety of technology applying math and science principles. Projects will include Lego Robotics, AutoCAD design and 3D Printing, and drone design and application.

### Robotics I & II – 1/2 credit each

This course will encourage students to rely on the engineering design process to design, build, program, troubleshoot, and revise their own robots. Students will experience a project-based environment that will challenge them to start off small to complete objectives. and missions while building the knowledge and confidence to tackle larger competitions and challenges. The hardware being used to constrict the robots will either be the LEGO Mindstorms Education EV3 robotics kit or the PITSCO Tetrix Max robotics kit. There will be a variety of software used to supplement the exploration of robots as being both autonomous and remote-controlled including LEGO Mindstorms for EV3, Labview 2012 for Mindstorms, RobotC, PTC Creo, and Lego Digital Designer. Also, multiple on-line programs, tutorials, apps, and blogs will be used as resources to guide learning. The goal of this class is that every student will gain awareness of and grow more comfortable with the "robots" all around us that allow us to interact with, monitor, record, and enjoy our daily 21st Century lives.

### 3D Manufacturing - 1/2 credit

If you like to create, innovate and fabricate, this is the course for you! 3D Manufacturing constructs a solid, three-dimensional object by adding material in layers. 3D printing is one of the most exciting manufacturing processes being used today.

It is also known as rapid prototyping, a mechanized method whereby 3D objects are quickly made on a reasonably sized machine connected to a computer containing blueprints for the object. This revolutionary method for creating 3D models with the use of inkjet technology saves time and cost by eliminating the need to design; print and glue together separate model parts. Then, students are able to create a complete model in a single process using 3D printing.

### Drone Operation - 1/2 credit

This course is designed to provide students with an understanding of drone applications and use of the evolving technology. Instruction will focus on flying drones, legal issues and future careers that affect this emerging technology.

Career opportunities for students with drone training include military drone pilot, firefighter, disaster relief, search and rescue, law enforcement, oil and gas operations, seismic study, border patrol, traffic reporting, storm chasing, agriculture, package delivery, forestry, engineering, computer science, commercial contractors, film, and other industries. Companies that hire drone engineers and pilots include aerospace and defense companies Northrop Grumman and Lockheed Martin, and aircraft manufacturer Boeing.

# SOCIAL STUDIES



### Global History 9 - 1 credit

This course will begin with early civilization to the 1750s. Begins with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical

societies, and traces the expansion of trade networks and their global impact. Emphasizes key themes of interactions over time, shifts in political power, and the role of belief systems.

### Global History 9 Honors - 1 credit

This course is a more intensive approach to the standard Global 9 course. It is geared to challenge the motivated student to achieve a higher level of mastery and is a step towards the Global History 10 course. It will require students to use critical thinking and analytical strategies to obtain factual knowledge and an understanding of ancient history to the late 18<sup>th</sup> century. The course combines content and skills to give students an awareness of the dimensions and cultures of the past, which can be applied to today's world. Students will analyze historical evidence, primary sources, and events worldwide much in the way a historian would. This in-depth study will use discussion, participation, and research in an inquiring, curious atmosphere and show a willingness to share & receive other perspectives. Good reading and writing skills are important as well as a commitment to assigned work.

### Global History 10 - 1 credit

Global 10 starts with the late 1700s through modern times. Students will study nations and their cultures within a framework that is designed to develop a global perspective. Students take the NYS Regents exam in Global History and Geography at the end of the year.

### Global History 10 Honors - 1 credit

While the content of this Regents level course closely parallels Global History 10, the honors course will involve students in more independent analysis, synthesis and evaluation of historical data. Students are expected to maintain a high level of academic interest, demonstrate a sophisticated level of critical thinking and be self-motivated learners.

### U.S. History and Government 11 - 1 credit

This course covers six major units, the first of which is a study of the origins and development of the Constitution during the early years of our nation. The other units deal with US History since the Civil War, with the major



emphasis on the 20<sup>th</sup> century. At the end of the course, students take the NYS Regents exam in United States History & Government.

<u>American History (HST 101-102)</u> - 1 credit This course may be used to fulfill the U.S. History 11 requirement.

# Students may earn 6 college credits. See SUPA description page 12.

The American History sequence is a year-long college course comprising **History 101: American History to 1865 and History 102: The United States since 1865**. Students will study American attitudes and beliefs about political democracy, social justice, economic opportunity, equality, and the environment, and will trace how those attitudes and beliefs have evolved in the first two-and-a-half centuries of American history. History will be studied as a process through which society and America came to be as they are today. It is hoped that, by the end of the second course, students will not only know more about the American experience, but also how to read critically, to construct persuasive arguments, to use evidence effectively, and to hone a variety of crucial analytic skills.

At the end of the course, students take the NYS Regents exam in United States History & Government.

### Economics - 1/2 credit

This course provides students with basic economic concepts and understanding which all people need to function effectively and intelligently as citizens and participants in the economy of the United States and the world.

### Participation in Government - 1/2 credit

This course provides students with practical knowledge and skills for citizenship. It emphasizes the interaction between citizens and governments at all levels: local, state and federal.

# An Intro. To the Analysis of Public Policy (PAF

<u>101)</u> – ½ credit

May be used to fulfill the requirement for Participation in Government.

# Students may earn 3 college credits. See SUPA description page 12.

This course is designed to provide students with basic research, communication, and decision-making skills used in public policy analysis. Students will develop a range of applied social science skills that will help them to make more informed choices as citizens, as workers, and as consumers. While studying particular public policy issues, students will practice collecting information and will examine the use of graphs, tables, statistics, surveys, and other informal interviewing procedures. In addition, students will identify a social problem and come up with a proposed public policy to deal with it. They will forecast the impact of that policy on societal conditions, analyze the political factors affecting the policy, and develop strategies to implement the proposed public policy.

#### History Through Film – ½ credit Grades 11 & 12

If you like watching movies that are set in historical settings, this class is for you. History through Film examines many famous and not so famous films with historical themes and discusses their impact, accuracy, and biases. The course involves research projects done in class to prepare a base knowledge of each film's time period and issues. We take time in class to debate the key issues that each film brings up and the impact that the film made when it was released.

This course focuses on a wide range of topics from the ancient Greeks in the film <u>Troy</u> to the US space program in <u>Apollo 13</u>. Other notable films that this course has shown are:

- ✓ <u>The Killing Fields</u> Cambodian genocide
- ✓ <u>Apocalypse Now</u> Vietnam
- ✓ Enemy at the Gates WWII
- Munich Israeli Mossad
- ✓ Paradise Now Palestinian Suicide Bombers
- ✓ The Last Samurai Meiji Japan
- ✓ Gladiator Ancient Rome
- ✓ Hotel Rwanda genocide in Africa
- ✓ <u>Apocalypto</u> Mayans

#### **Decades In History** - ½ credit Grades 11 & 12

This course will focus on the more interesting social, political, cultural, and musical trends of recent U.S. history beginning in the 1960s and ending up in the

new millennia. A multimedia approach will be used to explore the lesser and maybe more unusual side of recent history. There will be a lot of investigative research and plenty of class discussions on an array of fascinating topics.

# **College Credit Opportunities**

Gouverneur High School offers several opportunities for motivated students to earn college credits while in high school. Courses through Syracuse University and SUNY Potsdam are taught by GHS faculty while Hudson Valley Community College courses are taught by HVCC faculty via distance learning.

## Incentive Plan

At the end of a college course (SUPA, SUNY Potsdam or HVCC), students will receive reimbursement as follows depending on the grade received in each course:

- A = 100% reimbursement \$50
- B = 80% reimbursement \$50
- C = 60% reimbursement \$50
- <C = 0% reimbursement

Students who wish to drop a course for full tuition reimbursement minus the registration fee must do so within the **first five days** of the class. Students will also be required to pick up another class at Gouverneur Central School. **The dropping of a college course for a study hall is not allowed.** 

## Syracuse University Project Advance

SUPA is a cooperative program between Syracuse University (SU) and participating high schools that allows juniors and seniors to take college-level courses and earn college credits while in high school. Gouverneur High School expects to offer a total of 35 credits for the 2022-23 school year. Students enrolled in these courses pay tuition less than that charged to take the same course on campus. The current cost is **\$115 per credit hour**. Students receiving free/reduced lunch can also gualify for financial aid to reduce their actual cost. SUPA classes are taught at Gouverneur High School by GHS teachers who are trained and designated as adjunct instructors of Syracuse University. In cooperation with the high school

teachers, SU faculty monitors the courses along with Project Advance administrative staff to ensure the standards maintained in the high school are identical to those for the same courses being taught on the SU campus.

Students register at the beginning of the course and families are billed directly by Syracuse University. Students successfully completing Project Advance course work are awarded a Syracuse University transcript that records credits earned. Credits are transferable to hundreds of colleges/universities nationwide.

## SUNY Potsdam College in High School

Through the CHS Program participating high schools partner with the SUNY Potsdam Office of Early College Programs to award college credit for the successful completion of approved courses offered by the high school. Students participating in the CHS Program qualify for a special SUNY reduced tuition of \$125 per course (versus \$835 or more for a 3 credit course as a freshman), including college and transcript fees. Students who are eligible for free or reduced lunch at their high school are also eligible for an additional discount and will be charged \$75 per course. Credits earned through SUNY Potsdam may be eligible for transfer to other colleges and universities.

Students must request transcripts be sent to other colleges.

### **Distance Learning**

The costs associated with taking a Hudson Valley Community College course through the Distance Learning network is **§195.00 (§65 per credit hour)** and includes tuition, textbooks, and fees. Students receive three (3) college credits if a grade of D or better is received in the course.

# Scholarships are available for students who are eligible for free or reduced lunch.

Students must complete registration forms within 60 days prior to the start of the course and will be billed directly by HVCC. Mrs. Tyler will facilitate the registration process by the deadline set by HVCC. Any student who fails to make a required payment will forfeit their seat in the class.

### Sociology (SOCL 100) - 3 credits

An introduction to the scientific study of human social interaction with emphasis on societies, groups, organizations, social networks and communities as the units of analysis. Topics covered include culture, social structure, socialization, sex roles, groups, and networks, organizations, deviance and social stratification, race and ethnic relations and social institutions.

### General Psychology (PSYC 100) - 3 credits

This course consists of systematic, empirical study of human behavior. The course covers the following: introduction to psychology, research methodology, biological psychology, sensation and perception, consciousness, learning memory, thought and language, intelligence, human development, motivation and emotion, personality theories, abnormal psychology, health psychology, and social psychology.

For the 2022-23 school year, GHS plans to offer the following courses for college credit:

### **SUPA**

Practices of Academic Writing (WRT 105) Gender & Literary Texts (ETS 192) American History I & II (HST 101-102) An Intro to the Analysis of Public Policy (PAF 101) Calculus I (MAT 295) General Biology I & II/Lab (BIO 121-123/124) Forensic Science (CHE 113) Intermediate Spanish (SPA 201)

### **SUNY Potsdam**

Anatomy & Physiology (BIOL 210) Elementary Probability & Statistics I (MAT 125)

### Hudson Valley Community College

Intro. To Psychology Intro. To Sociology

### 35 credits

3 credits

3 credits

6 credits

3 credits

4 credits

8 credits

4 credits

4 credits

4 credits 3 credits

#### 7 credits

3 credits 3 credits

#### 6 credits

**TOTAL CREDITS: 48 CREDITS**