

WELLSVILLE SECONDARY SCHOOL

CURRICULUM GUIDE

2023-2024



AARON BRUBAKER, PRINCIPAL

ERIKA SCOTT, ASSISTANT PRINCIPAL

MAIN OFFICE:

585-596-2182

BRIDGET KEHRER, HIGH SCHOOL COUNSELOR

SARA KENT, HIGH SCHOOL COUNSELOR

LENORE BRAUNSCHEIDEL, COUNSELING OFFICE SECRETARY

SECONDARY SCHOOL COUNSELING OFFICE:

585-596-2160

NYS Graduation Requirements

**Minimum number of credits required for Graduation is 22 ½-
HOWEVER students must carry 6 ½ credits each year in their schedule**

Regents Diploma

<i>Required Courses</i>	<i>Credits</i>
English	4
Social Studies	4
Math **	3
Science **	3
Foreign Language	1
Art/Music	1
Health	.5
Physical Ed	2

Advanced Regents Diploma

<i>Required Courses</i>	<i>Credits</i>
English	4
Social Studies	4
Math	3
Science	3
{a}Foreign Language	3
Art/Music	1
Health	.5
Physical Ed	2

Required Exams

CC English Exam
CC Algebra Exam
Global History Regents
US History Regents
1 Science Regents

Required Exams

CC English Exam
CC Algebra I Exam
CC Geometry Exam
CC Algebra II Exam
Global History Regents
US History Regents
Foreign Language Exam
(1) Physical Science Regents
(1) Living Science Regents

** An integrated math/science/technology course may be used as the third required unit of credit in Math (Regents Diploma Only) or Science.

{a} Students acquiring 5 units of credit in Art, Music, or Career and Technical Education may be exempt.

- If a student has a cumulative average of 90 or higher on all required regents exams taken, an **Honors Distinction** is awarded.

Various appeal options may be available for students with qualifying circumstances regarding exam requirements.

ENGLISH

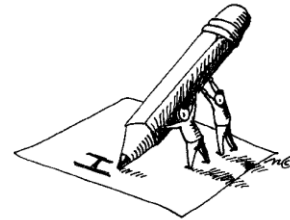
ENGLISH DEPARTMENT:

MADONNA FIGURA SIMON- DEPARTMENT CHAIR

LACEY GARDNER

RACHEL MANGELS

MATTHEW WARREN



English 9: 1 Credit

English 9 focuses on developing a student's ability to read closely for textual details, make evidence-based claims, perform research to deepen understanding, and craft evidence-based arguments. While developing these skills, students will explore rigorous non-fiction pieces and challenging texts from a variety of literary genres. Students will also continue to analyze the use and effect of literary devices in the works they explore through regular discussion, close reading, and critical writing.

English 9 Honors: 1 Credit

English 9 Honors focuses on developing a student's ability to read closely for textual details, make evidence-based claims, perform research to deepen understanding, and craft evidence-based arguments. However, English 9 Honors demands a higher level of responsibility and independence from those involved, as many assignments and projects are student-generated and student-led. Students who choose to enroll in English 9 Honors are also expected to complete nightly homework assignments and come to class prepared to engage in higher level, evidence-based discussions. Throughout this course we will experience rigorous non-fiction pieces and challenging works from all literary genres.

English 10 Honors: 1 Credit

Honors English focuses on critical writing and reading. Literature units include the short story, poetry, a modern play, a Shakespearean play and a modern American novel. Discussion centers on a close analysis of the techniques an author uses to communicate. This course focuses on the essay of literary analysis but includes writing which parallels the tasks tested on the New York State English Regents and Common Core Examinations, which is taken in the junior year.

Sophomore English also focuses on informational reading and analysis. Through the examination of various informational texts, this course develops the ability to cite strong and thorough textual evidence, analyze various accounts of a subject told in different mediums, and

delineate the specific claims made in an informational text. English 10 also offers an introduction to rhetoric and argument writing. Grammar, usage, mechanics, and sentence structure are examined and practiced routinely throughout the year. Vocabulary and spelling development are ongoing throughout all units of study. This course offers an open enrollment policy and strives to recruit students who understand the meaning of going above and beyond what is expected. An ideal candidate is someone who is self-motivated, intellectually mature, and inspired to dig deep for the truth.

English 10: 1 Credit

Sophomore English focuses on critical writing and reading. Literature units include the short story, poetry, a modern play, a Shakespearean play and a modern American novel. Discussion centers on a close analysis of the techniques an author uses to communicate. This course focuses on the essay of literary analysis but includes writing which parallels the tasks tested on the New York State English Regents Examination, which is taken in the junior year. Sophomore English also focuses on informational reading and analysis. Through the examination of various informational texts, this course develops the ability to cite strong and thorough textual evidence, analyze various accounts of a subject told in different mediums, and delineate the specific claims made in an informational text. Grammar, usage, mechanics, and sentence structure are examined and practiced routinely throughout the year. Vocabulary and spelling development are ongoing throughout all units of study.

English 11 Honors: 1 Credit (Regents)

It is assumed that students participating in the Honors program intend to enroll in either Advanced Placement English or Freshmen Composition/College Literature during their senior year. Students will face demanding and meaningful experiences in writing and literature. They will be encouraged to think critically and creatively to create a sense of self-awareness, independence and leadership. Students enrolled in English 11 Honors will take the ELA Regents exam during January of their junior year.

English 11: 1 Credit (Regents)

English 11 focuses on making and supporting evidence-based claims by using selections from both classic and modern literature paired with rigorous informational texts. Students are asked to complete a college/career research project in collaboration with the guidance department. Students are expected to work through multiple texts, both literary and informational, and to hone the craft of writing about these texts. Students enrolled in English 11 will take the ELA Regents exam during January of their junior year.

English 12: 1 Credit

This course is designed to prepare students for the rigorous reading and writing required by colleges and careers. Students read closely in a variety of genres with a special emphasis on reading non-fiction and writing expository and persuasive papers. A key component of the course is the completion of a multiple source research paper, a Wellsville High School graduation requirement. Students receive direct instruction in rhetorical analysis as well as usage, and mechanics.

Advanced Placement (AP) English: 1 Credit Grade 11/12

This is college level course work using college grading standards. The Advanced Placement English course will focus on close reading and analytical writing. A number of well-known, highly regarded works of literature, from antiquity to present day classics will be studied. A ten-page research paper on an author of literary merit is also a course requirement. The AP examinations in both literature and language are offered to all participants.

Freshmen Composition 1503-Alfred State: 3 College Credits/.5 HS Credit Grade 12

College Composition is the Alfred State College introductory writing course that all college freshmen must pass. The course will improve the clarity, precision, and development of expository, persuasive, and analytical writing. It will prepare students for writing in a variety of genres in other college courses. Completion of a multiple-source research paper is an Alfred State and Wellsville Secondary School requirement. This course is a pre-requisite to College Literature.

College Literature 2603- Alfred State: 3 College Credits/.5 HS Credit Grade 12

This course is the college level introductory literature course which exposes students to a variety of genres (short story, poetry, drama, and the novel). A variety of critical theories will be presented. Students will and demonstrate the ability to comprehend, analyze, and critique literature through writing and discussing. Freshman Composition is a pre-requisite for this course.

Speak Out, Act Out: 1/2 Credit

Speak Out/Act Out is a two-part course which combines learning public speaking skills and techniques with dramas, one-acts, and other plays. In the first half of the course, students will learn how to be a better public speaker and will learn tips that will help them get over their fears of speaking in public in front of others. Students who may already have some experience in speaking out loud will hone their skills in this course. In the second half of the course, students will read and view on film a variety of plays, dramas, one-acts and shorter scenes from the dramatic world. We'll read and act out parts of the plays we will read and explore dramatic choices characters might make when performing the scenes. When feasible, students will take a

field trip to a professional theater venue in the Buffalo/Rochester area to watch a touring Broadway performance.

SOCIAL/GLOBAL STUDIES

SOCIAL STUDIES DEPARTMENT:

LAUREN SKRZYNSKI – DEPARTMENT CHAIR

MATT BURKE

JUSTIN SKRZYNSKI

JUSTIN VOSSLER



Global History and Geography 9: 1 Credit (Grade 9)

Wellsville High School offers an academically rigorous program in Global Studies that takes students on a chronological journey through world history from 10,000 BC through 1750 CE. This course provides an academically stimulating classroom setting that relies on student participation and teamwork to drive classroom instruction. Students will explore world history from the perspectives of archaeologists, economists, anthropologists, and historians to study world history in a chronological manner, while analyzing important social, political, and economic events across the central themes of the Global I curriculum. Students are expected to embrace a collaborative classroom atmosphere that will routinely interpret primary documents and historical accounts, while reinforcing their newfound knowledge with secondary sources to make important connections between the past and present. Students will investigate complex questions and themes from multiple perspectives, while seeking global connections across cultures. Students will have frequent opportunities to exhibit their in-depth understanding of how events in history have, and continue to influence one-another through reading, writing, and creative use of technology.

Global History and Geography Honors 9: 1 Credit (Grade 9)

The content of this course takes students on a chronological journey through world history from 10,000 BCE through 1750 CE. Students will work to uncover the social, political, and economic developments of diverse civilizations while analyzing history from multiple perspectives. Students will work both independently and collaboratively to analyze primary and secondary historical documents and artifacts to gain an accurate and in-depth understanding of world history. Students will make global connections as they follow the rise and fall of complex cultures and civilizations while demonstrating their knowledge through reading, writing, and creative use of technology.

In Global 9 Honors, students are expected to take a more active role in their learning and will often do a lot of the “prep” work outside of class, including reading lengthy texts, annotating new texts, and regularly meeting with their peers, so that class time can be spent working on more collaborative discussions, projects, or activities. While all Global History and Geography students can expect a certain amount of homework next year, Global 9 Honors students will be reading, writing, and completing projects much more often than their Regent-level peers.

For example, honors students will be responsible for completing independent reading outside of class each week in attempts to bridge the gap in historical context and go deeper into the events associated with our curriculum. Honors students will also be expected to develop their own assignment timelines and be responsible for driving classroom productivity without high levels of teacher assistance. This is all in addition to the regular classwork and homework that they would normally receive in the regents-level course. Global 9 Honors students are also required to share their work both in front of their peers and in front of members of the school community on a regular basis, making class presentations and public speaking a regular occurrence in class.

Global History and Geography 10: 1 Credit (Regents)

The content of this course takes students on a chronological journey through world history from 1750CE through the present. Students will work to uncover the social, political, and economic developments of diverse civilizations while analyzing history from multiple perspectives. Students will work both independently and collaboratively to analyze primary and secondary historical documents and artifacts to gain an accurate and in-depth understanding of world history. Students will make global connections as they follow the rise and fall of complex cultures and civilizations while demonstrating their knowledge through reading, writing, and creative use of technology.

Global History and Geography 10 Honors: 1 credit (Regents)

Wellsville Secondary School offers an academically rigorous program in Global Studies that takes students deeper into the Global II curriculum, but will also include an academically stimulating classroom setting that relies on student participation and teamwork to drive classroom instruction. Students will explore world history from the perspectives of archaeologists, economists, anthropologists, and historians to study world history in a chronological manner while analyzing important social, political, and economic events across the central themes of the Global I curriculum. Students are expected to embrace a collaborative classroom atmosphere that will routinely interpret primary documents and historical accounts, while reinforcing their newfound knowledge with secondary sources to make important connections between the past and present. Students will investigate complex questions and themes from multiple perspectives, while seeking global connections across cultures. Students will have frequent opportunities to exhibit their in-depth understanding of how events in history

have, and continue to influence one-another through reading, writing, and creative use of technology.

Advanced Placement United States History: 1 Credit (Regents)

The advanced placement course is designed to provide students with analytical skills and factual knowledge necessary to deal critically with the problems and materials in American History. The course should prepare students for intermediate and advanced college courses by making demands upon them equivalent to full-year introductory college courses. Students will learn to assess historical events and to weigh the evidence and interpretations presented in historical scholarship, and to present those ideas clearly and persuasively in essay format. The Advanced Placement History examination is required. Students must take the state Regents examination. The final average is based on four quarter marks and the Regents Examination score. A 5% quality point adjustment will be made quarterly.

U.S. History and Government: 1 Credit (Regents)

This course will be a comprehensive chronological study of America's political, economic and social history. In addition, constitutional and legal issues will be explored. Previous knowledge of U.S. History and Government will be called upon for background purposes in all topics.

Advanced Placement Economics: 1 Credit (Grade 12)

This 2-semester sequence will be equivalent, in presentation and grading, of an introductory college-level course. Outside readings, abstracts, and active participation in the learning process are required. Microeconomics (1st semester) will give students a thorough understanding of the principles of economics which apply to the individual producers and consumers within the larger economic system. Macroeconomics (2nd semester) will give the students a thorough understanding of the principles of economics which apply to the economy as a whole. Two AP examinations will be offered: one in Micro-Economics and one in Macro-Economics.

Economics: ½ Credit (Grade 12)

This course will include the basic economic concepts and understandings which everyone will need to function effectively and intelligently as citizens and participants in the United States and the world. Some of the major concepts are scarcity, productivity, opportunity cost, supply and demand, inflation, profit, interdependence, capital, competition and the market. The course will not teach consumer education, but will emphasize rational decision-making which should be applied to all economic decisions. The major focus will be on the economy of the United States, but other economic systems will be examined. The course will include the basic principles of economics, the elements of an economic system (microeconomics), the overall operation of an economic system (macroeconomics), and the world economy and international trade.

Participation in Government: ½ Credit (Grade 12)

This course will emphasize the interaction between citizens and government at all levels; local, state and federal. Students will be encouraged to understand and participate in the democratic process. Formal powers, procedures and structures of government in the United States will be presented. How political decisions are made and the provision of opportunities for students to participate in political decision-making will occur. Students will have the opportunity to examine the substance of public policy issues and participate in some aspects of school, community, or government service. Key civic values and analytical concepts will be developed and reinforced. The ultimate goal will be to prepare students for effective participation in the democratic process. Students must also complete a 20-hour community service requirement during the semester; this is scheduled into the Participation in Government course.

General Psychology: 1 Credit (Grade 11/12)- (JCC 3 credits)

This is full year college level Introduction to Psychology course. Students will become familiar with the history of and approaches to psychology, research methods and current research in the field. Topics covered include but are not limited to: perception, personality, sleep and dreams, emotions, motivation, behavior and cognitive processes, and psychological disorders (abnormal psychology). Career and employment opportunities in the field will be explored. Experts in the field will guest lecture when available. This course requires students to pass a placement test for reading and writing.

Sports Economics: 1 credit

Students will be introduced to the Monopoly and Monopsony business models and how they operate in the world of sports. Students will take a look at the background and history of anti-trust legislation, labor unions and collective bargaining agreements to gain a better understanding of player/owner conflicts, the draft system and player compensation.

The concepts of inelastic demand and inelastic supply will be examined to understand and explain ticket prices, player salaries etc. Students will use graphical analysis to achieve this.

The Consumer Price Index will be used to compare prices/salaries from year to year and establish real values of the dollar in different time periods. Students will be able to calculate the CPI and use this data to analyze player salaries, team payrolls and the cost of living in general.

The concept of Game Theory will be explored and students will understand how it applies to the decision-making processes of coaches, players and entire sports organizations. Students will define absolute and comparative advantage and explain how they relate to the world of sports.

Students will be periodically given a Sports Economics Question to research and then participate in a graded class discussion. Topics will cover a wide range of sports and will be controversial. Students will be required to discuss both sides of the issue.

The final exam will consist of a series of power point checkpoints that include several topics covered during the year. Students will put systematically put together their power point in the expectation that upon completion, their final exam requirement will be met.

Mathematics

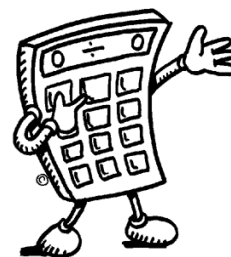
MATH DEPARTMENT:

MIKE BIDZERKOWNY- DEPARTMENT CHAIR

RHONDA FARRAND

SAMANTHA KAMINSKA

ZACHARY SMITH



**All students must take at least three years of math to complete the necessary graduation requirements. The math department highly recommends four years of math for all college bound students*

Common Core Algebra: 1 Credit (CC Exam)

This course is designed for all students. This math course will cover real numbers, signed number operations, properties, factoring, solving linear and quadratic equations, graphing linear, exponential and quadratic equations, mathematical reasoning, polynomials, inequalities, radicals, scientific notation, absolute values, factorials, probability, exponents, right triangle trigonometry, Pythagorean theorem, area, perimeter, volume, functions, statistics, probability, and word problems. Passing this course and the Algebra Regents Exam is a requirement for graduation.

Common Core Algebra A: 1 Credit

This course is designed for students who struggle with math. These math courses are a two-year sequences that will cover real numbers, signed number operations, properties, factoring, solving linear and quadratic equations, graphing linear, exponential and quadratic equations, mathematical reasoning, polynomials, inequalities, radicals, scientific notation, absolute values, factorials, probability, exponents, right triangle trigonometry, Pythagorean theorem, area, perimeter, volume, functions, statistics, probability, and word problems. Passing these courses and the Algebra Regents Exam is a requirement for graduation

Common Core Algebra B: 1 Credit (CC Exam)

This course is designed for students who struggle with math. These math courses are a two year sequences that will cover real numbers, signed number operations, properties, factoring, solving linear and quadratic equations, graphing linear, exponential and quadratic equations, mathematical reasoning, polynomials, inequalities, radicals, scientific notation, absolute values, factorials, probability, exponents, right triangle trigonometry, Pythagorean theorem, area, perimeter, volume, functions, statistics, probability, and word problems. Passing these courses and the Algebra Regents Exam is a requirement for graduation.

Common Core Geometry: 1 Credit (CC Exam)

This course will cover formal proofs, informal proofs, problem solving, transformations, logic, congruence, triangles, geometric inequalities, slopes, equations of lines, parallel lines, perpendicular lines, quadrilaterals, three-dimensions, circles, locus, and constructions. The algebraic skills and concepts within the algebra process must be maintained and applied as students are asked to investigate, make conjectures, give rational, and justify or prove geometric concepts. This course will prepare the students for the geometry regent's exam given in June.

Common Core Algebra 2: 1 Credit (CC Exam)

This course is designed for students who would like to earn the advanced regents diploma. This course will cover functions, linear systems, matrices, quadratic equations, polynomials, radicals, rational exponents, logarithms, exponential functions, rational function, conic sections, sequences, series, probability, statistics, and trigonometry. This course will prepare the students for the Algebra 2/Trig exam given in June.

Geometry Applications: 1 Credit

This course introduces the concepts covered in Geometry. Students can use this as preparation for the regent's level Geometry class or as their 3rd credit of math toward graduation. Students do not take the regents exam at the end of this course.

Consumer Mathematics: 1 Credit

**Algebra CC or Algebra A & B is recommended*

In Consumer Math, students study and review arithmetic skills they can apply in their personal lives and in their future careers. The first semester of the course begins with a focus on occupational topics; it includes details on jobs, wages, deductions, taxes, insurance, recreation and spending, and transportation. In the second semester of Consumer Math, students learn about personal finances, checking and savings accounts, loans and buying on credit, automobile expenses, and housing expenses. Teaching students about spending, saving and other aspects of "money math" will prepare them to make better financial decisions.

Statistical Methods& Analysis 2124: ½ Credit (Alfred State College 4 credits)

This is a one-semester (non-calculus based) course which covers descriptive as well as inferential statistics. Included are topics on collecting, organizing, and summarizing data. Other topics include correlation and regression, probability, normal and binomial probability distributions, normal approximation to the binomial, central limit theorem, confidence intervals, hypothesis testing, and nonparametric statistics. This course is open to seniors who have completed Algebra 2/Trig. There is the possibility of college credit through Alfred State College.

College Algebra 1033: ½ Credit (Alfred State College 3 credits)

This course includes topics such as polynomials, radicals, exponents, coordinate geometry, rational expressions and equations, and solutions to linear and quadratic equations. Students are introduced to the concept of functions and their graphs. Additional topics may include- conic sections, matrices, variation, and non-linear inequalities. Emphasis will be placed on problem solving. This course is opened to students who have completed Algebra 2/Trig.

College Pre-Calculus 1054: ½ Credit (Alfred State College 4 credits)

This course is designed primarily for the student who needs a foundation in algebra and trigonometry for the study of calculus. The concept of function and graphical representation of functions is stressed. Topics covered include: real numbers; algebra of real numbers including equations and inequalities; functions and their graphs including polynomial, rational expressions, logarithmic and exponential, trigonometric, algebra of the trig functions including identities, equations, polar coordinates, complex numbers, systems of equations. This course is open to students who have completed Algebra 2/Trig.

Calculus I 1084: ½ Credit (Alfred State College 4 credits)

This course is designed for the student intending to continue their education in mathematics, science, or engineering. The course will include a review of functions, an introduction to the concept of limits, and a study of the derivatives and integrals of algebraic and transcendental functions and their applications. This course is open to students who have completed Algebra 2/Trig.

Calculus II 2094: ½ Credit (Alfred State College 4 credits)

This course is a continuation of calculus I with a concentrated study of integration techniques along with applications. Applications include but are not limited to- areas, volumes, arc length, and work problems. The course involves methods of integration and applications as they apply to both the algebraic and transcendental functions. Infinite series will be included. This course is open to students who have completed calculus I.

Computer Programming I: .50 credit

The Computer Programming I course is designed to help students master the basics of Java programming language. The course utilizes a blended classroom approach. The content is fully web-based, with students writing and running code using CodeHS. Topics to be covered include basic java, methods, classes, object-oriented programming, arrays and array lists.

Computer Programming II: .50 Credit

The Computer Programming II course allows students to refresh their knowledge of basic programming concepts (control structures, variables, functions, etc.) in order to control a physical device using Arduino. Students will perform basic physical tasks using LEDs, motors, and sensors to see how computer programming gives physical devices the ability to interact with their environment.

Computer Programming III: .50 Credit

Computer Programming III teaches the fundamentals of designing a game using the most widely accessed and preferred editing engine in the world, Unity. The intent of this course is to prepare high school students with the industry related skills needed for the workplace and higher learning environments. By the end of this course, they will understand the design planning process, be knowledgeable of industry related careers, and be able to navigate the Unity environment in order to create 3D games.

Computer Programming IV: .50 Credit

Computer Programming IV is a project-based course that teaches students how to build their own web pages. Students will learn the languages HTML and CSS and will create their own live homepages to serve as portfolios of their creations. By the end of this course, students will be able to explain how web pages are developed and viewed on the Internet, analyze and fix errors in existing websites, and create their very own multi page websites. Students will learn the foundations of user interface design, rapid prototyping and user testing, and will work together to create professional, mobile responsive websites.

AP Computer Science: 1 credit

**Algebra CC or Algebra A & B is required*

AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented

programming and design using the Java programming language. The AP Computer Science A course requires that solutions of problems be written in the Java programming language.

Mathematics in Sports: 1 credit

**Algebra CC or Algebra A & B is required*

Mathematics in Sports is a class that will look at how math is used and applied in many different sports. The math that will be covered is probability, statistics, functions, basic trigonometry, and basic geometry. Students will do many different projects in order to understand and be able to use math.

SCIENCE

SCIENCE DEPARTMENT:

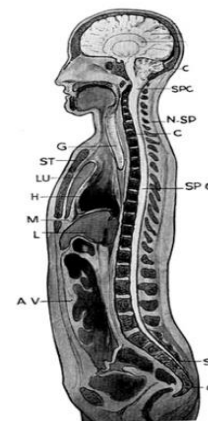
ROSS MUNSON- DEPARTMENT CHAIR

JAN EDWARDS

SANDRA QUICK

DIANE WILLARD

ALYSSA WIXSON



All students must take at least three credits of science to be eligible for graduation. College bound students should take four years of science throughout their high school career to help prepare them for college level science courses. The courses will be scheduled as follows:

9th grade: Living Environment

10th grade: Earth Science

11th grade: Chemistry

12th grade: Physics

Earth Science/Physical Setting: 1 Credit (Regents)

This course includes the study of the Earth, its systems, its history and its relationship to space. The course includes laboratory work done both individually and in groups. Satisfactory completion of all lab experiments and reports is required to take the Earth Science Regents Exam.

Living Environment: 1 Credit (Regents)

Study includes basic principles of biology related to the physical world with emphasis on ecology, evolution and genetics. Emphasis is placed on developing laboratory skills, improving reading and writing in the science content area, note taking, laboratory reporting, and research methodology. The goal is for students to develop respect and responsibility for themselves and others, and to understand biodiversity and the fragility of the environment. Laboratory investigations & lab reports are a prerequisite to the Living Environment Regents. This course meets the state requirement for one regent's credit with a successful grade on the Living Environment Regents and one course credit in the life sciences – Living Environment.

Chemistry: 1 credit (Regents)

A course which includes units on structure of matter, chemical bonding, energy and entropy changes, periodicity of the elements, mole concept, acid-base theories, equilibrium, redox, organic chemistry and nuclear chemistry. Lab work is correlated with classwork. Successful completion of the lab requirement is necessary for admission into the regent's exam.

Physics: 1 credit (Regents)

This course involves a detailed study of our physical world, including units on motion, heat, waves, electricity, magnetism and atomic & nuclear energy. Emphasis is placed on real-life applications of these concepts. A good math background is strongly recommended (Integrated algebra is required, Trig is preferred). Lab work is done on a weekly basis. Satisfactory completion of all lab experiments is required to take the Regents Exam.

College Biology: 1 credit (Alfred University- 8 credits)

College Biology is a lab science where students will closely examine the fundamentals of biology. Topics include the chemical basis of life, cell structure and function, genetics, biological organization, diversity of organisms and environmental interactions. This course is designed for students who intend to major in Biology, are preparing for a career in health professions, plan to take upper level biology courses, or have an interest in biology. College Biology is a full year course with dual credit through Alfred University; students will have the opportunity to earn up to eight (8) lab science credits. Prerequisites: Completion of Regents Chemistry course and successfully passing the Regents Chemistry exam.

Fish and Wildlife Conservation: 1 Credit

In this class students will have an opportunity to take on a diverse number of topics including native animal and plant species of New York, the politics of modern-day hunting, and the history

of the conservation movement in the United States. We will spend a good portion of the class outdoors putting our newly learned skills to use and working on various projects centered on the content we are learning. Examples could include creating casts of animal tracks, identifying plants or animals, or working on habitat improvement projects.

Environmental Science: 1 Credit

Environmental science is a course dedicated to understanding the interactions between earth's natural systems and the demands placed on them by the human population. The course includes elements of life science, physical science, and social science and focuses on the interrelatedness of relevant current events.

Anatomy & Physiology: 1 Credit (alternating years)

This course is a rigorous introduction to A&P designed for students interested in the medical field. This course will examine the structures and functions of the human body. We will dive into the cells, tissues, and organs involved in helping the body stay healthy. There will be practical applications of the information covered through lab activities and case studies. There is no separate lab time for this class but lab activities will be incorporated into the class. Chemistry is required for this course but it can be taken at the same time.

Forensic Science: 1 Credit (alternating years)

The application of science for solving crimes. This is a course rich in exploration and lab investigation, which applies many disciplines of scientific study such as biology/anatomy, chemistry, and physics to solving crimes.

LANGUAGES

LANGUAGE DEPARTMENT:

SARAH GERMAIN-TARDIEU- DEPARTMENT CHAIR

TIFFANY RANSOM



All students must complete at least one unit of credit in Foreign Language to be eligible to graduate from a New York State High School. College bound students are highly encouraged to pursue at least three units of credit in a Foreign Language and successfully pass a Foreign Language Regents equivalency examination.

French 3: 1 Credit (Regents Equivalency)

French 3 students will complete the French verb system and also participate in an intense vocabulary study. There will be great emphasis on writing, speaking and listening, and reading comprehension. The cultural entity of French 3 will be reinforced through media and technology. French 2 is a prerequisite.

Spanish 1: 1 Credit

Spanish 1 is an introductory study of Spanish pronunciation, vocabulary, and grammar. There is also a focus on the cultures of Spanish-speaking countries.

Spanish 2: 1 Credit

In Spanish 2, students will expand their vocabulary while advancing their knowledge of grammar through proficiency-based activities and exercises. Students will also explore the cultures of Spanish-speaking countries and continue developing reading, writing, listening, and speaking skills. Spanish 1 is a prerequisite.

Spanish 3: 1 Credit (Regents Equivalency)

A study of Spanish with emphasis on conversation, composition, culture and comprehension. Spanish 2 is a prerequisite. One credit will be awarded upon successful completion of the Regents Equivalency Examination.

Spanish 4: 1 Credit (SUNY Albany 3 credits)

Emphasis is placed on the fundamental aspects of Spanish grammar, composition, conversation, comprehension and culture. A student may register for possible college credit through The “University within the High School Program” offered by SUNY Albany. A student may earn four college credits. There is a charge for those who elect to receive college credit.

Spanish 5: 1 Credit (SUNY Albany 3 credits)

Spanish 4 is a prerequisite. The students will enhance their ability to express themselves verbally in Spanish. The course is a thorough review of all major grammatical concepts and all verb tenses. Compositions are written once per month. Exposure to Spanish literature is also part of the course. This course also affords the students the opportunity to receive 4 additional potentially transferable college credits through the University within the High School program offered by SUNY at Albany. There is a charge for those taking the course for college credit.

HEALTH, PHYSICAL EDUCATION



THOMAS DELAHUNT – DEPARTMENT CHAIR

GIA GEORGE

ERICA AFTUCK

Health: ½ Credit

The High School Health course is a requirement for graduation. This course meets for one semester. Upon successful completion of all course work at a quality level of performance, students will receive 1/2 unit of credit. This course is predominately project oriented. Students will be actively involved with the course content. Projects focus on prevention of lifestyle-related diseases/conditions and promotion of a safe and healthy lifestyle.

Physical Education – ½ credit (2 credits total required for graduation)

This required course is designed to promote a balance of fitness, wellness and performance-based activities. In this environment students will be engaged in a variety of individual lifetime activities as well as development related to team sports. Students are required to dress appropriately and maintain good attendance. Students in NYS must take PE every year they are enrolled in school.

Lifetime Physical Education – ½ credit

The purpose of the high school lifetime physical education program is to teach basic skills, enhance knowledge about sport, exercise and other forms of physical activity, and to develop immediate and lifelong benefits as well as enjoyment of regular physical activity. Physical activities focusing on lifelong fitness (non-competitive sports) will be performed every other day throughout the school year. The exposure to new lifetime skills will help students to develop a passion to live a lifelong active and healthy lifestyle.

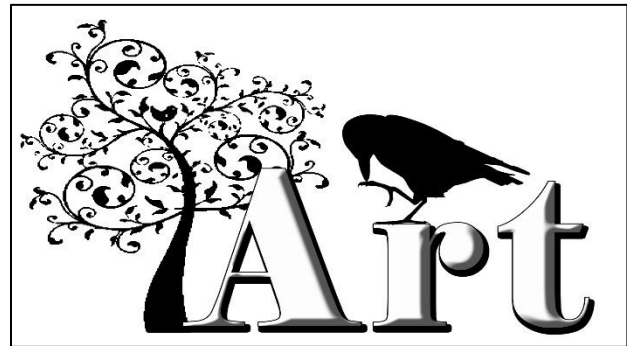
Personal Fitness and Weight Training – ½ credit

This course will be for those students who want to improve their overall health and/or improve their sports performance. This course will go above and beyond a traditional physical education class in terms of knowledge and hand-on experience. We will start with an assessment of your current health related fitness levels. From there you will learn how to create a strength and conditioning program to help you achieve your goals. Topics will include: basic anatomy & physiology, energy system development, assessment, and program design. Open to 10th-12th graders only.

ART DEPARTMENT

MARK CORWINE

KRISTY MCNULTY



Studio in Art: 1 Credit

Studio Art is foundation course for first-year art students. Students will explore the nature of art, learn how to identify and utilize the elements of art and study the movements and trends in the world of art. Student will work with materials and processes that expose them to the other advanced electives available to them after completing this course.

Drawing and Painting: 1 Credit

Studio in Art is a prerequisite to the Studio in Drawing and Painting course. Studio in Drawing and Painting will concentrate on painting and drawing and build upon knowledge gained in Studio in Art.

Computer Art and Graphic Design: 1 Credit

Studio in Art is a prerequisite to Computer Art and Graphic Design. This class that is computer based and students will use Adobe Photoshop for creative expression and commercial exercises. Students will also have the opportunity to use digital cameras, scanners, and a comprehensive Computer Graphic and Design software environment. Other Adobe applications such as Illustrator and InDesign may be sampled as well.

Ceramics and Sculpture: 1 Credit

Studio in Art is a prerequisite to Studio in Ceramics and Sculpture. The concentration of this course is using ceramic materials for the creation of both utilitarian and sculptural work. During the first term, students will begin with functional vessel making. During the second term,

ceramics as a sculptural medium will be explored along with other materials to develop ideas and create objects in 3 dimensions.

Printmaking: .50 Credit

Beginning Printmaking is an introductory course in the expression of two-dimensional ideas and in some of the processes, materials and methods used in printmaking. In addition to learning to use materials and processes, you are encouraged to experiment, explore your ideas and take some risks. In this course you will create monotypes and mono-printing, linoleum relief, and silk-screening.

Mixed Media: .50 credit

Must have studio in art or DDP as a prerequisite

This is an art course in which you will be using a multitude of art mediums and supplies. It is led by an idea and followed by students' creativity and imagination. Maybe get a little messy, create new art, but most of all, have fun!

Photography: .50 credit

In this course students will learn the fundamentals of taking a good photo, and selecting the strongest visual images that they took to display. Student will participate in discussions about their work and see examples of Photography masters to learn from. A brief history of the major figures of the field will be covered. The course will require the use of a digital camera and Adobe Photoshop. Prior knowledge of photoshop preferred but not required. Cameras will be supplied to students. The course will require weekly assignments of taking photos outside of class time. Students will learn about editing their work, displaying their work and be required to participate in a local Teen photography contest (spring).

Portfolio Art: 1 Credit

In portfolio art students will have the opportunity to work individually in their particular area of interest. Students must be mature enough and dedicated enough to work independently with guidance and supervision from the teacher. The year will end with an exhibition and completion of a personal art portfolio.

Technology

Design and Drawing for Production (DDP): 1 Credit (Fine Arts) – Grade 9

Required for sequence

This course will provide opportunities in design and drawing through creative thinking, decision-making, and problem-solving experiences. It emphasizes strategies of design and drawing appropriate now and in the future. A shift from conventional learning methods to this problem-approach method is the basis for this course.

- Students will learn the basics of technical drawing by hand and on the computer and then create projects out in the lab using tools.
- Students will learn the basics of design and engineering with a focus around STEAM.

Communications & Marketing: 1 Credit (Elective) – Grades 9-12

This course provides instruction in the electronic, graphic, and photographic systems which people use to communicate information and ideas. The projects are driven by client needs, and the communication processes used to meet them. Included are media such as television, radio, motion pictures, printing, photography, and computer-based communication.

- Course will provide students with knowledge, skills and experience in the different categories of communication and multimedia with a focus around video editing.
- Categories include visual communication, audio/video communication, photography and graphic design.
- This course will produce the video morning announcements and other videos for the school.

Principals of Engineering (POE): 1 Credit (Non-Lab Science) – Grades 10-12

DDP is a prerequisite

This course offers integrative, hands-on, laboratory-based course which introduces students to concepts of engineering (ethics, design, modeling, optimization systems, and technology/society interactions). These concepts are applied to solving problems contained in "real world" case studies. Case study abstracts relate to auto safety computer automation and control, energy, communications, structural design and designing technology for people with disabilities.

Computer Aided Drawing (CAD): 1 Credit (3 College Credits) – Grades 10-12

DDP is a prerequisite - Alfred State Basic CAD for Residential Drawing BLCT 4302

This course is a computer-based course that provides students with an exposure to Computer Aided Drawing (CAD). The class will cover both AutoCAD and Inventor. The course is setup for the students to learn at their own pace and have an emphasis on developing preliminary CAD residential blueprints.

- This course is designed for students who are interested in applying their mechanical drafting skills (drawing by hand) to computerized drawing.
- Students will use a 3D printer and laser engraver machine.

Materials Processing: 1 Credit (2 College Credits) – Grades 10-12

DDP is a prerequisite - Offered Alternating Years

Alfred State Portable Tools & Fastening Systems BLCT 1202

This course covers an overview of hand and portable power tools, fasteners, adhesives, and power fastening systems commonly used in the construction industry. Students will learn the proper terminology usage, setup, maintenance, and safety associated with industry. The course also includes the proper choice of tools, fasteners, adhesives as well as critical thinking problems for students to solve.

Construction Essentials: 1 Credit (2 College Credits)

Materials Processing is a prerequisite – Offered Alternating Years

Alfred State Wood Products & Fabrication BLCT 2242

This course examines the process of lumber, manufactured wood, and engineered wood products. Students will learn how these products are used in building trades and the installation requirements unique to these engineered wood products. Students will also be trained in the proper setup and safe use of stationary power tools.

Product Research and Development: 1 Credit – Grade 12

DDP, CFM, and 2 additional technology education courses are a prerequisite

This capstone course covers the significance and procedures of the research and development process, applied to the production of material goods, the improvement of industrial processes, and the acquisition of new knowledge. The course involves the students in realistic, hands-on research and development. Brainstorming, library research, problem solving, modeling, prototype production and other skills are developed.

MUSIC

MUSIC DEPARTMENT:

JEFF JOSLYN- BAND

NOAH LUTHART- ORCHESTRA

KELLY SUZANO- VOCAL



Band: 1 Credit

Concert Band is a performing ensemble that prepares and performs various styles of music. Band is open to all students who play a woodwind, brass or percussion instrument. Previous experience on an instrument or other formal study of music is required. The Concert Band performs in concerts in the winter and spring. Band members have the opportunity to participate in extra-curricular musical activities and performances.

Orchestra: 1 Credit

The Orchestra is open to students who study stringed instruments. Students will prepare and perform various styles of orchestral music. Previous experience studying a stringed instrument and previous participation in orchestra is strongly recommended. The Orchestra performs numerous times each year and members have the opportunity to participate in musical extra-curricular activities.

Chorus: 1 Credit

Choir should be selected by students who enjoy singing and performing. The Choir will perform various styles, from classic literature to modern music. Students learn correct vocal techniques, proper breathing, tone and articulation skills and a general enjoyment of music and singing. Choir is open to any students interested in serious vocal study. Previous experience in Choir is preferred and recommended.

Chamber Choir: 1 Credit

This course will be audition-based and members will be selected by the music department. This course will focus on Classical music selections and will be offered in addition to or separate from Chorus.

Music Theory: 1 Credit

Music Theory is designed to give students understanding of the rules and principles involved in using the language of music. Students will increase their ability to analyze music aurally and

visually, to improve their music reading skills; compose, harmonize, improvise and analyze music. Students will also develop an understanding of the history of music, the roots of modern music literature and the people and places fundamental to the development of music history. Course required for Music majors.

BUSINESS

Accounting: 1 credit

A first-year accounting course that correlates with Jamestown Community College's "Fundamentals of Accounting" course for the possible award of 3 college credits to students who complete all of the requirements at or above the levels required. Students will begin with learning about the accounting cycle in a sole proprietorship service business and then progress to more complex items that are found in a merchandising business operating as a corporation. Excel software will be used to learn how to develop formulas and create templates of journals and other documents used in accounting.

Intro to Business: 1 credit

Students will study the elements and characteristics of a free enterprise system and will be presented an overview of functional areas of business and basic concepts of the business world. Some topics include the environment of business, organization and management of the enterprise, management of human resources and production, marketing, finance, government's role in business, social responsibility, and cultural diversity, as well as major societal issues facing today's business executives. Recommended for beginning business students.

Everyday Law: 1 credit

Students will learn about the various court systems, criminal law, civil law, contract law, and consumer law. Throughout the course, students will demonstrate the laws through examples, court simulations, creation of contracts, and group work where applicable. A field trip to the county jail, guest speakers, and law related videos and movies are part of the curriculum.