



2024 - 2025 Course Catalog

James Nicotri
Principal

“We educate and **INSPIRE the problem solvers and
leaders of tomorrow.”**

MINIMUM CREDIT REQUIREMENTS FOR GRADUATION

English - 8 credits

- English 1
- English 2
- English 3
- English 4
- English 5
- English 6
- AP English Literature 2
- AP English Literature 1
- College Prep English (SAT)
- Freshman Seminar
- AP English Language 1
- AP English Language 2

Social Studies - 8 credits

- Global History I
- Global History II
- Global History III
- Global History IV
- History of NYC
- AP Psychology
- AP US History
- US History I
- US History II
- Government
- Economics
- AP Macroeconomics
- AP US Government
- AP Human Geography

Mathematics - 6 credits

Required:

- Algebra I (*Semester 1*)
- Algebra I (*Semester 2*)

At least 4 credits from the following:

Semester Semester

- | <i>1</i> | <i>2</i> | |
|--------------------------|--------------------------|--------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Algebra II |
| <input type="checkbox"/> | <input type="checkbox"/> | Geometry |
| <input type="checkbox"/> | <input type="checkbox"/> | Math Lab |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Pre Calculus |
| <input type="checkbox"/> | <input type="checkbox"/> | Calculus |
| <input type="checkbox"/> | | Financial Algebra |
| <input type="checkbox"/> | | Statistics |
| <input type="checkbox"/> | <input type="checkbox"/> | College Prep Math (SAT) |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Calculus AB |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Calculus BC |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Computer Science Principles |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Statistics |

Science - 6 credits

Required:

- Biology (*Semester 1*)
- Biology (*Semester 2*)

At least 4 credits from the following:

Semester Semester

- | <i>1</i> | <i>2</i> | |
|--------------------------|--------------------------|----------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Chemistry |
| <input type="checkbox"/> | <input type="checkbox"/> | Earth & Space Science |
| <input type="checkbox"/> | <input type="checkbox"/> | Physics |
| <input type="checkbox"/> | | Astronomy |
| <input type="checkbox"/> | <input type="checkbox"/> | Forensics |
| <input type="checkbox"/> | <input type="checkbox"/> | Bio in Ethics Research |
| <input type="checkbox"/> | <input type="checkbox"/> | Sherman Scholars |
| <input type="checkbox"/> | <input type="checkbox"/> | Human Anatomy & Physiology |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Psychology |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Physics C:Mechanics |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Biology |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Chemistry |
| <input type="checkbox"/> | <input type="checkbox"/> | AP Environmental Science |
| <input type="checkbox"/> | <input type="checkbox"/> | Advanced Science Research |

Foreign Language - 2 credits, 6 for Advanced Regents

- French 1
- French 2
- French 3
- French 4
- French 5
- French 6
- Spanish 1
- Spanish 2
- Spanish 3
- Spanish 4
- Spanish 5
- Spanish 6
- AP Spanish Language I
- AP Spanish Language II
- AP Spanish Literature I
- AP Spanish Literature II

Arts - 2 credits from the following

- Digital Photography
- Studio Art
- Required Art
- Music
- Graphic Yearbook

Health/Physical Education - 1 credit Health, 8 semesters PE

- | | |
|--------------------------|--|
| Health (1 credit) | Physical Education (<i>4 credits, .5 credits each</i>) |
| <input type="checkbox"/> | <input type="checkbox"/> Freshman Year |
| <input type="checkbox"/> | <input type="checkbox"/> Sophomore Year |
| <input type="checkbox"/> | <input type="checkbox"/> Junior Year |
| <input type="checkbox"/> | <input type="checkbox"/> Senior Year |

REGENTS EXAM REQUIREMENTS FOR GRADUATION

REGENTS DIPLOMA

- English Language Arts
- Global History or US History
- Algebra I or Algebra II or Geometry
- Biology or Chemistry or Earth & Space Science or Physics
- One additional Regents exam
- English Language Arts
- Global History & Geography

ADVANCED REGENTS DIPLOMA

- US History & Government
- Algebra 1 and
- Algebra II and
- Geometry
- Biology and
- Chemistry or Earth & Space Science or Physics
- World Language

COURSE SEQUENCES

MATH

Algebra 1
Math Lab → Algebra 2
AP
PreCalculus
Enrichment → Geometry → Calculus → AP Courses

SCIENCE

Living
Environment → Chemistry
OR
Earth & Space
Science → Physics
OR
Chemistry → Physics
OR
AP Class

ENGLISH

English 1/2 → English 3/4 → English 5/6
OR
AP English Language → AP English
Literature

SOCIAL STUDIES

Global 1/2 → AP World History → US History
OR
AP US History → Government
and
Economics



ENGLISH I AND II - INTRODUCTION TO ENGLISH WRITING AND COMPOSITION

Credits: One credit/semester

Grade(s): 9

Length of Course: Two semesters

Prerequisite: None

Requirement Satisfied: Required English

Freshman English establishes the parameters for the study of English language writing and literature through the lens of self-discovery. Students write a series of essays to build strong foundational skills in analysis and communication;. Review of the four basic literary elements – plot, character, setting, theme – is conducted, as students are introduced to the works of such authors as Chimamanda Ngozi Adichie, Sherman Alexie, Elie Wiesel, and Trevor Noah. Students learn how to analyze both literary texts and non-fiction informational material.

HUMANITIES SEMINAR

Credits: One credit/semester

Grade(s): 9

Length of Course: Two semesters

Prerequisite: None

Requirement Satisfied: None

Rhetoric and Composition is a two-term course taken in addition to 11th Grade English, with the purpose of developing the practical writing skills required for the English Language Arts Regents. Guided by rubrics and templates, students read, write argument, informational and narrative essays in addition to writing creatively. They are introduced to the writing tasks they may encounter in the following year if they take AP Language. Students identify and analyze rhetorical strategies and logical fallacies, practice synthesizing diverse source material, and gain confidence in using the writing process, visible in their portfolios, to participate in academic discourse.

ENGLISH III AND IV - LITERATURE ACROSS CULTURES

Credits: One credit/semester

Grade(s): 10

Length of Course: Two semesters

Prerequisite: English I and II

Requirement Satisfied: Required English

In this annualized course of two semesters, sophomore English students begin to consider themselves as members of a larger global community by reading texts written by both American and international authors while focusing on societal conflicts and human relationships within them. Students will examine concepts such as socioeconomic inequality, racism, gender equality, dystopian societies, and economic systems.

Continued emphasis will be placed on the study of English literature from around the world, studying diverse writers such as Ernesto Quiñonez, J.D Salinger, George Orwell, and Ray Bradbury, along with thematic non-fiction works. Students will complete a variety of writing assessments analyzing fiction, nonfiction, poetry, art, music, video and other texts. New rhetorical and literary devices and techniques, including plot structure, allusion, and archetype among others will be introduced within regents-style practice in order for students to gain familiarity with the concepts they will be expected to grasp in 11th grade.

ENGLISH V AND VI – THE AMERICAN EXPERIENCE

Credits: One credit/semester

Grade(s): 11

Length of Course: Two semesters

Prerequisite: English III and IV

Requirement Satisfied: Required English

In this annualized course of two semesters, students prepare for the level of English reading and composition that is expected in college and careers post high school. Students will utilize multiple forms of writing media, projects, and presentations, as well as reading assignments to help them study and review *The American Experience* and the art of rhetoric. Students will focus on themes such as The American Dream, the causes and effects of war, the conflict between illusion and reality, gender roles, racial tension in the United States, the role of religion in American life, the conflict between capitalism and communism, and the dynamics of the American family. Students will take the New York State English Language Arts Regents in January of 11th grade and then transition to focusing on skills necessary for whole-text literary analysis and information literacy to better prepare them for twelfth grade English and college-level skills.

RHETORIC & COMPOSITION

Credits: One credit/semester

Grade(s): 11

Length of Course: Two semesters

Prerequisite: English III and IV

Requirement Satisfied: Required English

Rhetoric and Composition is a two-term course taken in addition to 11th Grade English, with the purpose of developing the practical writing skills required for the English Language Arts Regents. Guided by rubrics and templates, students read, write argument, informational and narrative essays in addition to writing creatively. They are introduced to the writing tasks they may encounter on the . Students identify and analyze rhetorical strategies and logical fallacies, practice synthesizing diverse source material, and gain confidence in using the writing process, visible in their portfolios, to participate in academic discourse.

THEATER FOR CHANGE

Credits: One credit/semester

Grade(s): 11, 12

Length of Course: Two semesters

Prerequisite: English III

Requirement Satisfied: Elective

This is a 2-semester course that will focus on the potential and power of artwork as a way to change the world.

Students will explore, examine, and emulate significant forms of art that have had a big influence on creating social, environmental, and political changes throughout history.

This course will provide students with the opportunity to investigate societal issues, gather evidence, and use artistic expression to support, defend, and promote positive changes.

AP ENGLISH LANGUAGE AND COMPOSITION

Credits: One credit/semester

Grade(s): 11

Length of Course: Two semesters

Prerequisite: Application & In-School Writing Sample

Requirement Satisfied: Required English

In this annualized course of two semesters, students prepare for the level of English reading and composition that is expected in college and careers post high school. Students will learn about the elements of rhetoric and composition as they develop their critical-reading and writing skills. Students will read and analyze American nonfiction (and some fiction) works from various periods and write essays with different aims: for example, to explain an idea, argue a point, or persuade their reader of something. There is a heavy focus on current events, history, and the political sphere in addition to literature and rhetoric. In addition to preparing for the Advanced Placement exam in May, students will sit for the New York State English Language Arts Regents in January of 11th grade.



GLOBAL HISTORY I AND II

Credits: 1 credit/semester

Grade(s): 9

Length of Course: 2 semesters

Prerequisite: None

Requirement Satisfied: Global History

Global I and II is a one year course that starts with the Prehistoric times and ends with the Age of Absolutism. The course is divided by topic chronologically in order to follow the New York State Curriculum for Global Studies. At the end of this course, you will be able to answer all of the daily Aims, define the essential vocabulary, and apply the relevant concepts.

CREATIVE WRITING

Credits: One credit/semester

Grade(s): 11, 12

Length of Course: Two semesters

Prerequisite: English III

Requirement Satisfied: Elective

This course is open to students who are interested in creative writing. In this class, students will learn about different forms/styles of writing and then compose their own work in that form/style. Some forms/styles include but are not limited to : Poetry, short stories, journal entries, reviews, and blogs. This course will provide students with the opportunity to practice their writing and compose their own personal writing portfolio.

AP ENGLISH LITERATURE AND COMPOSITION

Credits: One credit/semester

Grade(s): 12

Length of Course: Two semesters

Prerequisite: English V and VI

Requirement Satisfied: Required English

The Advanced Placement English literature and composition course is designed to prepare students with an interest in English studies for the rigors of such work at the college level. Students will read and write about seminal works of literature in English in all genres – poetry, prose, and drama, by writers both from Great Britain itself and from its current and former colonial territories including the Caribbean, Africa, Asia, and the United States. Students will read and write at an accelerated rate, and will be responsible for bearing the full load of a college class in high school. Students registered for this course must take the Advanced Placement test in May of their senior year.

AP WORLD HISTORY

Credits: 1 credit/semester

Grade(s): 10

Length of Course: 2 semesters

Prerequisite: Global I and II

Requirement Satisfied: Global History

AP World History is designed for qualified students who wish to complete studies in secondary school equivalent to an introductory college course in world history. The purpose of this course is to develop greater understanding of the evolution of global processes and contacts in different types of human societies. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. Students will be required to take the AP World History test in May.

US HISTORY I AND II

Credits: 1 credit/semester

Grade(s): 11

Length of Course: 2 semesters

Prerequisite: Global I-IV

Requirement Satisfied: American History & Government

U.S. History I & II is a one-year survey course that covers topics in American history from the Colonial Period (early 1600s) through The Great Depression (1941). Emphasis is placed on our Constitutional foundations and the effectiveness of this system of government throughout this time period. Students will continue to develop skills necessary to take the Regents Exam by working on multiple choice strategies and preparing for Civic Literacy Essays. The two courses are prerequisites to U.S. History III.

AP US HISTORY

Credits: 1 credit/semester

Grade(s): 11

Length of Course: 2 semesters

Prerequisite: Global I-IV

Requirement Satisfied: American History & Government

Advanced Placement United States History is an academically rigorous, chronological and thematic survey course spanning the entirety of United States history from 1492 to the present day. The Advanced Placement course is designed to provide students with the analytical skills and factual knowledge critical to dealing with the problems and issues inherent throughout United States history. Students will learn to assess historical materials, their relevance to a given interpretive problem, and their reliability and significance. The course will emphasize key themes in United States history including national and ethnic diversity, identity and culture, demographic changes, economic transformations and trade patterns, the environment, globalization and international relations, politics, reform, religion, slavery and labor systems, war and diplomacy. Students are required to take the Advanced Placement test in May.

US HISTORY III/GOVERNMENT

Credits: 1 credit/semester

Grade(s): 12

Length of Course: 1 semester

Prerequisite: US History and Government I & II

Requirement Satisfied: American History & Government

U.S History III/US Government incorporates the following topics in US History with an emphasis on the role of government at the federal, state and local levels: The Politics of the Roaring Twenties, the Great Depression and the New Deal, World War II, The Cold War, the Postwar Boom, the Korean War, Civil Rights, The Vietnam War, An Era of Social Change, The Conservative Tide, and The United States in Today's World. US Government includes the principles of Democracy and the foundations of US Government, political behavior, comparative political and economic systems, as well

as state and local governments. Students will take the U.S. History Regents in January.

ECONOMICS

Credits: 1 credit/semester

Grade(s): 12

Length of Course: 1 semester

Prerequisite: US History and Government I, II & III

Requirement Satisfied: Economics

Students will study the following: Economic Systems, American Free Enterprise, Supply and Demand, Market Structures, Business Organizations, Labor, Financial Markets, Introductory Macroeconomics, Taxation and Spending, Fiscal Policy, International Trade, and Economic Development and Transitions. Students will learn to analyze and critique economic systems, processes, as well as policy. Personal financial awareness is also taught to prepare students for independent adulthood. This course is offered to all students during the Spring semester of their senior year.

AP GOVERNMENT & POLITICS

Credits: 1 credit

Grade(s): 12

Length of Course: 1 semester

Prerequisite: US History and Government I & II

Requirement Satisfied: Government

AP Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behavior. They also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. Students are required to take the Advanced Placement test in May.

AP MACROECONOMICS

Credits: 1 credit

Grade(s): 12

Length of Course: 1 semester

Prerequisite: US History and Government I & II

Requirement Satisfied: Economics

AP Macro is a fast paced college-level course that focuses on the decision making of individuals, businesses, and the government. Students will study a variety of economic theories and analyze their practical application in the real world. This semester-long course will focus on the economy as a whole, including economic measures, economic growth, fiscal policy, monetary policy, and international economics. Extensive math skills are not required; however, the ability to analyze graphs and charts is essential. Students are required to take the Advanced Placement test in May.

HISTORY OF NYC

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: None

Requirement Satisfied: Elective

This is a two-semester course that will explore the history of New York City. Starting with New York's indigenous past, its Dutch and English roots and moving through the impact of slavery. Later, the transformation of NY through the influx of immigrants to an industrial city; and culminating with New York's role in art, music, fashion, and the economy. Students will go on field trips, complete research, and participate in a new service-learning project directly connected to NYC (i.e., NYC government, parks, etc.)

AP HUMAN GEOGRAPHY

Credits: 1 credit/semester

Grade(s): 11,12

Length of Course: 2 semesters

Prerequisite: AP World

Requirement Satisfied: None

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012).



ALGEBRA 1

Credits: 1 credit/semester

Grade(s): 9

Length of Course: 2 semesters

Prerequisite: None

Requirement Satisfied: Required Math

This course introduces variables, constants, and expression of equations with an emphasis on problem solving. Topics covered include: algebraic concepts of signed numbers, polynomials, equations and inequalities, functions, real numbers, factoring, quadratic equations, systems of equations, graphs of both linear and nonlinear functions, and data analysis. Students will take the Algebra 1 Regents exam in June.

Disclaimer: Incoming 9th grade students who score below 76 on the Algebra Regents in the 8th grade will be placed in a one year sequence of Algebra. Students may earn up to 4 credits in Algebra.

MATH LAB

Credits: 1 credit/semester

Grade(s): 9

Length of Course: 2 semesters

Prerequisite: Taken concurrently with Algebra 1

Requirement Satisfied: Required Math

This course expands and builds upon skills and topics learned in Algebra 1. The course is designed for students to become comfortable with and master Algebra, the foundation of all math courses to come.

ALGEBRA II

Credits: 1 credit/semester

Grade(s): 9, 10, 11

Length of Course: 2 semesters

Prerequisite: Algebra 1

Requirement Satisfied: Required Math

This course in mathematics includes number systems and their properties, rational expressions and quadratic equations, irrational numbers, complex numbers, relations and functions, exponential and logarithmic functions, series, sequences and a continuation of probability and statistics. Algebra 2 builds upon and extends concepts introduced in Algebra 1. Success in this course is an indicator of college readiness. Students will take the Algebra II Regents exam in June.

AP PRECALCULUS

Credits: 1 credit/semester

Grade(s): 9, 10, 11

Length of Course: 2 semesters

Prerequisite: Taken concurrently with Algebra 2

Requirement Satisfied: Required Math

This one year course is designed to support topics learned in Algebra 2. This course centers on functions modeling dynamic phenomena. This research-based exploration of functions is designed to better prepare students for college-level calculus and provide grounding for other mathematics and science courses. In this course, students study a broad spectrum of function types that are foundational for careers in mathematics, physics, biology, health science, business, social science, and data science.

ALGEBRA II ENRICHMENT

Credits: 1 credit/semester

Grade(s): 9, 10, 11

Length of Course: 2 semesters

Prerequisite: Taken concurrently with Algebra 2

Requirement Satisfied: Required Math

This course is a companion course for Algebra 2 for students who got below a 75 on the Algebra 1 Regents. This course expands and builds upon skills and topics learned in Algebra 2. The course is designed for students to become comfortable with and master Algebra 2.

GEOMETRY

Credits: 1 credit/semester

Grade(s): 10, 11

Length of Course: 2 semesters

Prerequisite: Algebra 1 & Algebra 2

Requirement Satisfied: Required Math

The fundamental purpose of Geometry is to deepen explanations of geometric relationships moving towards formal mathematical arguments. This course follows the high school Common Core standards of Geometry of NY State with emphasis on transformations, Euclidean proofs, and applications of shapes. All students will take the Geometry Regents in June at the end of this course.

CALCULUS

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Precalculus

Requirement Satisfied: Required Math

This is a full year course covering functions in a single variable. This course covers topics in Limit differential calculus and integration, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. Students will learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. The course is offered for students who have already completed the three mathematics Regents classes. This course is offered to students who want to take higher courses such as Advanced Placement Exam Calculus AB/BC the following year or to senior students who may take the course again in college or technical careers later.

AP CALCULUS AB

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Calculus & above 80 on Algebra 2 Regents

Requirement Satisfied: Required Math

This course covers all the topics for Calculus AB as outlined in the AP Calculus Course Description. Primary topics include the concepts and applications of limits, derivatives, indefinite

integrals, and definite integrals, differential equations, volumes of the solids. The course will make sure students understand the concepts of calculus, using methods and its applications for each equation. Students should be able to work with functions numerically, graphically, analytically, and verbally. At the end of the school year, students will take their AP Calculus AB exam in May.

AP CALCULUS BC

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Calculus & above 90 on Algebra 2 Regents

Requirement Satisfied: Required Math

This course covers all the topics for Calculus BC as outlined in the AP Calculus Course Description. Primary topics include the concepts and applications of limits, derivatives, indefinite integrals, definite integrals, differential equations, volumes of the solids, improper integrals, Taylor and Maclaurin Series, parametric equations, polar equations, and area in polar graphs. The course will make sure students understand the concepts of calculus, using methods and its applications for each equation. Students should be able to work with functions numerically, graphically, analytically, and verbally. At the end of the school year, students will take their AP Calculus BC exam in May.

AP STATISTICS

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Completed Regents Sequence

Requirement Satisfied: Required Math

The AP Statistics course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes evident in the content, skills, and assessment in the AP Statistics course: exploring data, sampling and experimentation, probability and simulation, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. This year long class is the equivalent to an intro level statistics class in college and students will take the AP exam in May.

AP COMPUTER SCIENCE PRINCIPLES

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Department Supervisor's Permission

Requirement Satisfied: Required Math

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students in this course are expected to take the AP Exam in May.

PHYSICS

Credits: 1 credit/semester

Grade(s): 10, 11, 12

Length of Course: 2 semesters

Prerequisite: Algebra 1, Algebra 2, Biology

Requirement Satisfied: Physical Science

This class has a state mandated laboratory component and terminates in a required Regents examination in June. Students must complete a minimum of 1200 minutes of laboratory work to be eligible to take the Regents exam. Students will learn the fundamental concepts and principles concerning matter and energy through the laboratory study of mechanics, wave motion, heat, light, electricity, magnetism, electromagnetism, and atomic and nuclear physics.

PHYSICS: FORCES

Credits: 1 credit/semester

Grade(s): 12

Length of Course: 2 semesters

Prerequisite: Algebra 1, Algebra 2, Biology

Requirement Satisfied: Physical Science

Students will learn the fundamental concepts and principles concerning matter and energy through the study of mechanics, wave motion, heat, light, electricity, magnetism, electromagnetism, and atomic and nuclear physics. This class will not have a laboratory component and students in this class are not expected to take the Regents Exam in June.

AP BIOLOGY

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Regents Chemistry

Requirement Satisfied: Life Science

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. This course is open to students who have exhibited a mastery of Biology and Chemistry. This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Students enrolled in this class are required to take the advanced placement exam in May.

AP CHEMISTRY

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Regents Chemistry

Requirement Satisfied: Physical Science

This course is open to students who have demonstrated a mastery of Chemistry. Students must also exhibit mastery in certain math classes to be considered for this course. This course is designed to be the equivalent of the general chemistry course usually taken during the first college year.

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: § Atomic Structure and Properties § Compound Structure and Properties § Properties of Substances and Mixtures § Chemical Reactions § Kinetics § Thermochemistry § Equilibrium § Acids and Bases § Thermodynamics and Electrochemistry. Students enrolled in this class are required to take the advanced placement exam in May.

AP PHYSICS C

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Regents Physics, Completion or concurrent enrollment in a calculus course

Requirement Satisfied: Physical Science

This course is technically 2 courses expected to be taken consecutively. Students are expected to sit for *only* the AP Mechanics exam (now 3 hours long). There is a separate Electricity and Magnetism exam, but we will not finish the curriculum by the May test date.

AP Mechanics: Returns to kinematics, Newton's laws, momentum, energy, and gravity but at a deeper level and inclusive of calculus concepts. Introduces students to rotation and simple harmonic motion.

AP Electricity and Magnetism: Returns to electrostatics and circuitry, but at a deeper level and inclusive of calculus concepts. Introduces students to magnetism and the laws that link electricity and magnetism. Lays the groundwork for understanding light as an electromagnetic wave and even special relativity.

AP ENVIRONMENTAL SCIENCE

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: 2 Science Regents Exams

Requirement Satisfied: Physical Science

The AP Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. Students enrolled in this class are required to take the advanced placement exam in May.

ADVANCED SCIENCE RESEARCH

Credits: 1 credit/semester

Grade(s): 10, 11, 12

Length of Course: 6 semesters

Prerequisite: Application & Teacher Recommendation

Requirement Satisfied: Elective

This course is a three-year intensive science research program beginning in Sophomore year and continuing through Senior year. Students are eligible to apply for the program in the spring of their Freshman year. The program has a partnership with the University of Albany and students may earn up to 12 college credits during their time in ASR. Students gain real laboratory experience conducting authentic scientific research both in the classroom and in outside labs as they explore areas of science which interest them. The students attend various symposiums and apply to competitions where they present their research work. Outside programs we participate in include but are not limited to: The American Rocket Challenge, the Billion Oyster Project, SRMP with the American Museum of Natural History, Research Ready, Biobus, Mount Sinai labs and the Urban Barcoding project.

ASTRONOMY

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 1 semester

Prerequisite: 2 Science Regents Exams

Requirement Satisfied: Elective

This is a 1 semester course open to students who have completed their laboratory science requirements. Students will study the universe as they cover the following topics: history of astronomy, gravity and motion, planets, stars, galaxies and the structure of the universe. This course places an emphasis on how astronomers gather information about distant objects without leaving the Earth.

ENVIRONMENTAL SCIENCE

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: 2 Science Regents Exams

Requirement Satisfied: Elective

Environmental science course introduces students to the natural world and how human activity affects it. Students learn about the patterns and processes of Earth, and how natural and human impacts affect them. They also study environmental problems and efforts to solve them, and understand the need for a sustainable future.

FORENSICS

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: 2 Science Regents Exams

Requirement Satisfied: Physical Science

Forensic Science is a full year integrated science course in which students will apply their prior knowledge of living environment, chemistry, physics and mathematics to the popular field of crime scene investigation. Students will gain a basic understanding of the scientific and analytical approach to determining the value of evidence as it relates to the court of law. Students will learn terminology and investigate procedures related to processing a crime scene, collecting evidence, questioning, interviewing, and criminal behavior characteristics used to solve crimes. Using scientific methods, students will collect and analyze evidence, including; fingerprints, DNA, blood, ballistics, hair, fibers, and handwritten ransom notes. Students will learn the history, legal aspects, and career options within forensic science.

ETHICS IN BIOLOGY RESEARCH

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: 2 Science Regents Exams

Graduation Requirement Satisfied: Elective

This course is a research seminar designed to allow students to explore past and current events in science through a critical lens. Students will analyze the ethical issues involving advances in modern medicine and biology and gain experience engaging with various media resources, compiling independent research, and collaborating with their peers. Members of the class will work together to foster a broader and more in depth understanding of the ethical issues facing modern science researchers and society through a discussion.

HUMAN ANATOMY & PHYSIOLOGY

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: 2 Science Regents Exams

Graduation Requirement Satisfied: Elective

This is a full-year science course that offers an in-depth study of the structure and function of the eleven organ systems of the human body including the nervous, cardiovascular, skeletal, and muscular systems. Through a combination of laboratory work, dissections, lectures, readings, and case studies, students will explore the intricate ways in which these systems interact to maintain homeostasis, respond to environmental changes, and adapt under the influence of diseases and disorders. This challenging course demands a strong commitment to memorization and critical thinking, providing students with a solid foundation for further studies in biological sciences and health careers.



FRENCH I AND II

Credits: 1 credit/semester

Grade(s): 9

Length of Course: 2 semesters

Prerequisite: None

Requirement Satisfied: World Language

This course is designed to introduce students to the French language through the study of vocabulary related to the self, the home, and general greetings, introductions, and descriptions of time and weather. Students will learn present tense conjugations of regular and key irregular verbs, learn numbers, learn how to form questions, and to make sentences negative. Additionally, they will be introduced to French culture through lessons on Francophone countries.

FRENCH III AND IV

Credits: 1 credit/semester

Grade(s): 10

Length of Course: 2 semesters

Prerequisite: French I and II

Requirement Satisfied: World Language

This course further develops the student's ability to function in French language on various topics relevant to high school students. The goal is to develop communicative competence in the target language in the four language skills: listening, speaking, reading, and writing. French 3 & 4 instruction develops cross-cultural awareness, skills, and understanding. Students learn to use language as a tool for communication and experience the enrichment of new and different thoughts and ways of life.

FRENCH V AND VI

Credits: 1 credit/semester

Grade(s): 11

Length of Course: 2 semesters

Prerequisite: French III and IV

Requirement Satisfied: World Language

Within the framework of the NYC Comprehensive Exam (Checkpoint B) in French, French 5 & 6 offers both the linguistic and non-linguistic aspects of French, as well as the varied cultures of francophone countries. This course further develops the student's ability to function in French on various topics. There is increased practice in listening comprehension, reading comprehension, and guided and free composition. Culture is infused in the topics covered. Preparation for the NYC Comprehensive Exam in French (Checkpoint B) taken at the end of the year will include review of grammar and vocabulary, as well as the reinforcement of listening, speaking, reading, and writing skills. This course terminates with the NYC Comprehensive Exam in French (Checkpoint B) in June.

Students can qualify for an Advanced Regents Diploma with the passing of this exam (65 or higher).

SPANISH I AND II

Credits: 1 credit/semester

Grade(s): 9

Length of Course: 2 semesters

Prerequisite: None

Requirement Satisfied: World Language

This course is an introduction to the Spanish language. At a beginning level, students will develop proficiency in Spanish across the four skills: Oral communication, listening comprehension, written self-expression and reading comprehension. Students will learn to ask simple questions, answer questions, respond to commands, create original dialogues and present them to the class. Students will learn to understand short conversations and dictation in Spanish. They will be able to answer reading comprehension questions from stories in complete sentences in Spanish.

SPANISH III AND IV

Credits: 1 credit/semester

Grade(s): 10

Length of Course: 2 semesters

Prerequisite: Spanish I and II

Requirement Satisfied: World Language

This course further develops the student's ability to function in Spanish language on various topics. At this level, the students will expand their knowledge of the target language using more involved vocabulary and more complex grammatical structures. Spanish 3 and 4 will increase the students' ability to create original Spanish constructions for communication. Students will continue developing proficiency in Spanish across the four skills: oral communication, listening comprehension, written self-expression and reading comprehension.

SPANISH V AND VI

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Spanish III and IV

Requirement Satisfied: World Language

The third year of Spanish is a year-long course that prepares students to take the Spanish Regents exam in June. The course will reinforce the knowledge they have acquired in the Spanish 1, 2, 3, 4 classes. The course focuses on the four tasks of the Regents test: writing, listening, talking and reading. In this course, students will be reviewing grammar structures and also the use of the different tenses in real life situations. Students will be prepared to be able to describe and narrate, as well as to use most tenses and moods, while speaking about familiar topics such as everyday situations, current events, job-related information and subject matter encountered in reading assignments. This course terminates with the NYC Comprehensive Exam in Spanish (Checkpoint B) in June. Students can qualify for an Advanced Regents Diploma with the passing of this exam (65 or higher).

AP SPANISH LANGUAGE

Credits: 1 credit/semester

Grade(s): 10, 11, 12

Length of Course: 2 semesters

Prerequisite: Department Supervisor's Permission

Requirement Satisfied: Elective

This AP Spanish Language course is designed to develop student's Spanish language skills and learn about the cultures in Spanish-speaking parts of the world. Students will practice communicating in Spanish and study real-life materials such as newspaper articles, films, music, and books. This course is equivalent to an intermediate level (typically third- or fourth-semester) college course in Spanish language. Students registered for this course are required to take the Advanced Placement test in May.

AP SPANISH LITERATURE

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Department Supervisor's Permission

Requirement Satisfied: Elective

The AP Spanish Literature course is designed to be the equivalent of a third year college course surveying Spanish literature. The course covers works from Spain and Latin America from the medieval period to the 20th century. The course is taught entirely in Spanish. Throughout the year long course, students will learn to be comfortable reading critically in Spanish, analyzing and interpreting the selected works using the literary terms and themes learned, as well as learn how to express these analyses and interpretations orally and in writing using the AP rubrics as a guide. Students registered for this course are required to take the Advanced Placement test in May.



DESKTOP PUBLISHING/YEARBOOK

Credits: 1 credit/semester

Grade(s): 11, 12

Length of Course: 2 semesters

Prerequisite: Department Supervisor's Permission

Requirement Satisfied: Arts

This is a year course offered to seniors. Students will learn to use digital cameras, Adobe Photoshop and Entourage Design software. Students are responsible for all aspects of production, including layout and design, photography and writing. The yearbook pages are submitted electronically to the yearbook publishing company.

DIGITAL PHOTOGRAPHY

Credits: 1 credit/semester

Grade(s): 10, 11, 12

Length of Course: 1 semester

Requirement Satisfied: Arts

The overall goal of this course is to introduce students to photography. The medium that we will use is the digital SLR camera (DSLR) and Adobe Photoshop. The course will cover the technical aspects of using a digital SLR camera and some basic Photoshop functions. In addition students will have an opportunity to view historically important photographers and to learn the language of critiquing their own and other students work. The school will lend students the SLR cameras needed for the assignments.

INTRODUCTION TO VISUAL ARTS

Credits: 1 credit/semester

Grade(s): 9-12

Length of Course: 1 semester

Graduation Requirement Satisfied: Arts

This introductory visual arts course will explore the relationship between art and contemporary life, focusing on developing skills in various artistic techniques and understanding the evolution of visual arts. Students will engage in hands-on projects and analyze diverse artistic styles, aligning with key goals such as enhancing creativity, improving technical skills, and fostering critical thinking about art's role in society.

STUDIO ART

Credits: 1 credit/semester

Grade(s): 9-12

Length of Course: 1 semesters

Prerequisite: None

Requirement Satisfied: Arts

This course allows students to explore a variety of artists, art processes and materials such as drawing, painting, printmaking, two & three-dimensional design, and digital art. Student artwork will reflect aesthetics & cultural and historical contexts. Willingness to get involved in the creative process is a more important requirement than the student's talent or previous experience.

MULTIMEDIA

Credits: 1 credit/semester

Grade(s): 10, 11, 12

Length of Course: 1 semester

Requirement Satisfied: Arts

This one semester computer course is especially appealing to students who enjoy creating visual presentations. They will learn to use Adobe CS4 software to create multimedia presentations.

MUSIC

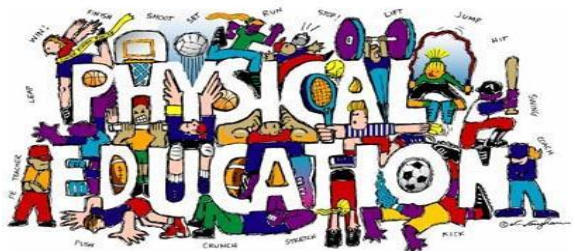
Credits: 1 credit/semester

Grade(s): 10, 11, 12

Length of Course: 1 semester

Requirement Satisfied: Art

This course is an exploration into the how and why of creating, consuming, and experiencing music as human beings through embracing ethnomusicology. Together we will deconstruct our western orientation in order to evaluate the extent to which it informs and distorts our preconceptions of what music is or perhaps ought to be. Students will be exposed to various cultural musics and through this exploration experiment with various forms of notation, theory and performance.



HEALTH EDUCATION

Credits: 1 credit/semester

Grade(s): 9, 10, 11 or 12

Length of Course: 1 semester

Prerequisite: None

Requirement Satisfied: Health

The health education program provides all students with the knowledge and skills that will enable them to achieve and maintain a healthful life during their time in school and beyond. Health education is an important component of a balanced educational program. Students who are health conscious increase their chances of achieving their highest academic potential. Below are the units covered in health:

- Emotional & mental health
- Nutrition and physical activity
- Alcohol, tobacco, and other drug prevention
- Abstinence, personal & sexual health
- HIV, STD & pregnancy prevention.
- Injury and violence prevention

PHYSICAL EDUCATION

Credits: 0.5 credits/per semester

Grade(s): 9, 10, 11 & 12

Length of Course: 8 semesters

Prerequisite: None

Requirement Satisfied: Physical Education

The physical education (PE) program provides all students with the knowledge and skills that will enable them to achieve and maintain a physically active and healthful life during their time in school and beyond. Physical education is an essential component of a balanced educational program. Students who are physically active increase their chances of achieving their highest academic potential. All students will have the opportunity to be assessed through the NYC Fitnessgram. Below are the PE courses offered over the 8 semesters:

- **INDIVIDUAL & TEAM SPORTS**
The class emphasizes basic skill and participation in various individual and team sports. The activities typically offered may include: basketball, badminton, fitness, European team handball, recreational games, soccer, and volleyball. This course is set to prepare students for a basic foundation of activities and knowledge for continued participation after high school.
- **WEIGHT TRAINING:**
The class emphasizes muscular strength & endurance activities with elements of all five of the components of fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility and body composition. Students will utilize both free weights and weight machines. This course is set to prepare students for a basic foundation of weight training exercises and knowledge after high school. Anatomy and physiology will also be introduced.
- **CARDIOVASCULAR & FITNESS TRAINING**
The class emphasizes aerobic activity with elements of all five of the components of fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility and body composition. This course is set to prepare students for a life of fitness after high school.