



BAY RIDGE PREP

AN INDEPENDENT K-12 COLLEGE PREPARATORY SCHOOL

BAY RIDGE PREP COURSE CATALOG

This catalog describes courses that are currently or traditionally offered at Bay Ridge Prep High School. Not all courses are offered year-to-year. The sequence of courses is for a typical high school student entering Bay Ridge Prep High School in the 9th grade. The listed sequence of courses may vary from student to student; for example, an advanced math student may take Geometry in 9th grade, instead of the typical 10th grade sequence. In these instances, when referring to a student's transcript, the course name and description takes precedence over the grade level notation on the transcript in describing the elements of the course.

Credits are based on the number of instructional hours a course meets per week. Bay Ridge Prep's daily schedule has 7 periods, each 50 minutes in duration. A course that meets 5 days per week is awarded 0.5 credits per semester, for a total of 1 credit for a full-year course. Courses that meet less often are awarded credit values accordingly.

* Indicates that a course includes Honors option for eligible students

ENGLISH

9th grade courses:

ENGLISH LANGUAGE & CULTURE I (2 semesters, 1 credit) – This course is offered to students in our International Student Program (ISP), and serves as a supplement to English Literature I and Ancient History I for students whose first language is not English. The course offers supplemental materials to the above classes to assist in the understanding of older forms of English, poetry, and cultural interpretation. Reading comprehension, vocabulary building and honing writing skills are stressed.

ENGLISH LITERATURE I (2 semesters, 1 credit) – This required course explores ancient cultures and works of literature, including *Gilgamesh*, *The Iliad*, and *The Odyssey*. The course also includes a writing element. The course is paired with the Ancient History course, and is aligned with the NYS Regents curriculum, which includes Common Core standards.

10th grade courses:

ENGLISH LANGUAGE & CULTURE II (2 semesters, 1 credit) – This course is offered to students in our International Student Program (ISP), and serves as a supplement to English Literature II and Ancient History II for students whose first language is not English. The course offers supplemental materials to the above classes to assist in the understanding of older forms of English, poetry, and cultural interpretation. Reading comprehension, vocabulary building and honing writing skills are stressed.

*ENGLISH LITERATURE II (2 semesters, 1 credit) – This required course explores literature from the Middle Ages and the Renaissance. Students read works including *Beowulf*, *The Canterbury Tales*, and various Shakespeare plays. The course is paired with the Ancient History course, and is aligned with the NYS Regents curriculum, which includes Common Core standards.

11th grade courses:

*ENGLISH III: AMERICAN LITERATURE (2 semesters, 1 credit) – American Literature is a required course in Junior year which includes academic discussion of oral Native American folklore, a study of the chronicles of early exploration, the writings of the early settlers in the Americas and studies of such authors as James Fennimore Cooper, Washington Irving, Nathaniel Hawthorn, Herman Melville, Mark Twain, Walt Whitman, Ralph Waldo Emerson, Henry David Thorough, F. Scott Fitzgerald and Tennessee Williams.

ENGLISH LANGUAGE & AMERICAN CULTURE (2 semesters, 1 credit) – This course is offered to students in our International Student Program (ISP), and serves as a supplement to American Literature and American History for students whose first language is not English and are not native born in the United States. The course offers short readings, video lectures, podcasts and a variety of media specific to understanding the political and cultural history and culture of the United States. Reading comprehension, vocabulary building and honing writing skills are also stressed.

12th grade courses:

ENGLISH IV: ENGLISH LITERATURE (2 semesters, 1 credit) - This senior course, modeled after a college level literature seminar, encourages students to explore the connection between famous works of literature such as *Hamlet* and *A Streetcar Named Desire* and the human experience. Students will discuss what makes characters tick and why certain works stand the test of time. The course introduces students to various critical approaches to literature and uses these approaches to explore larger themes within the course texts. Students will write papers, make presentations, and participate in debates about what they read.

ENGLISH LANGUAGE & LITERATURE (2 semesters, 1 credit) – This course is offered to students in our International Student Program (ISP), and prepares senior students for attending college-level liberal arts courses. While reading works by such authors as William Shakespeare, Henry Miller, Amy Tan, Margaret Atwood, etc., students learn advanced literary analysis and essay writing. They also engage in creative writing, do guided self-reading assignments, and hone presentation skills.

*HONORS ENGLISH: SHAKESPEARE & PLAYWRIGHTS (2 semesters, 1 credit) - This senior-level course explores dramatic, literary, psychological, humanistic, and existential dimensions of working with dramatic texts. Using Shakespeare as the nexus point, the course delves into tragic, comedic, historical, and romantic works, including *Hamlet*, *Death of a Salesman*, *the Odd Couple*, *King Lear*, and *The Graduate*. With an emphasis on speaking the text, acting, and movement, in conjunction with analysis, close reading, and writing, Shakespeare and the Playwrights aims to use the play as an entry point into personal growth, character development, and a deeper, more lasting appreciation of the world.

COLLEGE ENGLISH (ENGLISH COMPOSITION) (2 semesters, 1 credit) – This elective course is a first year college-level course which covers writing skills, literary text analysis, the rudiments of literary criticism, elements of story, and structure and interpretation of literature with the study of such authors as Richard Connell, Tobias Wolff, Graham Greene, Alice Munro and Jhumpa Lahiri. Students have the option of taking the course for 3 college credits through St. John’s University.

FINE ARTS

9th grade courses:

INTRODUCTION TO MUSIC AND THEATER (*2 Semesters, 0.5 Credits*) – This course provides all freshmen students with a broad overview of basic terminology, concepts, and developments in both areas of study. Students gain perspective and insight into the traditions of both Western and non-Western music and theater, and how those traditions have shaped the arts in the past and into the present.

STUDIO ART I: FOUNDATION (*2 Semesters, 0.5 Credits*) – This course integrates ancient history and fine arts, introducing art from different cultures around the world. Students will learn the structures of visual language such as Elements of Art: line, shape/form, color, texture/pattern and space and Principals of Design: balance, rhythm, unity, contrast and emphasis. Other topics include perspective, proportions of the body and face and color theory. Students will also develop and refine their written and verbal skills in interpretation and analysis of artwork.

10th grade courses:

FOUNDATIONS OF MUSIC (*2 Semesters, 0.5 Credits*) – This course introduces an additional level of depth to some of the materials introduced in freshman year; the focus of this course is application of general musical knowledge (i.e. basic analysis) and study/exposure to key composers and styles of music.

THEATER (*2 Semesters, 0.5 Credits*) - This elective class focuses on acting techniques including improvisation, monologues, and scene work. It also includes work on theater critique, playwriting, and directing.

MUSIC THEORY AND COMPOSITION (*2 Semesters, 0.5 Credits*) - This course, designed for both the novice and intermediate music student, offers a comprehensive and multidisciplinary approach to the foundations of music theory: rhythmic and pitch notation, ear-training, basic harmonic analysis, and form. Students apply this knowledge in composition assignments and projects, with particular attention paid to historical context.

STUDIO ART II: INTRODUCTION TO ARTISTS, ART PERIODS, TECHNIQUES & MATERIALS (*2 Semesters, 0.5 Credits*) – This course focuses on art styles and movements in art history (realism, impressionism, abstract art, etc.). Students will apply that knowledge to their own artistic creations through drawing, painting, and sculpting. They will also explore personal themes and concepts in various projects while developing their ability to respond, analyze, and interpret their own artwork as well as others.

11th grade courses:

DIGITAL ARTS I (*2 Semesters, 0.5 Credits*) – This course provides an overview of graphic design concepts and technical features of the Adobe suite, using Photoshop, Lightroom, Bridge (CameraRaw), Illustrator, InDesign, and Animate. Students will have the opportunity to explore narrative construction and character creation through storyboarding and comic creation, as well as digital editing and painting techniques.

DRAMA (*2 Semesters, 0.5 Credits*) - This elective class is an intensive workshop class designed for students to focus on work of their choosing. The work involves classical and contemporary monologues and scenes.

MUSIC MEETS THEATER (*2 Semesters, 0.5 Credits*) - This team-taught elective is designed for the music theater-minded student - a hands-on approach to acting, singing, and appreciation of the genre of music theater. Students regularly participate in activities as individuals, partners, and small groups, and experiment with script- and song-writing. Multimedia experiences (audio and video) and field trips to live performances are a critical component of the course.

STUDIO ART III: INTRODUCTION TO CONTEMPORARY ARTISTS, TECHNIQUES AND MATERIALS (*2 Semesters, 0.5 Credits*) – This course introduces students to contemporary artists. Students will continue to explore personal themes using various mediums and methods in drawing, painting and sculpture. Other techniques and processes that will be covered will be bookmaking, printmaking, and stretching canvas. They will refine their ability to respond, analyze, and interpret their own artwork as well as others through art critiques.

12th grade courses:

ACTING SHAKESPEARE (*2 Semesters, 0.5 Credits*) - This elective class focuses on performing a variety of Shakespeare scenes. Students work as a group and with scene partners to prepare scenes from Shakespeare's comedies, tragedies and histories. Final work includes a culminating performance of students' own choice of Shakespeare performance.

CHAMBER MUSIC (*Extra-curricular*) - Chamber Music is an opportunity (twice a week) for instrumental musicians to collaborate with each other on duets, trios, and small-ensemble pieces from the classical repertoire. Participants are coached in the communicative and artistic skill set needed for successful chamber music performance and are encouraged to attend chamber music events with their peers and independently.

DIGITAL ARTS II (*2 Semesters, 0.5 Credits*) – The scope of this course provides specialized instruction for personal, portfolio, and commercial projects that span the digital platform, integrating design, painting, and animation utilizing the Adobe suite. This course goes beyond the fundamentals, invoking more enhanced features of Photoshop, Lightroom, Bridge (CameraRaw), Illustrator, InDesign, and Animate. Students will also analyze, through critique, and construct their own visual styles by exploring historical, as well as contemporary, techniques.

DIGITAL PHOTOGRAPHY (*2 Semesters, 0.5 Credits*) – This course provides instruction on the technical terminology, mechanical interfaces and procedures, as well as the elements of design, as the fundamentals of digital or traditional photography. Students will gain experience using Adobe Camera Raw, Lightroom, and Photoshop editing tools in order to enhance latent detail. Additionally, students will also be introduced to the primary functions of a DSLR camera. Through classroom, critique, and homework assignments, this course will give students the opportunity to create a body of work that represents the scope of their personal and conceptual abilities.

THEATER (*2 Semesters, 0.5 Credits*) - This elective class focuses on acting techniques including improvisation, monologues, and scene work. It also includes work on theater critique, playwriting, and directing. The class works on both classical and contemporary plays.

IMPROVISATIONAL THEATER (*2 Semesters, 0.5 Credits*) - This elective class teaches students the elements of improvisational acting. Students will learn to develop plot, characters, and action “on the fly,” and learn to work together as a team to produce a improvised theatrical works.

MUSIC HISTORY (*2 Semesters, 0.5 Credits*) - Designed as an introduction to the traditions and developments of Western music, this course spans music from the medieval ages through contemporary times. In addition to studying trends and important composers/pieces from the Renaissance, Baroque, Classical, Romantic, and Modern eras, students apply their knowledge to basic formal analysis, interdisciplinary connections (visual arts, theater, history, and science), and discover direct parallels between the music of yesterday and today.

MUSIC THEORY AND COMPOSITION (*2 Semesters, 0.5 Credits*) - This course, designed for both the novice and intermediate music student, offers a comprehensive and multidisciplinary approach to the foundations of music theory: rhythmic and pitch notation, ear-training, basic harmonic analysis, and form. Students apply this knowledge in composition assignments and projects, with particular attention paid to historical context.

PERFORMING ARTS IN CURRENT EVENTS (2 Semesters, 0.5 Credits) -

A discussion-based course, this class explores the trends, developments, and controversies surrounding present-day art and artists - in all arts disciplines. Special attention is paid to censorship, appropriation, and the New York metropolitan area. Current news articles, op-ed pieces, video clips, and recordings are used in class. Students are expected to develop independent views on subject materials discussed.

STUDIO ART IV: INTRODUCTION TO CONTEMPORARY ARTISTS, TECHNIQUES AND MATERIALS II (2 Semesters, 0.5 Credits) – This course focuses on refining art vocabulary, art skills and techniques through drawing, painting, and sculpture. Students will continue to explore personal themes using various mediums and methods. Students will continue to learn about contemporary artists. They will continue to refine their ability to respond, analyze, and interpret their own artwork as well as others through art critiques.

VOCAL TRAINING AND CHORUS (2 Semesters, 0.5 Credits) - Chorus is a vocal ensemble for both beginner and intermediate music students interested in furthering their vocal performance abilities. The group strives to foster a positive, collaborative music-making environment and encourages each student to model good vocal health habits, demonstrate useful vocal warm-ups, and perform a wide variety of choral literature. Secondary focuses include historical context of vocal music and basic music theory.

Additional Arts Courses:

ART NOW (2 Semesters, 0.5 Credits) - This class will explore the contemporary art scene, particularly in New York City. The subject material will include the visual arts as well as performance art and cutting-edge trends.

ART PSYCHOLOGY (2 Semesters, 0.5 Credits) - In this course, students will learn about and practice creative methods of expression. There will be a focus on humanism, an overall sense of wellbeing, reconciling emotional conflicts, fostering self-awareness and personal growth.

COMPUTER GRAPHICS (2 Semesters, 0.5 Credits) – This elective course introduces students to computer graphics using Adobe Photoshop. Students will learn the fundamentals of Photoshop including brushes, selection tools, layers, filters, etc. Projects include creating movie posters, magazine ads, television ads, collages, and photo enhancements.

INTRODUCTION TO 3-D DESIGN (2 Semesters, 0.5 Credits) - This course will be a foundational survey of three- and four-dimensional media and practices. Students will engage with a variety of materials, such as paper, clay, wire, wood, video, and found objects. Techniques to be explored include modeling, folding, assemblage, mold-making, and casting.

FOREIGN LANGUAGES

FRENCH I, ITALIAN I, OR SPANISH I (2 Semesters, 1 Credit) – First-year language courses stress the fundamentals of pronunciation, grammar, practical vocabulary, useful phrases, and the ability to understand, speak, read, and write at a basic level. Using fundamental sentence structures in the present and past tenses, students practice reading and writing. Discussions are included covering the geography, customs, culture, and literature of relevant countries, while completing several projects that relate to culture and customs.

FRENCH II, ITALIAN II, OR SPANISH II (2 Semesters, 1 Credit) – Second-year language courses are a continuation of year one, and complete studies in elementary grammar. Students delve further into development of conversational, reading, and writing skills. Exercises include the reading of texts with emphasis on oral expression and advanced writing projects stressing the different tenses.

FRENCH III, ITALIAN III, OR SPANISH III (2 Semesters, 1 Credit) – Third-year language incorporates a review of grammar, with special emphasis on idiomatic construction and expressions. Throughout the year students learn

more advanced tenses, which helps them complete more advanced reading and writing assignments, as well as develop increased communicative proficiency. Each reading and writing assignment advances the grammar of each student allowing them to be able to have dialogue outside of the classroom.

ADVANCED FRENCH, ITALIAN, OR SPANISH (*2 Semesters, 1 Credit*) – These elective classes provides the student with an opportunity to acquire intermediate fluency in their chosen language, with an emphasis on natural basic colloquial usage. New vocabulary and idiomatic phrases are emphasized as the student submits their more advanced assignments.

ANCIENT GREEK (*2 Semesters, 0.5 Credits*) – This elective course teaches the fundamentals of pronunciation, grammar, and vocabulary, and introduces the ability to understand and read the language at a basic level.

LATIN (*2 Semesters, 0.5 Credits*) - This elective course teaches the fundamentals of pronunciation, grammar, and vocabulary, and introduces the ability to understand and read the language at a basic level.

HISTORY

9th grade courses:

GLOBAL HISTORY/ANCIENT WORLD HISTORY/GEOGRAPHY (*2 semesters, 1 credit*) – This required course is offered to Freshmen, and includes topics such as the beginnings of civilizations and the advent of empires, early directions in government in society, classical Rome and Greece, the origins of religions, early advances in technology, and study of the Middle Ages.

10th grade courses:

*GLOBAL HISTORY/MEDIEVAL GLOBAL HISTORY (*2 semesters, 1 credit*) – This course is the second of a two-year cross-curriculum discipline that further develops students' lexicon of historical terms via exploration of types of historical evidence, critical-thinking skills, the role of geography as it shapes history, political science and types of government, economics, art and architecture, scientific advances, cultural literacy, and civilization. The course follows the state guidelines and begins with the end of the medieval era and continues through the Renaissance, Age of Exploration, Scientific Revolution, Age of Enlightenment, Age of Imperialism, Industrial Revolution and the modern era, culminating in a standardized state exam.

11th grade courses:

*AMERICAN HISTORY (*2 semesters, 1 credit*) - This required course is offered to Juniors, and includes topics such as early explorations of the Western hemisphere, colonization of the Americas by the Europeans, United States government and citizenship, manifest destiny, the Revolution, industrialization, the World Wars, cultural advancements, immigration and modern Western civilization.

12th grade courses:

*MODERN WORLD HISTORY (*2 semesters, 1 credit*) - This college preparatory course develops students' historical literacy through seminar and group discussion of the modern era. From discussion of world issues such as geopolitical economics and international trade, social policy, climate change, terrorism, nuclear proliferation, renewable resources and energy, infrastructure, the rule of law and ethics, rhetoric, and other world issues, students learn to articulate their ideas, research and vet sources, compose research and persuasive papers in MLA format, and more fully prepare for the transition to the collegiate environment.

MATHEMATICS

9th grade courses:

ALGEBRA I (*2 semesters, 1 credit*) – This required course is offered to incoming freshman, and includes topics such as solving equations, and a study of linear, exponential, quadratic, radical, rational and piece-wise functions. It is aligned with the NYS Regents curriculum, which includes Common Core standards. Students take the Common Core Algebra 1 exam at the end of the course.

10th grade courses:

GEOMETRY (*2 semesters, 1 credit*) – This course is designed to emphasize the study of the properties and applications of common geometric figures in two and three dimensions. It includes the study of transformations and right triangle trigonometry, and the use of proofs to solve properties of geometric figures. Inductive and deductive thinking skills are used in problem solving situations, and applications to the real world are stressed.

11th grade courses:

ALGEBRA II/TRIGONOMETRY (*2 semesters, 1 credit*) – This required course is a continuation and extension of Algebra I and Geometry. Within the course, the number system will be extended to include imaginary and complex numbers. Polynomial, absolute value, radical, trigonometric, exponential, and logarithmic functions will be studied. Data analysis will be extended to include measures of dispersion. Arithmetic and geometric sequences will be expressed in multiple forms and will be evaluated. Right triangle trigonometry will be expanded to include the investigation of circular functions, and problem situations requiring the use of trigonometric equations and identities will also be investigated.

GEOMETRY/ALGEBRA II (*2 semesters, 1 credit*) – This course is offered as an option for students who exhibited difficulties completing the Geometry sequence in 10th grade, or for students first entering the school who are not prepared for the required Algebra II course. The course typically blends the elements of second-semester Geometry with first-semester Algebra II topics, as described above.

PRECALCULUS (*2 semesters, 1 credit*) – This elective course prepares students for further study in Calculus by covering topics such as functions and their characteristics, analysis of graphs and application to real-world situations, summation, higher-order functions, and matrices.

12th grade courses:

*FINANCE (*2 semesters, 1 credit*) – Designed as a primer for undergraduate studies in general economics, this senior level course explores both microeconomic and macroeconomic principles within the field of Finance. With a curriculum that hones in on practical as well as theoretical content within the field, Finance deals with how to buy and rent real estate, the history of American stock market, how companies use marketing strategies to attract consumers, supply and demand curves, price equilibrium, Wall Street culture, and countless other aspects of personal and corporate Finance. Students who complete senior Finance gain the distinct advantage of walking into college level economics classes with the edge of having worked through these traditionally college-level constructs in high school.

PHYSICAL EDUCATION

DANCE (*2 Semesters, 0.5 Credits*) - This elective course is offered at varying levels for students in grades 9-12, based on need and interest. The course teaches the elements of dance, including varying styles and techniques.

HEALTH (*2 Semesters, 0.5 Credits*) – This required course educates students to all areas of personal health, wellness, and individual lifestyle. Topics covered include social and emotional health, promoting safe and healthy relationships, abuse and violence prevention, and communicable diseases. Emphasis is placed on acquiring knowledge and assuming responsibility for one's own health.

PHYSICAL EDUCATION (*2 Semesters, 0.5 Credits*) – This course is offered at each grade level from 9-12, and includes instruction in areas of personal fitness, exercise training, and sports instruction. Activities vary across terms and years, and may include additional specializations, such as dance, yoga and Tae Kwon Do.

SCIENCES

9th grade courses:

BIOLOGY (*2 semesters, 1 credit*) – This required course introduces students to topics such as evolution, genetics, ecology, and the human body. Includes a lab component, and goes beyond the standards set forth by the NYS Board of Regents.

10th grade courses:

EARTH SCIENCE (*2 semesters, 1 credit*) – This sophomore course encompasses basic and advanced topics in geology, environmental science, oceanography, meteorology and astronomy. A separate lab course allows to students to directly experience earth science in a hands on fashion. The course follows the NYS Regents curriculum and is also aligned with the Next Generation Science Standards. At the end of the course, students take the Physical Setting- Earth Science regents exam.

INTRODUCTION TO SCIENCE RESEARCH (*2 semesters, 1 credit*) – This elective course serves as the first course in a three-year sequence introducing students to scientific techniques, investigation skills, and problem solving. Students explore a topic of their choosing and conduct research, culminating in an end-of-year symposium.

11th grade courses:

*CHEMISTRY (*2 semesters, 1 credit*) – This required course gives students an introduction and background into the atomic and molecular world. Topics such as atomic structure, periodic trends, the mole, electro-chemistry, and nuclear chemistry are covered. Includes a lab component, and follows the standards set forth by the NYS Board of Regents.

SCIENCE RESEARCH PRACTICUM (*2 semesters, 0.5 credits*) – This elective course serves as the second course in a three-year sequence. Students will refine research questions, present their research proposal to an institutional review board, and upon approval, engage in initial data collection.

12th grade courses:

ADVANCED SCIENCE RESEARCH (*2 semesters, 1 credit*) – This elective course serves as the final course in a three-year sequence. Students complete their data collection, analyze the data, and develop a research paper for publication in the school science journal. Results of each student's study are presented at an end-of-year symposium.

*ANIMAL BEHAVIOR (*2 semesters, 1 credit*) – This elective course introduces students to a unique facet of animal

sciences involving direct observation, peer-reviewed journal articles, and in-depth coursework. Topics include migration, mating, child-rearing, hunting, communication, and intelligence.

COMPUTER SCIENCE (2 semesters, 1 credit) – This elective course goes beyond merely learning how to use applications like word processors, spreadsheets, and internet browsers. It uses the Java programming language and focuses on principles and method writing. The primary aim of the course is to introduce students to the diverse and in-demand field of computer science, and to acquaint students with computer programming.

GREAT BOOKS OF SCIENCE (2 semesters, 0.5 credits) – This elective course discusses famous scientists and the ideas that changed the world. Students read primary source books related to topics in contemporary science.

PHYSICS (2 semesters, 1 credit) – This senior elective introduces students to basic principles of physics. Topics covered include mechanics, optics, waves, vibrations, electricity and magnetism. The course includes project-based learning in the format of quarterly projects. Each project challenges students to incorporate basic principles of physics and engineering, along with creative design, to accomplish a specific task.

SOCIAL SCIENCES

10th grade courses:

SOCIAL PSYCHOLOGY (2 semesters, .25 credits) – This elective course introduces students to the study of the interaction between humans and their environment. Topics such as social influence are covered and related to relevant social issues, such as prejudice and peer pressure. The course serves as a primer for the more formal psychology electives offered in later years.

11th grade courses:

*INTRODUCTION TO PSYCHOLOGY (2 semesters, 1 credit) – This elective course introduces students to the scientific study of human cognition, emotion, and behavior. The course covers a broad range of key topics in the field, including neurology, sensation and perception, consciousness, learning theories, psychological disorders, and group/environmental factors that influence behavior.

12th grade courses:

ABNORMAL PSYCHOLOGY (2 semesters, 1 credit) – This elective course exposes students to the study of abnormal behavior and mental disorder on an in-depth level. Students explore the etiology, prevalence, diagnosis, and treatment of various disorders, including behavioral disorders, thinking disorders, mood disorders, and anxiety disorders.

COLLEGE PSYCHOLOGY (2 semesters, 1 credit) – This elective course is offered in conjunction with St. John's University, and carries an option to earn 3 credits through SJU upon successful completion. The course furthers the topics covered initially in the introductory course, introduces higher level concepts, and includes research in peer-reviewed journals, critical analysis and study of key topics, and written analytical papers.

COMMUNICATION AND MEDIA (1 semester, 0.5 credits) – This elective course explores how our lives and the course of history are effected by social media, TV/radio/print media and advertising. Students examine how different forms of media are used to elect presidents, start revolutions, win wars, create celebrities, and force change in society.

INTRODUCTION TO NEUROPSYCHOLOGY (2 semesters, 1 credit) – This elective course focuses on developing an understanding of brain-behavior relationships. Through the use of lectures, videos, projects and class activities, students learn about the basic anatomy of the brain, explore how neurons function, and study cognitive functions that include language, memory, attention, and social/emotional skills.

INTRODUCTION TO SPEECH AND LANGUAGE PATHOLOGY (*1 semester, 0.5 credits*) – This elective course provides an introduction to various communication and feeding disorders. Students will learn about typical speech and language development, as well as the assessment, diagnosis, and treatment of speech, language, and feeding disorders.

INTRODUCTION TO POLITICAL SCIENCE – This elective course examines the influence of politics on our daily lives. Topics include the principles of government, citizenship and the meaning of democracy, the various roles that government plays in our daily lives, and understanding global politics.

PSYCHOLOGY & SOCIETY (*2 semesters, 1 credit*) – This elective course runs as a seminar, and covers current topics in world news that effect our lives, and the social psychological perspectives on these topics. Typical topics include mental health treatment, individual differences and tolerance, the power of social media, love and hate, and social biases.

ADVANCED PLACEMENT COURSES

AP STUDIO ART: 2D DESIGN (*2 Semesters, 1 Credit*) – Prerequisite: *Foundation; Introduction to Artists, Art Periods, Techniques, and Materials*. This course encourages and prepares students to be independent thinkers and use their creativity and knowledge of art in producing a body of artwork. Students will develop a portfolio that will consist of artwork done in any 2-D medium such as acrylic, watercolor, pen & ink, pencil, oil pastel, charcoal, collage, mixed media, and photography. Students will demonstrate their skill and master their abilities and approaches in problem solving and ideation through weekly assignments, critiques, and discussions.

AP STUDIO ART: 3D DESIGN (*2 Semesters, 1 Credit*) – Prerequisite: *Introduction to 3-D Design*. This course is available to students who would like to engage in a more intense study of 3-D art. Students will develop a body of artwork that includes various types of sculpture such as sculpture in the round, relief sculpture, assemblage, and kinetic sculpture. They will also examine techniques such as modeling, carving, and joining/constructing. Students will develop a body of work that will be submitted at the end of the course that will show mastery in concept, composition and execution of their ideas.

AP STUDIO ART: DRAWING (*2 Semesters, 1 Credit*) - Prerequisite: *Foundation; Introduction to Artists, Art Periods, Techniques, and Materials*. This course encourages and expects students to be independent thinkers and use their creativity and knowledge of art in creating a body of artwork. Students will develop a portfolio that will consist of artwork created using any form of “mark making” with materials such as acrylic, watercolor, pen & ink, pencil, oil pastel, charcoal, and mixed media. Students will demonstrate their skill and master their abilities and approaches in problem solving and ideation through weekly assignments, critiques, and discussions.

AP CALCULUS AB (*2 semesters, 1 credit*) - This elective course is offered to students who have completed Algebra 1, Geometry, and Algebra 2/Trigonometry. Major topics of study include limits, the derivative function, derivative rules, optimization, applications of the derivative, the antiderivative, applications of definite integrals, differential equations, and slope fields. This course is aligned with the College Board's AP Calculus AB curriculum and students are expected to take the AP Calculus AB exam at the end of the course.

AP CALCULUS BC (*2 semesters, 1 credit*) - This course serves as an extension of AP Calculus AB. Main topics include limits, derivatives, applications and analysis of derivatives, integration, differential equations and slope fields from the AB exam. In addition, there will be further concepts of differentiation and integration as well as applications of parametric equations, polar equations, sequences, series, vectors (velocity & acceleration), L’hopital’s Rule and Euler method. This course is aligned with the College Board’s AP Calculus BC curriculum and students are expected to take the AP Calculus BC exam in May.

AP BIOLOGY (*2 semesters, 1 credit*) – This elective course follows the curriculum framework set forth by the College Board for gaining AP credit. We emphasize inquiry based learning, hands-on labs, and a collaborative classroom environment. Topics include evolution, structure and function, energy processes, and systems interactions.

AP ENVIRONMENTAL SCIENCE (*2 semesters, 1 credit*) - This elective course follows the curriculum framework set forth by the College Board for gaining AP credit. The course exposes maturing students to a branch of applied science focused on how the planet operates as a system, and how humans fit into/impact that system.

AP PHYSICS 1 (*2 semesters, 1 credit*) – This elective course follows the curriculum framework set forth by the College Board for gaining AP credit. Covers topics such as kinematics, dynamics, energy, momentum, gravitation, circular motion, simple harmonic motion, and simple electrostatic and electrical circuits.

AP PHYSICS 2 (*2 semesters, 1 credit*) - This elective course follows the curriculum framework set forth by the College Board for gaining AP credit. Covers topics such as fluids, thermodynamics, advanced electrostatic and electric circuits, magnetism, light and optics, and modern physics.

ADDITIONAL ELECTIVE COURSES

AUDIO ENGINEERING (*2 Semesters, 1 Credit*) – This elective course introduces students to the field of audio engineering. The course covers the science of sound and techniques of digital and analog recording and sampling. Students engage in a series of hands-on projects that allow them to understand the principles of audio, as well as to develop a facility with relevant recording software.

COMPUTER PROGRAMMING (*2 Semesters, 0.5 Credits*) – This elective course introduces students to computer programming. Students explore the basic syntax, structure, and terminology of the Java language, including conditional statements, loops, and arrays.

GREEK MYTHOLOGY (*2 Semesters, 0.5 Credits*) - In this course, students read, discuss, and create artwork based on Greek mythology, mythological characters, and the meanings within them.

MYTHS, LEGENDS, & COMIC BOOK HEROES (*2 Semesters, 0.5 Credits*) – This elective course introduces students to the myths and legends of a wide variety of cultural groups (Greek, Roman, Norse, Egyptian, Celtic, Polynesian, etc.), with a focus on the types of characters that form the heroes and villains in each tradition. The course allows students the opportunity to draw parallels between the societies in which these legends arose and examine the continued influence of these mythical traditions on contemporary storytelling forms such as comic books.

SAT PREP (*2 semesters, 0.5 credits*) – This elective course helps students develop familiarity with the various college entrance exams, and seeks to help them develop and improve test-taking techniques. Emphasis is typically placed on the SAT exam, although topics from the ACT may be covered as well.

NON-STANDARD & MODIFIED COURSES

The following courses are identified as “modified” on the student transcript. These courses are typically only available to students in our Bridge Program, who have learning differences that require varying levels of modification to the curriculum and/or teaching methods. Such modifications may include pacing differences (i.e., a typical two-semester course may be extended to three or four semesters), specialized teaching methods, and access to accommodations such as extended time on exams and assignments, a reader for exams, smaller class placement, etc. Every effort is made to keep the curriculum aligned with NYS standards, and in most cases, students sit for the NYS Regents exam in the core subject areas when they complete the modified sequence.

9th grade courses:

MODIFIED ALGEBRA I (*2 semesters, 1 credit*) – This course includes topics such as solving equations, factoring, and the study of linear, exponential, quadratic, radical, and rational functions. A review of relevant pre-algebra topics is built into the course, and the class is paced to be completed over a two-year sequence. It is aligned with the NYS Regents curriculum, which includes Common Core standards, and students take the Common Core Algebra I Regent exam at the end of the two-year sequence.

MODIFIED ANCIENT HISTORY (*2 semesters, 1 credit*) – This modified course begins with pre-historic earth and continues through the history of mankind, moving from the *Big Bang* through to *Ancient Rome*. Historical themes are introduced in various ways, with a particular emphasis on project-based learning. The NYS Regents curriculum is adhered to throughout.

MODIFIED BIOLOGY I (*2 semesters, 1 credit*) – This course introduces students to topics such as evolution, genetics, ecology, and the human body. The course is paced over four semesters to allow for repetition and review of the broad breadth of material for students with learning differences. The course includes a lab component, and is aligned with the NYS curriculum in science. Students sit for the Living Environment Regent exam at the end of the four semester sequence.

MODIFIED ENGLISH LITERATURE I (*2 semesters, 1 credit*) – In this modified course, the students explore literature from several different genres. Students read works including *Of Mice and Men*, *Romeo & Juliet*, *Inherit the Wind*, *Tuesdays with Morrie*, *The Five People You Meet in Heaven*, *The Alchemist*, *Siddhartha*, and various poems. The course is paired with the World History course, and is aligned with the NYS Regents curriculum, which includes Common Core standards.

READING & WRITING (*2 semesters, 1 credit*) – This course is offered in each of a student’s first three years as a daily component of the Bridge English curriculum, and is separate from the students’ Literature class. In the course, students work on writing and communication skills they will need in college and career. Topics include, but are not limited to, written organization, persuasive writing, grammar, research skills, and vocabulary.

10th grade courses:

MODIFIED ALGEBRA 2 (*2 semesters, 1 credit*) – This course is the second half of a two-year sequence that covers the NYS curriculum for Algebra. Students continue their study of algebra, with an emphasis on more advanced techniques and an introduction to concepts that will be learned in Geometry. Students typically take the Common Core Algebra I Regent exam at the end of the course.

MODIFIED MEDIEVAL HISTORY (2 semesters, 1 credit) – This course is the second of a two-year global history curriculum that further develops students' understanding of world history. The course begins with the medieval era and continues through the Renaissance, Age of Exploration, Scientific Revolution, Age of Enlightenment, Age of Imperialism, Industrial Revolution and the modern era. Students typically sit for the NYS Regents exam at the end of the course, and the NYS Regents curriculum is adhered to throughout.

MODIFIED BIOLOGY II (2 semesters, 1 credit) – This course represents the second year of a four-semester sequence, as described above. The course covers topics such as evolution, genetics, ecology, and the human body, and is aligned with the NYS curriculum in science. Students sit for the Living Environment Regent exam at the end of the four-semester sequence.

MODIFIED ENGLISH II (2 semesters, 1 credit) – In this modified course, the students explore literature from the Middle Ages and the Renaissance. Students read works including *Beowulf*, *The Canterbury Tales*, and various Shakespeare plays. The course is paired with the Ancient History course, and is aligned with the NYS Regents curriculum, which includes Common Core standards.

11th grade courses:

MODIFIED ALGEBRA/GEOMETRY (2 semesters, 1 credit) – This required course serves as an introduction to Geometry and a review of key Algebra topics for students who struggle with mathematics. Depending on student need, the course provides additional review for the Algebra Regents exam, or seeks to strengthen understanding of core math principles in addition to covering basic concepts of geometric figures.

MODIFIED AMERICAN HISTORY (2 semesters, 1 credit) – This modified course spans the entire narrative arc of America, beginning with the age of European Colonialism and moving up through the modern era. Historical themes are introduced in various ways, with a particular emphasis on project-based learning. The NYS Regents curriculum is adhered to throughout.

MODIFIED AMERICAN LITERATURE (2 semesters, 1 credit) – In this modified course, students explore American Literature including works by Edgar Allan Poe, Washington Irving, F. Scott Fitzgerald, Charlotte Perkins Gillman, Nathaniel Hawthorne, and Anne Bradstreet. The course is paired with the American History course, and is aligned with the NYS Regents curriculum, which includes Common Core standards.

12th grade courses:

CURRENT TOPICS IN SCIENCE (2 semesters, 1 credit) – This modified science course covers a variety of topics that are both engaging and relevant to today's current social and political climate. Topics often include forensic science, astronomy, electronics, and issues related to the various STEM (science, technology, engineering and math) fields. As this is an elective course, the course may delve into content and themes that students have a particular interest in, or topics that they may not have encountered before.

MODIFIED ENGLISH IV (2 semesters, 1 credit) – In this modified course, the students explore the connection between famous works of literature such as *Hamlet*, *One Flew over the Cuckoo's Nest*, and *A Streetcar Named Desire*. The students also explore several critical approaches to literature and practice using these approaches in their writing and discussion of the texts.

MODIFIED MATH: FINANCE (2 semesters, 1 credit) – This required course explores basics of managing one's own finances, global and personal financial concepts, and individual responsibility for managing money. Topics such as the use of credit cards, bank accounts, paying bills, and retirement savings are addressed.

MODIFIED WORLD HISTORY (*2 semesters, 1 credit*) – This modified course covers a wide range of topics, including Pollution/Global Warming, Racism, Global Politics, Defense, and various others. The curriculum for this section is partially student-directed, in that each classmate contributes at least one subject of inquiry.

READING, WRITING & RESEARCH (*2 semesters, 1 credit*) – This senior-level course is offered as a supplement to the modified English course. The course explores research and writing skills that students will need in college and career. Students conceive, research, write, and present their own research thesis on a topic of their choice. The course is typically taught by a speech and language professional.

Bay Ridge Prep reserves the right to make changes to its course catalog, as necessary. Courses may be added or deleted from the roster, based on circumstances such as class size, interest, availability of staff, etc. All course descriptions are accurate as of the date of this publication.

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