

MILLBROOK SCHOOL



2009-2010 Course Offerings

General Academic Policies

To qualify for a Millbrook School diploma, a student must meet the following requirements:

- English** - four years.
- Mathematics** - three years (Algebra I and II, geometry).
- Languages** - three years of one language.
- Science** - two laboratory sciences, including biology
- History** - one year of U.S. History is a graduation requirement; U.S. History at Millbrook requires submission of a research paper; fourth formers take Modern World History and third formers take Ancient History.
- Arts** - one year course
- Human Development** – Full-year course for all fourth formers meets the New York State Health requirement.

All students are required to take a minimum of five and a maximum of six courses each semester.

All Students must complete a minimum of 20 credits.

Advanced Placement

The Millbrook School curriculum is designed to challenge students at every level of their academic experience and, as such, features course offerings at the introductory, intermediate, and honors and advanced levels. In selected subject areas, students may choose from Advanced Placement courses that will permit them to enter college with advanced standing. Advanced Placement courses are year-long courses; advanced standing is awarded based upon the results of three-hour exams administered in May. The grading scale for the AP is 1-5, and in the last five years, nearly 60% of Millbrook students who sat for these exams have scored 3 or above. At Millbrook, the AP is offered in English Language and Literature, and Spanish Language and Literature, and Calculus AB and BC.

Culminating Experience for Seniors

All seniors at Millbrook are required to complete a Culminating Experience during their senior year. The purpose of this program is to provide our seniors with an opportunity to develop their intellectual independence in a particular discipline or disciplines by engaging in an authentic intellectual project as part of the culmination of their academic career at Millbrook. Seniors are required to present their findings in a formal presentation to members of the Millbrook community.

At the beginning of their senior year, seniors select the academic discipline in which they will pursue their culminating experience. Each senior then submits the essential question he or she plans to investigate to the relevant academic department for approval or revision. Once the

question has been approved, each student is required to spend a minimum of fifteen hours researching, developing and refining the project over the course of the year. The project culminates in the student's formal public presentation of his or her project to a panel of faculty evaluators and peers.

Independent Study

Independent study is a semester-long or year-long directed course of study, through which a sixth former and, occasionally, a fifth former may investigate topics of particular interest to him or her, topics that may not be covered fully within Millbrook's academic program. Normally, the pursuit of independent study is carried on after a student has exhausted the course offerings within the academic program, or in conjunction with a student's work in an honors or advanced course. In order to secure approval for independent study, a student must obtain sponsorship of a member of the faculty and, with him or her, submit a draft proposal for the course of study to the dean of faculty for review. The proposal should be submitted by May before the fall semester in which the study is to begin, or by December for the spring semester. A course of independent study is subject to the dean of faculty's and the academic department chair's approval.

Any student seeking approval for an independent study must have maintained honor roll status for the semester preceding the independent, and must maintain honor roll status for the duration of the independent study.

Human Development

Millbrook School inaugurated a Human Development Curriculum, beginning with the fourth form in the fall of 2000. The goal of such a curriculum, broadly stated, is a) to foster cooperation, communication, and respect for individual differences throughout the community and b) to help each student to accomplish the developmental tasks of adolescence, that is, identity, wellness, core values, and decision-making. The aim is to help students make better choices in the areas of goal-setting, time management, relationships, anger management, sexuality, drug and alcohol use. The fourth form will meet twice weekly for regularly scheduled Human Development classes during the academic day. The first class of the week will be a lecture to the entire form, the second, a discussion meeting in sections of twenty students each.

ENGLISH

English III

As a writing and grammar course, English III at Millbrook refreshes students' skills and prepares them for the rigors of the English curriculum. Students write a great deal of both reflective and critical pieces and, as the year progresses, begin to hone their analytical abilities through close textual readings and evidence-based writing. In the classroom, the emphasis is on developing the third form English student's role as participant, resource, and self-advocate. Recent texts include *The Odyssey*, *Antigone*, *Life of Pi*, *Stand Before Your God*, *Things Fall Apart*, and *Much Ado about Nothing*. In addition, the class uses *Vocabulary Energizers I* throughout the year, which we supplement with an in-house grammar program based on this vocabulary text.

English IV: Honors and Regular

English IV and English IVH introduce students to the major genres in literature: short story, novel, poetry, and drama. At the same time, students develop the vocabulary and the capacity for critical thinking and expression necessary to study each genre effectively. Central to both

enterprises is the use of X.J. Kennedy's *Literature*, which includes a wide variety of classic and contemporary works. Students engage the literature actively through analytical and creative writing, and classmates study the creative work of their peers along with that of published writers. In addition, the class uses *Vocabulary Energizers II* throughout the year, which we supplement with an in-house grammar program based on this vocabulary text.

English V: Honors and Regular

Both English VH and English V are full-year courses focusing on the theme of "The American Journey." The course gives students a sense of American history through readings and literature from the 17th through the 20th centuries, and as such it corresponds at several key points throughout the year with the historical period that students are exploring in their U.S. History class. Analytical writing in fifth form English emphasizes the development of a strong thesis and supporting arguments. Recent texts include *The Scarlet Letter*, *Middle Passage*, *Ragtime*, *The Great Gatsby*, *A Streetcar Named Desire*, *Death of a Salesman*, *A Raisin in the Sun*, *The Heidi Chronicles*, and *One Flew over the Cuckoo's Nest*. Some students in English VH may be selected to take the AP Examination in English Language.

English VI: Advanced Placement Literature

AP English is a full year, college-level literature course which is offered to sixth form students who have been recommended by their fifth form English teachers. While the course does prepare students for taking the skills-oriented Advanced Placement examination in English Literature and Composition, its fundamental goal is to help students develop the capacity for independent and original thought by means of comprehensive reading, active discussion, and polished forms of expression.

The first semester is devoted to a systematic study of British literature from the Elizabethan era to the Romantic. Among the major works covered are *Hamlet*, *Henry IV, Part One*, *The Merchant of Venice*, *The Tempest*, *Wuthering Heights*, *Jane Eyre*, *Pride and Prejudice*, and *The Importance of Being Earnest*. We also read shorter pieces – both prose and poetry – by Shakespeare, Donne, Swift, Pope, Blake, Wordsworth and Keats. As the year progresses students focus on modern world literature, analyzing such works as *Crime and Punishment*, *The Death of Ivan Ilyich*, *The Metamorphosis*, *No Exit*, *The Stranger*, and J.B. In addition, students can expect to read numerous poems and short stories, including *The Love Song of J. Alfred Prufrock*, *The Wasteland*, and James Joyce's *The Dead*.

English VI: Honors and Regular

The curriculum for English VIH and English VI closely parallels that of the AP course through the year. In the first semester, students focus on British literature beginning with *Hamlet*. We then move through another Shakespeare play, the poetry of Donne, and selected works from both the Augustan and the Romantic period. The semester ends with a close reading of *Jane Eyre* and *Pride and Prejudice*. In the second semester, the classes move into the modern era, reading *The Heart of Darkness* or *The Death of Ivan Ilyich*, poetry by T.S. Eliot, *The Metamorphosis* and *The Stranger*. We then read *No Exit* before moving on to an exploration of contemporary literature, which covers such works as *Brave New World*, *White Noise*, and *The Handmaid's Tale*. Along the way, students hone their writing skills in a variety of genres. Critical writing is stressed throughout the course. The first semester also features a personal narrative designed to meet the requirements of a college essay. Students write a number of critical essays and several larger group research projects.

Analytical and Creative Writing This two-semester English elective is open to Vth and VIth formers only. The fall semester will focus on non-fiction writing, primarily personal essays. We will examine techniques for composing effective personal essays as covered in the text, *The Art of the Personal Essay*, which includes numerous models for students to consider. VIth formers in the course will work towards writing several college essays. The spring semester will shift to creative writing, most notably short stories, but also some poetry and drama. Students will develop their stories through a series of editing and review workshops. In addition, the final pieces will be published in a form accessible to the community for public critique.

English as a Foreign Language Writing Seminar

See Foreign Language Department course descriptions.

MATHEMATICS

Algebra I

The first course in mathematics is a study of Algebra I together with an introduction to probability. Its emphasis is on understanding, modeling, and visualizing rather than on the rote learning of procedures. This course will do all that it can to ensure that math makes sense.

Geometry: Honors and Regular

Geometry is offered at two levels. The regular geometry course, while it includes a modicum of proof, focuses primarily on intuitive geometry and problem solving. Geometry Honors includes intuitive geometry and problem solving, but puts its emphasis on logical structures and proof.

Admission to Geometry Honors is by invitation of the department.

Algebra II: Honors and Regular

Algebra II is offered on two levels. Algebra II begins with an extensive review of Algebra I, then covers the usual Algebra II topics with a heavy emphasis on problem solving. Algebra II H assumes a good command of the ideas of Algebra I; extends those ideas through such topics as sequences and series, functions, logs, binomial theorem, and probability; and ends with a strong treatment of trigonometric functions. *Admission to Algebra II Honors is by invitation of the department.*

Statistics

Statistics focuses on the gathering, organizing, and analyzing of data. Students will learn different ways of organizing and displaying data, probability, how to compare samples to populations as well as how to compare two samples to determine whether or not they are significantly different. Students will also learn how to read articles supported by statistical evidence with a critical eye. This is a course for students who wish to pursue math beyond the school's minimum requirements. *Prerequisite: completion of math courses through Algebra II. Students may choose to take this class in addition to another math class such as Pre-Calculus or Calculus.*

Pre-Calculus: Honors and Regular

The central matter of Pre-Calculus is the deepening and extending of the student's understanding of functions and their graphs. Pre-Calculus, or its equivalent, is a prerequisite for Calculus at Millbrook and is the appropriate choice to prepare for calculus in the freshman year in college.

Admission to Pre-Calculus is by invitation of the department.

AP Calculus AB; AP Calculus BC

There are Advanced Placement courses for students ready for college level work in mathematics. For those who complete AP Calculus AB in the fifth form with an AP exam grade of 3 or better, AP Calculus BC is offered.

The advanced placement courses will follow the rigorous AP curriculum. The AB course will explore in depth limits, derivatives, integrals and their applications. The BC course will expand on these topics and will also explore sequences and series. Students will build theorems from basic principles, and analyze the theory behind the mathematics. Students are expected to have a strong background in algebra, a solid understanding of pre-calculus concepts including trigonometry, and a desire to work with abstract ideas. All students are required to take the Advanced Placement exam in the spring. *As with all advanced courses, admission to AP Calculus AB and BC is by invitation of the department.*

Calculus

Calculus will cover the basic ideas of calculus — limits, derivatives and integrals — with less of an emphasis on proof and more of an emphasis on conceptual understanding and problem solving. By the end of the year, students will have a strong understanding of basic calculus, and will be prepared to take a college-level calculus course. *In order to enroll in Calculus, students must have successfully completed a year-long course in Pre-Calculus.*

Discrete Mathematics

Discrete Mathematics will begin with a focus on methods of proof. Students will learn techniques of logic, and then work to apply those techniques to a variety of applications, including number theory, counting and probability. This course will explore ideas outside of the traditional high school sequence, and examine how mathematics can be applied to a wide variety of real-world situations. The course is open to juniors and seniors who have completed Algebra II or higher.

FOREIGN LANGUAGE

All students new to Millbrook must take a placement exam. If this exam is not on file at the start of the first semester, the student will sit for this exam immediately upon arrival. All students will be appropriately placed by the end of the second week of classes.

Students are required to successfully complete the third level of one language at Millbrook. Although we encourage all students to continue beyond the language requirement, Level IV classes mark the beginning of our advanced language courses. From Level IV on, there will be a greater emphasis on combining the integration of the four language skills (speaking, reading, listening and writing) with thinking critically about social, political and cultural issues. AP will be by invitation only. The department may assign summer work in the upper levels and will reserve the right to ask students to withdraw from the course if they do not meet expected obligations. We also encourage all students to spend time in Spanish and French speaking countries or in approved language immersion programs.

Course description titles are based on the ACTFL guidelines.

French I – Novice (Low-Mid-High)

Beginning French is for students who have had no previous instruction or who have been placed at this level as the result of a language department assessment. Communication skills are systematically developed in a wide variety of contexts through student-centered activities. The focus of the course is to experience language through highly interactive and cooperative learning strategies. Text – *Debuts*.

French II – Intermediate (Low)

In this course, communication skills are expanded. Students learn to function in real life contexts, which build their vocabulary skills and cultural understanding, and help them function in practical situations. The activities of the class continue to encourage student-centered learning through video, small group work, readings, and oral exams. *Prerequisite: French I or equivalent. (Text – Debuts)*

French III – Intermediate (Mid)

At this level students learn to improve their accuracy in reading, writing, speaking and listening. Short stories, authentic articles, video and other materials are used to strengthen skills and further develop cross-cultural awareness. *Prerequisite: French II or equivalent. (Text – Debuts)*

French IV – A – Intermediate (High)

Students will complete a variety of projects to further their cultural awareness and their speaking ability. Students will view films, and read and write about popular, classical and Francophone literature, as well as plays, poems and short stories. *Prerequisite: French III or equivalent and permission of department*

French IV – B – Advanced

In this high intermediate French course, students will have intensive grammar instruction and will be able to carry on conversations about a variety of topics and demonstrate knowledge of essential cultural concepts. Students will read and discuss selections from advanced classical and contemporary literature and plays. *Prerequisite : French IV – A or equivalent, and permission of the department. (Students will solidify all grammar points previously taught).*

AP French Language Level V – Advanced Plus

AP French language explores the nuances of the French language and its grammar, and seeks proficiency in the student's ability to speak, write, understand, and read in French. The course will utilize a variety of literature, videos and other authentic materials to promote usage and development of the four language skills along with critical thinking. The students will be required to write in a variety of styles and registers, from informal paragraph responses to fully developed essays, and they will also be required to speak on a variety of topics in situations ranging from casual conversations to more formal debates and oral presentations. Class time will also be spent preparing specifically for the AP French Language exam which the students will take in May. *Prerequisite: French IV – B or the equivalent, and the permission of the department.*

Spanish I – Novice (Low-Mid-High)

Beginning Spanish is for students who have had no previous instruction in Spanish or who have been placed at this level as the result of a language department assessment. Communication skills are systematically developed in a wide variety of contexts through student-centered activities and projects. The focus of the course is to experience language through highly interactive and cooperative learning strategies. *(Text: Destinos)*

Spanish II – Intermediate (Low)

In this course communication skills are expanded. Students learn to function in real life contexts, helping them to build their vocabulary skills and to function in practical situations. The activities

of the class continue to encourage student-centered learning through small group work and interdisciplinary projects. *Prerequisite: Spanish I or the equivalent. (Text: Destinos)*

Spanish III – Intermediate (Mid)

At this level students learn to improve their accuracy in reading, writing, speaking and listening. Short stories, authentic articles, video and other materials are used to strengthen skills and further develop cross-cultural awareness. *Prerequisite: Spanish II or equivalent. (Text: Destinos)*

Spanish IV – A – Intermediate (High)

The students will continue to learn advanced Spanish grammar in order to hone their reading and writing, as well as their speaking and presentational skills. Students will be exposed to works of art by Spanish artists, which will prompt discussions, interpretations and connections of ideas, about the similarities and differences in the cultures of the Spanish world. Students will read and discuss selected short stories and poems as well as write organized thesis based essays in Spanish. Students at this level may be assigned summer work. *Prerequisite: Spanish III, and the permission of the department.*

Spanish IV – B – Advanced

In this high intermediate Spanish course, students will continue the development of the four language skills, while they deepen their insight into Hispanic culture. This course is designed with an emphasis on preparation for the Advanced Placement Language course. The students will be exposed to Spanish literature. They will learn and practice their grammar contextually. All four language skills will be practiced and integrated regularly, either in the classroom or by accessing suggested websites. We will use all modes of communication routinely: interpersonal, presentational, and interpretive. Students are expected to have a solid background in both their spoken and written Spanish. Students may be assigned summer work. *Prerequisite: Spanish IV – A or equivalent, and the permission of the department.*

AP Spanish Language – Level V – Advanced High

AP Spanish language is an advanced language course which emphasizes combining language development with critical thinking. The students will use authorial and thematically based textbooks that stimulate interpersonal and presentational spoken and written communication based upon the student's ability to analyze and interpret information heard and read. We will acquire information from authentic sources in Spanish. From these authentic sources, the students will be able to identify and summarize main points and important details and make appropriate inferences and predictions. Students will work on timed formal writing, (200 – 250 word essays), and informal writing, (a ten minute, 60 word minimum personalized style of writing). We will practice the two types of oral presentations daily: formal and informal. Students will be graded holistically as suggested by the AP rubrics, because this is a university level course. There will be nightly homework assignments of one hour or more. Students will be expected to do summer work. *Prerequisite: Spanish IV – B or equivalent, and the permission of the department.*

Latin I

This course introduces the fundamentals of Latin grammar and builds a strong working vocabulary. The primary object of this class is to prepare students to begin to read unadapted Latin literature in their second year. Translation skills, vocabulary and English word derivation are stressed. As part of this preparation, students also study the history and culture of ancient Rome, the history of classical Latin literature, and classical mythology.

Latin II

In this second-year course, students continue their study of Latin grammar and vocabulary, Roman history and classical culture and literature. It begins with a thorough review of the basic concepts generally covered in a first year course. The new material tackled includes the uses of the subjunctive, indirect discourse and participial phrases. Increasingly, students move from adapted Latin prose and poetry to the original works of Roman historians, which include Julius Caesar, Livy, Suetonius and Eutropius.

Latin III

With the basics of Latin language firmly in their grasp, students explore the works of Roman authors in their unadapted forms. This examination is both grammatical and literary; material is selected to suit the interests and ability of the group. Authors typically studied include Cicero, Ovid, Pliny, Petronius and Sallust. In addition, Roman culture and history remain central to the discussion.

Latin IV

Students in Latin 4 read and translate Roman Literature. Authors include Catullus, Horace, Lucretius, Ovid, and Vergil. Emphasis is placed on refining translation skills and understanding secondary topics such as metrics and poetic figures. Geographical, historical, and cultural studies continue.

Advanced Readings in Latin

Students in this advanced class read the poetry of Catullus and Horace and the comedies of Plautus. Modern translations of these poets are critiqued for their interpretation of the original. Sections of the plays are staged and recent versions, such as *A Funny Thing Happened on the Way to the Forum* are examined in contrast.

English as a Foreign Language Writing Seminar

The overall objective of this course is to empower students to participate fully in academic and community life at Millbrook and beyond, by strengthening their confidence and competence, and encouraging their ability to communicate their ideas in progressively more nuanced form with the goal of reaching the level of their abilities in other disciplines. It is taken in addition to a student's regular English class and is not given for credit, although a student may elect to include a record of the course on his or her transcript. After an initial assessment of skills, students will either be allowed to exempt the course, or will be placed at the appropriate level in it. Class work will include repeated short reading, listening, speaking and writing assignments selected as introductions to the culture of 21st century United States, and, where possible, coordinated with curricula in other academic courses.

SCIENCE

Biology

This is a foundational course that begins with a study of concepts and issues in ecology with particular emphasis on biodiversity and environmental concerns. This is followed by a study of the relationship of form and function through observation of comparative anatomy and physiology. Class work is supplemented with readings from scientific and popular sources, oral presentations, research projects and an integrated laboratory program. Highlights of the program are field trips to and in the marsh and the careful dissection of a vertebrate. *Required for all students.*

Physics

Physics answers questions about the physical world: How does a motor work? What is the greenhouse effect? What are the physics associated with water rockets? and many other questions about how our everyday experiences operate. This full-year lecture, lab, and demonstration course is a general survey of introductory physics through thermodynamics, electricity, magnetism, and basic mechanics.. While this is not a mathematically focused course, students will encounter algebra during problem-solving. There will be an opportunity for each student to research independently a topic of his or her choice, which will be presented to a full class. The student will develop an understanding of physics principles, will practice giving presentations based upon independent research, and will engage his or her curiosity and creativity as it relates to the physics of the world around us. *Prerequisites: Algebra I, Biology.*

Chemistry

Chemistry is the study of the structure and function of our world, from the large things that we can see to the very small ones that we cannot. Students begin this course focusing on the macroscopic world around them, pondering the nature and classification of matter. Next, students move to the subatomic world, examining the composition of the atoms, elements, and compounds that make up matter. Students learn to appreciate some of the processes happening in and around them by identifying various types of chemical reactions, balancing chemical equations, and understanding the stoichiometry of reactions based on the concept of the mole. Other topics covered in our study include bonding, molecular geometry, acid/base chemistry, and the gas laws. Of course, no chemistry course is complete without lab experiments that allow students to experience all of these concepts first-hand as solutions bubble, fizz, change color, and possibly explode. *Prerequisite: Biology.*

Environmental Science

Students of environmental science examine basic ecological principles and analyze human impacts on the biosphere. Our approach is solution-oriented and focuses on sustainability—quality of life for all within the means of nature. This course is both scientific and multidisciplinary in its approach and challenges us to use the best scientific theory, research, and data to understand a variety of contemporary environmental problems and viewpoints. Frequent field activities and trips make use of local wetlands, streams, forests, and other wildlife habitats as well as the animals at the Trevor Zoo. *Prerequisites: Biology plus one other full year lab science is preferred.*

Advanced Biology – Honors

Advanced Biology is a laboratory/lecture/research course for the highly motivated science student. The course differs significantly from the first year biology course with respect to the kind of textbook used, the range and depth of topics covered, the kind of hands-on/inquiry based work done by students, and the time and effort required. The primary emphasis of the course is on developing an understanding of concepts, a grasp of science as a process rather than as an accumulation of facts, personal experience in scientific inquiry and the recognition of unifying themes that integrate the major topics of biology. Central to the course is the design and implementation of a year-long research project that provides students with a unique opportunity for independent, in-depth study of a specific biological question. The project will require the design and implementation of a scientific study, statistical interpretation of data, and the reporting of findings in a research paper and/or other suitable presentation format. Studies can take place at the zoo, in the field, or in the laboratory. This program is taught at the beginning college level with expectations based accordingly. *Prerequisites: Biology, strong math and reading comprehension skills, Chemistry recommended*

Advanced Physics – Honors

In this course the student will conclude the survey of physics begun in Physics. Some topics studied in Physics will be encountered again, such as Newton's Laws of Motion and Mechanical Waves. Most of the topics, however, will be new: Uniform Circular Motion and Rotational Dynamics, Wave Nature of Light and Optics, Special Theory of Relativity, Quantum Theory and Atomic Physics. We use a college-level text, and go into greater depth than in Physics, employing a quantitative problem solving emphasis. There will be opportunities for the student to independently research an area of his or her choice, which will be presented to the full class. The content in this course is introduced using a combination of labs, demonstrations, lectures, and independent research. *Prerequisites: Algebra I & II, Physics, a strong background in math.*

Advanced Chemistry – Honors

This course offers in-depth investigation of topics not covered in Chemistry that are part of most college courses. One of the primary objectives of this course is for students to get beneath the surface of chemistry, diving into the nuances of the discipline. Laboratory investigations, real-world phenomena, and discrepant events provide opportunities to hone problem-solving skills and become adept at using chemical concepts to explain actual events. Topics covered in this course include electrochemistry, equilibrium, reaction kinetics, thermodynamics, organic chemistry and other advanced topics based on student interest. *Prerequisites: Biology, Chemistry, and a strong background in math.*

Discovery in Science: Bio Diversity (fall semester) and Forensics (spring semester)

Science is an adventure. It is a way of learning about nature and our role in it. The first semester of the course will focus on a biological understanding of the diversity of plants and animals, how biological diversity arises, patterns of distribution, and biodiversity loss and extinction. It applies principles learned in genetics, ecology, and evolution, with added advanced ecological theory and concepts. The second semester will focus on the broad field of forensics with an emphasis on the biological aspects. It will require students to use past and new scientific understanding to solve problems and analyze and apply scientific data. Use of the scientific method will be key and lab activities will accompany each topic. *Prerequisites: General Biology, fifth or sixth form standing, and department approval.*

Animal Behavior: spring semester

Animal behavior is considered in a broad evolutionary context. Behavior is traced from its evolutionary function as adaptation, through its physiological basis and associated mechanisms, to its expression. Students will also develop and conduct their own research projects on animal behavior at the Trevor Zoo. This is a one semester course that will be offered during the spring semester. It may be taken as an alternative semester for Discovery or as a one-semester elective. *Prerequisites: General Biology, fifth or sixth form standing, and department approval.*

Astronomy

Where did we come from and where are we going? As Carl Sagan famously declared, "We are all starstuff." In this year-long course the students will explore these matters and learn about the solar system, the life and death of stars, the galaxies and the evolution of the universe. While the emphasis is to develop a conceptual knowledge of these issues, there will be some algebra-based problem solving. With the use of the school's 14-inch telescope, we will study the night sky – the stars, constellations, and planets. The Millbrook night sky is unusually clear of ambient light, making for memorable viewing opportunities. There will be opportunities for the student to independently research a topic of his or her choice, which will be presented to the full class. The course will be primarily lecture-based, with occasional classes in the computer center learning software relating to night sky observation. *Prerequisites: Algebra I & II, Physics.*

HISTORY

An old aphorism identifies experience as “that marvelous thing that allows you to recognize a mistake when you make it again.” One might say the same thing of history. The History Department presents history and social sciences not as recipes for success, but as intrinsically fascinating versions of human experience. Beginning with geographical and historical foundations of the ancient and modern worlds, the department’s courses survey some of the main patterns in story of civilization. In the United States History course, students investigate this country’s place in the larger context of the world. Senior electives then encourage the exploration of more detailed, advanced courses of study.

At the center of the department’s mission is the teaching of effective communication. Students write frequently, beginning in the third form with an emphasis on writing paragraphs, and culminating in the Blaine Essay Prize contest, in which seniors submit research papers to an outside reader for evaluation. The goal is for every student who graduates from Millbrook to have the tools necessary to ask penetrating, relevant questions, to research answers, and to articulate an opinion.

We seek also to cultivate a sense of curiosity and respect for the world’s immense cultural diversity.

Ancient and Medieval World History

This third form course focuses primarily on Greek and Roman history. Students consider the world views of these ancient peoples and attempt to apply their lessons to the contemporary world. The course emphasizes reading comprehension and the writing of narrative history. Students develop analytical skills through investigation of cause-and-effect. Texts include *These Are the Greeks*, *These Are the Romans*, *The Apology of Socrates* and readings on medieval history.

Modern World History

Intended for fourth form students, Modern World History considers the development of four regions of the world – the Americas, Europe, India, Africa and the Middle East – and the ways in which these regions interact. Most written work emphasizes historical analysis and interpretation. Basic research skills are also introduced and reinforced.

United States History

Required for graduation, generally taken in fifth form year, the course provides a survey of U.S. History from 1490 through the present. In the second half of the spring semester, the course focuses on three themes of U.S. history in three separate and discrete units: foreign policy between 1865 and 2003; government power and individual rights between 1865 and 2003; and race and society, 1865 to 2003. In this course, students focus primarily on historical analysis, especially of primary documents. During the winter, students engage in a research paper. The text is *A People and a Nation* by Mary Beth Norton.

SENIOR ELECTIVES IN HISTORY AND SOCIAL SCIENCES

History is not required in the senior year at Millbrook. We strongly encourage each student to take at least one course in the department, or Art History, which is offered in the Arts Department. Many students choose to take more than one history course.

A History of Dissent in the Western World

This course examines the history of dissent and radical thought in the Western World. Beginning with Galileo and Martin Luther, we will examine the men and women who spoke out against the status quo and changed the world. What drove these people to speak out against mainstream thought? How did they succeed or fail to change the societies around them? In return, the course will also look at how societies reacted to these radical movements of dissent. Were they suppressed or allowed to alter society peacefully? The course will examine such people and subjects as utopian societies, the Russian Revolution, the Civil Rights Movement in the United States, and feminism. The course will use primary source writings as well as secondary sources to examine these movements and the reactions to them.

Psychology

Psychology asks, “Why do individuals behave as they do?” The purpose of the psychology course is to survey a variety of fields of psychology each of which attempts to answer the essential question. The primary focus of the class will be experimentation. Students will work independently and in groups to design experiments and to raise and answer their own questions. Areas of study may include memory, learning, child development, stress, sensation and perception and social psychology.

Middle East

This course provides students with the information necessary to understand better this culturally and politically vital region. By tracing issues through time, from ancient times to modernity, students come to see the context of events that are often depicted in the West as baffling or random. Such issues include religious conflict, the place of women in Islam, the role of religious fundamentalism and the causes and effects of terrorism. Special emphasis is placed on the study of the U.S. media’s coverage of the Middle East.

Anthropology

This course considers the ways in which cultures develop. What patterns have emerged over the course of human history? How can we study the ways society influences individuals? How does our own society operate on us? In this course, students will read the work of professional anthropologists, and then learn to construct their own ideas about these questions.

Constitutional Law

The heart of this course is a series of moot courts – fake hearings before a “Supreme Court” – based on real cases. Most of the work in the course consists of reading Supreme Court opinions and then writing responses to them. We consider racial and gender equality, personal liberties, state and federal powers and other constitutional issues.

ARTS

Visual Arts

Beginning Drawing

Beginning Drawing is a semester course designed to introduce the student to a variety of drawing techniques and materials. Emphasis is placed on developing compositional and observational skills. To this end, visual appreciation, concept development, subject and material potential will be our major focus. Graphite, charcoal, oil and soft pastel, pen and ink, china marker, and some basic printing techniques will be employed. Projects are geared toward developing an understanding and appreciation of drawing. These projects will explore various drawing styles such as contour and gesture drawing, working on issues of perspective, and drawing from still life. *Semester long course, offered both semesters open to all students. No Prerequisites.*

Beginning Painting

Beginning Painting is a course designed to introduce the student to a variety of painting materials and techniques. Emphasis is placed on developing composition and observational skills. To this end, visual appreciation, concept development, subject and material potential will be our major focus. Watercolor, acrylic, oils and various mixed media will be employed. Projects are geared toward an understanding and appreciation of the process of painting. Although drawing skills are useful, they are not necessary. *Semester long course, offered both semesters. Open to all students. No Prerequisites.*

Advanced Drawing & Painting/Print Making

Advanced Drawing & Painting is a course designed to further develop a broader understanding of the materials, techniques, and concepts associated with drawing and painting. Students will get the chance to work with many drawing mediums, oil and acrylic paints as well as be introduced to print making practices involving copper plates and linoleum. The appreciation of art, art forms and critical analysis will enhance the student's awareness of concept development and potential for the material being used. Students will be asked to maintain a journal of observational entries that will be used in building a vocabulary for the translation of ideas, and a portfolio for purposes of critique. All students will be asked to exhibit their work and to participate in class critiques. *Yearlong course. Prerequisite: Beginning Drawing and Beginning Painting.*

Honors Drawing & Painting/ Mixed Media

Honors Drawing and Painting/ Mixed Media is an honors studio course designed to further develop and enhance the student's awareness and knowledge of his or her selected craft. Although students will have an opportunity to work on their projects independently, all students are required to be responsible for the time allotted to them one night a week for three hours. In addition, students are strongly encouraged to work in their studios beyond the evening class time. Individual journals will be kept to gather ideas for projects and a portfolio of student work will be used for critique. The portfolio will be accompanied by an artist's statement. Reading assignments will be issued and class critiques will be of the utmost importance. All honors students will be required to exhibit in the Advanced/Honors show at the end of the year. *Yearlong course. Prerequisites: Beginning Drawing or Beginning Painting, Advanced Drawing and Painting, portfolio review.*

Art History/Aesthetics

Abstract Expressionism; the Art and Movement, the Art and Ideas of Willem deKooning, Printmaking and Museum Studies

Prerequisites: junior /senior year long course

This year a select group of Millbrook students and the Millbrook School will have the rare opportunity to work with The Willem de Kooning Foundation in curating an exhibit of selected prints from the Foundation's collection. This exhibit will be held in the school's Warner Gallery and serve as a culminating experience. Students will be versed on museum studies and methods, the role of docent, physical and intellectual handling of art, creating didactics, and the structure of exhibit making. They will participate in the final selection of the de Kooning prints used to make up this exhibit and serve as docents during the exhibit's run. In addition, this course will explore the world of the Abstract Expressionists, their art and philosophy. The words, work and life philosophy of the artist Willem de Kooning will be prominent. Emphasis on how to read and appreciate a work of abstract art will help provide an important aesthetic. Students will have an opportunity to learn the craft and language of the print and printmaking by creating their own.

Field trips: There will be three required field trips associated with this course. Two trips will be to The de Kooning Foundation in NYC and will concentrate on selecting the prints for exhibit, learning about the nature of a foundation and its work on an artist's legacy, and visiting the de Kooning warehouse to approve actual prints for exhibition. There will also be a field trip the studios of Willem de Kooning and Krasner/Pollack to view firsthand where these artists worked and to get a more personal look at the life of the artist in the studio.

Required reading: de Kooning An American Master by Mark Stevens and Annalyn Swan.

Additional readings will be assigned.

Required paper: Blaine Essay

Beginning Ceramics: Hand Building

This course will focus on basic ceramic skills and hand-building techniques. Students will learn techniques such as pinch pots, coiling, and slab-building. The primary emphasis of this course is to introduce the student to the ceramics studio, use of clay and the materials used in the process of making hand-built ceramic forms. Students will be asked to keep a journal to develop ideas and to participate in class critiques. *Semester long course offered in the fall semester. 2 sections offered. No prerequisite.*

Beginning Ceramics: Wheel Throwing

This course will focus on basic ceramic skills and wheel throwing techniques. Students will learn such basic techniques as centering, pulling, shaping and trimming. The primary emphasis of this course is to introduce the student to the ceramics studio, use of clay, and the materials used in the process of throwing ceramic forms on the wheel. Students will be asked to keep a journal to develop ideas and to participate in class critiques. *Semester long course offered in the spring semester. 2 sections offered. No prerequisite.*

Advanced Ceramics

This course will focus on the further exploration of hand-building and some wheel throwing techniques. Emphasis will be placed on craftsmanship and the communication of each individual's ideas. A journal will be kept to help formulate these ideas and involvement in class critique will be essential. Students will be expected to exhibit their work in the Warner Gallery at the close of the year. A visual portfolio of student work will be important. *Yearlong course. Prerequisite: Beginning hand-building and wheel-throwing.*

Honors Ceramics/Mixed Media

Honors Ceramics/Mixed Media will be broken up into two distinctive semesters. The first semester will focus on the various surface design techniques associated with wheel throwing and hand-building. Students will explore heavily glazing calculations and techniques, resists, slip trailing and casting, and alternative methods of image application.

In the second semester students will have more of an independent focus which will allow students to use their advanced skills in helping to develop a creative, working studio environment. Emphasis will be on the exploration of ideas and alternate ways of working with ceramics.

Students will keep a journal for the exploration of ideas about projects, involved in the critique of their own work and the work of their studio mates, and exhibit in the close of the year Warner Gallery student exhibit. In addition, students will develop an artist's statement that will accompany their visual portfolio of ceramic work. *Yearlong course. Prerequisite: Beginning and advanced hand-building and wheel throwing, advanced ceramics under its previous configuration, and instructor approval.*

Note: Honors courses in the arts are offered or held in the evening one night a week for three hours.

Photographic Arts

Beginning Photography

This course begins in the first semester with an introduction to the 35mm camera. Students will explore how a camera operates and how it should be used. Emphasis will be placed on developing an appreciation for strong visual compositions. Students will also study the major genres of photography (candid and formal portraiture, journalistic, sports, landscape, wildlife, still life, visual essays, and fine arts photography). Students are expected to keep a journal to assist them in the process of understanding formal compositions and aperture settings. The second semester is devoted to understanding the darkroom. Students will learn how to mix chemicals, roll and process film, use an enlarger, print on different photographic papers, and how to present a finished photograph. *Semester long course offered both semesters open to all students. No prerequisites. Students must have a 35mm SLR camera with manual capabilities.*

Advanced Photography

This course is designed to further enhance student awareness of the visual concepts and techniques associated with photography. Emphasis will be on the fine art of photography. To that end, students will explore the world of the image and its relationship to the camera. Students will work in the darkroom and move to a digital format in an effort to assist them in the process of learning the potential of a photograph.

Through experiment and practice, individual and group assignments, this course will challenge students to acquire a higher level of understanding, skill, and appreciation of photography as a significant art form. Class critique is a vital part of this course and students are expected to participate. A journal will be kept to explore ideas. Study of a photographer or photographic movement will be required. Students will show their work in a student exhibit in the Warner Gallery at the close of the year. A visual portfolio of student work will be essential. *Yearlong course. Prerequisite: Beginning Photography. Students must have a 35mm SLR camera with manual capabilities.*

Honors Photography

Honors Photography is a course designed to work as a studio where students can explore ideas independent of assignments. The emphasis of this course is to build an understanding of the potential of a photograph as a work of art. Both the darkroom and digital formats will be used. Students must keep a journal to explore ideas and be active participants in class critiques. The focus of this class is to assist the student in developing a strong portfolio of their work. To this end, students must concentrate on putting together a comprehensive body of work that demonstrates their skill and proficiency in photography. Students will be asked to complete an artist's statement to accompany their portfolio and to exhibit in the student exhibit in the Warner Gallery at the close of the year. *Yearlong course. Prerequisites: Beginning and Advanced Photography and instructor approval. Students must have a 35mm, and or, digital camera: both preferred.*

Beginning Digital Photography

The digital photography course is an introduction to the use of the digital camera and the formatting of digital images. This course will include using the digital camera, computer enhancement programs, and the inkjet printer. Students will look at the development of digital photography over the past decade and the importance of this medium in today's culture. Students will discuss the physical make-up of digital images, composition with an emphasis on Gestalt, visual collage, traditional and alternative portrait, landscape and still life photography, and various surface printing techniques. *Semester long course offered both semesters. No Prerequisite. Students must have a digital camera.*

Beginning Digital Video

In this one semester course, students will learn the proper use of the DV video camera and camera accessories. We will discuss basic lighting, and sound recording techniques, and relate basic visual composition principles to working with the moving image. Using Final Cut Express, Soundtrack, and DVD authoring software, the class will explore computer-based DV editing. We will build on basic video skills, talk about directing, writing, and pre-production planning. We will view classic films to assist us in discussing the aesthetics and practical techniques of visual story telling. *Semester course offered both semesters. Prerequisite: Beginning Photography, and/or Digital Photography. Due to considerations of computer access, this class is limited to six students.*

Advanced Digital Video

This semester long course will build on the camera skills and DV computer-based editing techniques learned in the beginning Digital Video class. We will consider further elements of visual composition, camera movement, picture quality, and lighting, sound recording, sequencing, script writing, storyboarding, screen direction, and DVD authoring. In addition to creating a repertoire of hands-on production experiences, we will continue to develop directing, writing, pre-production and post-production planning skills. We will study the works of classic film directors and develop an awareness of the aesthetic and practical implications of visual story telling. *Yearlong course offered both semesters. Prerequisite: Beginning Photography, and/or Digital Photography and Digital Video I. Due to considerations of computer access, this class is limited to six students.*

Music/Instrumental/Theater Arts

Third Form Chorus

The third form chorus has two main objectives. The first objective is to explore and develop skills and experiences associated with the performing arts. Students will learn basic vocal techniques,

solfege and music notation and explore concepts of rhythm, pitch, timbre and other qualities of music. These skills will be put to use in various forms, including both informal games and more traditional performances.

The second objective is to begin to develop a sense of community. Students will work together as an ensemble to prepare for various performances and through this process of community work ethic, learn to achieve a unified outcome as a member of a large group. *Yearlong course. Required of all third formers.*

Millbrook Singers

Millbrook Singers is an ensemble of students interested in doing choral work. This class will focus on understanding vocal music and refining the vocal instrument. Students will participate in a variety of performances including arts nights, special forums and school ceremonies and will work in conjunction with Millbrook's Community Chorus. This is a highly useful course for students wishing to pursue an interest in music. *Yearlong course open to all students. No prerequisites.*

Instrumental Ensemble

The Instrumental Ensemble class is the Millbrook School's equivalent of a larger school's band or orchestra. The instrumentation usually includes some combination of woodwind, bass and keyboard instruments along with drums, electric guitar and bass.

During the course of the year, the class will learn to play selections of various styles of music, including some or all of the following: jazz, classical, rock, rhythm and blues, pop and folk music. Material will be chosen and arranged based on the skill level of the various members of the ensemble. Those who would like to improvise will be given an opportunity to do so. Student suggestions for addition to the group's repertoire are welcome.

Each semester the class will prepare for a concert that will take place toward the end of the semester. There will be time devoted to recording of the repertoire. This is a fun class! *Yearlong course open to all students.*

Music Appreciation I and II

The first semester will focus on the development of American music over the last century starting with origins of blues and jazz and ending with the popular music of the present. Along the way we will learn about the birth of rock n' roll in the 1950's and follow it through the tumultuous 60's. Our discussion will be guided by listening to musical samples as well as watching documentary footage and concert films.

The second semester will focus on individual artists and groups of musicians who have had a significant impact on the art form over the years. Although we will spend much of our time on musicians over the last decades, we will also explore some European composers from centuries past and discover how they helped to shape the music that excites us today.

At regular interval, the class will also have live music sessions where each student will have a chance to try a musical instrument such as a guitar or piano. Students who already play an instrument can help others or spend the time improving their craft. *Semester long course offered both semesters open to all students. No prerequisites.*

Guitar Studio Class

This class is designed to give guitarists a chance to work on their instruments in a setting that will provide individual instruction as well as an opportunity to work together in small or large groups. Students will learn new techniques in a variety of styles on acoustic and electric guitars. Material covered will include learning songs, chords, strumming, scale patterns, improvisation, finger-picking, tablature, standard notation and theory.

Each member of the class will be encouraged to work on specific things he or she needs to become a more complete and well-rounded guitarist. The more advanced members of the class will be encouraged to serve as mentors to those with less experience. Members of the class will also have the opportunity to perform during Arts Night toward the end of each semester. *Semester or yearlong courses open to students with a background in guitar. Bass guitarists are welcome. Prerequisite: Beginning Guitar or the permission of the instructor.*

Note: Private instruction on all standard musical instruments and in voice is available apart from music courses. An additional fee is required for these lessons. Private lessons are not for credit.

Acting and Theater Arts

Open to all students and may be taken multiple times over the course of a student's career. This course provides an introduction to the principles of acting and stage performance as well as exposure to other components of dramatic work. Acting will involve both theoretical and practical skills such as script analysis, character development, rehearsal techniques, scene study and improvisation through speech and movement. Students will also gain experience in other areas such as scenic, costume and lighting design, principles of directing and composition, movement and physical approaches to performance (relaxation ideas, stage business and stage combat). The course will include rehearsal and performance scenes and short plays, as well as student-created material. *Yearlong course. No prerequisites.*

Advanced Acting : Character work and Script Analysis

Building on the foundations of the Beginning Acting Class, students would work in depth exploring more specific aspects of Theater. Students would study different approaches to movement, acting and character work (Hagen, Grotowski, Meisner, etc). Using the techniques and vocab from the beginning curriculum, students will research scenes and characters as if preparing for auditions and performances. In their role as mentors to the Beginning Acting class, the Advanced students would coach and direct students in the spring. Additional performance may arise from the direction of student-written material from other classes.

This would be a full year course open to any student that has taken Beginning Acting. (Special permission may be given to new students who demonstrate a proficiency in the curriculum).

ATHLETIC REQUIREMENTS

- ✓ All students must participate on an athletic team, in theater, dance, or other afternoon activity, during each season.
- ✓ All III and new IV formers must participate in a team sport or activity – soccer, cross country, theater or field hockey – during their first semester at Millbrook.
- ✓ Students may participate in any of the following – Zoo Squad or Strength & Conditioning – during only one season each year. The balance of their participation must come from among team sports, riding, theater or dance.

ATHLETIC CHOICES

Season	Interscholastic	Alternative
FALL	Soccer Cross Country Field Hockey (girls)	Theater (principals only) Tae Kwon Do Zoo squad Outdoor Education Riding Strength & Conditioning (upper forms only) Racquet Sports Rec. (upper forms only)
WINTER	Basketball Ice Hockey Squash	Dance Ensemble Zoo Squad Recreational Skiing/snowboarding Improv. Theater Team Strength & Conditioning (upper forms only)
SPRING	Baseball Tennis Lacrosse Golf Softball (girls)	Musical Theater (principals only) Zoo Squad Riding