

UPPER SCHOOL COURSE OF STUDY

The curriculum of the Birch Wathen Lenox Upper School is designed to produce positive learning outcomes in the following areas: knowledge and understanding; critical thinking and investigation; creativity and appreciation of aesthetics; personal and social growth; and development of values.

To meet the goals of the academic curriculum the following minimum graduation requirements have been established:

English	4 years including one Senior Elective
History	3 years including the study of World History (2 year sequence) and American History
Mathematics	3 years at high school level including 2 years of Algebra and 1 year of Geometry
Science	3 years of Laboratory Sciences: Biology, Chemistry, and Physics
Languages	3 years of one language through Level III
Fine Arts	2 years Art Grades 9 and 10, which includes Digital Photography, Visual Storytelling and Studio Art
Music & Performing Arts	1 year Music course in Grade 9. Students can choose from any of the Music course offerings to fulfill this requirement.
Physical Education	4 years including Health Education in Grade 9.
Elective Credits	Additional courses from academic and non-academic disciplines are to equal a minimum of 5 courses each semester each year. Six courses are strongly recommended.

Special Programs

The normal program for students in grades nine through twelve is six courses per year, plus Physical Education, and certain extra required courses that meet once or twice per week, such as Art History, Health, Junior and Senior Seminar. A program of fewer than six courses or more than seven courses may be taken only with the approval of the Upper School Head. Each student is guided through the course selection process by an advisor. At the end of each year, the student's school transcript is reviewed in order to be certain that requirements are being fulfilled and appropriate electives taken.

The extended curriculum at the Birch Wathen Lenox Upper School is focused on having our students interact with the community. The extended curriculum contributes to the personal and social growth of our students and increases their awareness of the larger community through their involvement in a guided program of community service. Included in this aspect of the curriculum are:

Community Service

The Birch Wathen Lenox Upper School has a thriving community service program. We view service as an essential part of our mission to instill the values of integrity, loyalty, and civility in each of our students, and therefore, we strongly encourage our students to engage in meaningful, impactful service, both inside and outside of our school community. The Dean for Student Life is dedicated to helping students find suitable service opportunities.

Senior Project

Beginning after Spring Break, all seniors will immerse themselves in a professional environment in lieu of the fourth quarter of academic classes. Projects may consist of community service, an internship, or employment. While all projects are subject to the approval of the administration, each student will work with a faculty mentor to secure an appropriate and fulfilling position.

Students should expect to devote a minimum of 20 hours per week to their project. Students taking AP courses in their senior year will participate in a modified Senior Project, while still attending their AP classes.

ENGLISH

English IX: Foundations of Literature

5 periods

(Required, Freshmen) In the first year of English in the Upper School, students read a range of literary classics including *The Odyssey*, *A Raisin in the Sun*, *The Catcher in the Rye*, and *A Midsummer Night's Dream*. Students will sharpen their analytical skills through discussions and written assignments.

English X: World Literature

5 periods

(Required, Sophomores) In nine months, this class touches upon the literary contributions of five continents and covers the four major genres. Through classroom discussions, debates, a healthy amount of writing assignments and grammar as needed, the course intends to shape articulate English students, ready for the upper levels of high school. Texts may include *Things Fall Apart*, *Othello*, *Night*, *Frankenstein*, *The Kite Runner*, *Master Harold and the Boys*, *Persepolis* and others.

English XI: American Literature

5 periods

(Required, Juniors) This course will examine the development of the American identity from the Puritan era to the present. We will ask three central questions: What is the American Dream as opposed to the reality? What does it mean to be an insider/outsider? How do race and gender affect the lens through which social mobility is both experienced and viewed? Ultimately, students will gain insight into their own lives through the discussion of aspiration, identity and social class. Authors may include Baldwin, Dickinson, Emerson, Morrison, Fitzgerald, Frost, Hawthorne, Hemingway, O'Brien, O'Connor, Miller, Roth, Plath, Sexton, Whitman, and Wright, many of whose themes coincide with the students' American History class.

AP English

5 periods

(Elective, Seniors, by permission of instructor) In AP English, students will read celebrated novels, poetry, drama, and short stories ranging from the 16th century to 21st century. During highly interactive seminars, students will learn to discuss literature, and write about it, based on careful observation of textual details, such as the work's structure, diction, style, theme, tone, etc. In addition to rigorous classroom discussions and writing assignments, students will also analyze the historical and cultural context of our different texts. Throughout the year, we will practice the structured writing and close reading skills that will lead to success on the AP Literature and Composition exam in May. Authors include: Shakespeare, Austen, Ibsen, Woolf, Hurston, Joyce, and Chekhov, among others.

Rhetoric and Media Analysis

4 periods

(Elective, Seniors) There is a constant stream of messaging being delivered to us everyday from all sorts of media: major news organizations, social media platforms, talk shows, and even the people you speak with every day. Which messages break through the media clutter and why? What is the difference between the media and journalism we should trust, and the media we shouldn't? How do different audiences understand these messages? How can you develop your voice to be heard among the crowd? This course will use the study of rhetoric to help answer these questions. Students will learn rhetorical theories and structures, analyze various media formats such as journalism, social media, and public speeches, learn to write a rhetorical analysis, and develop their own speeches and editorials for the school newspaper.

Studies in Shakespeare

Short Stories and Creative Writing

4 periods

(Elective, Juniors and Seniors) For students who enjoyed reading Shakespeare in previous years, this first semester class will explore four more of the Bard's plays - examining the language, discussing the plot, and exploring the themes within *The Tempest*, *Hamlet*, *Macbeth* and *King Lear*. Analytical writing will be a key component of the class, but we will also mix in performance of some of the most famous scenes and speeches from each of the plays.

Please note: Studies in Shakespeare will lead into Short Stories and Creative Writing

A vividly written snapshot of a single moment can seem to effortlessly capture a lifetime; however, writing a great story takes, among other things, hard work and technical mastery. In this one quarter course, we will study the craft of the short story both through reading models of great stories and then

writing our own creative pieces. We will explore elements of craft such as tone, symbols, point of view, and dialogue through both creative exercises and expository writing. We will read a variety of masters including Hawthorne, Kafka, Chekhov, Carver, Jackson, O'Connor, Baldwin, Hemingway and Kincaid.

Poetry Workshop

4 periods

(Elective, Juniors and Seniors) In this Honors English course we will write extensively. Each student will be expected to contribute an original project to an end of year Poetry Festival, keep daily writing logs, submit poems to contests, and give readings. This course will move at a faster pace than the typical English course and will require more in-depth analysis. Throughout the course we will explore the question "What is Poetry?" Undoubtedly, poetry is a craft as well as an art, but poems don't just happen--they are made. In this workshop we will learn the tools poets use to craft their poems. Construction and experimentation, exploration and imitation, poetry as play and poetry as social movement. The poetry workshop is open to all, including dancers, thespians, musicians, athletes and computer scientists. When we meet we will share our work with each other, read and discuss, and always write! Come to the workshop to find your voice and to discover the joy of a thousand year old practice.

HISTORY

History IX:World I

5 periods

(Required, Freshmen) World History is part of a two-year sequence, with the ninth grade covering material from the Stone Age up to the Renaissance and Reformation. The course will cover both Eastern and Western civilizations and cultures, and will emphasize comparative political, economic, social, and intellectual developments and interactions.

History X:World II

5 periods

(Required, Sophomores) This course is a continuation of the ninth grade program. Major topics to be treated in depth will include the Industrial Revolution, Nazism, and Communism, World Wars I and II, and the evolving relationships between Europe, Asia, and Africa.

History XI:American

5 periods

(Required, Juniors) This course is designed to introduce students to the major events, topics, themes, and people of American history. It is organized chronologically, moving from the Age of Exploration to the end of the Cold War. Within this framework, emphasis is placed on developing an interdisciplinary understanding of each period. Besides political history, the course stresses economic development and culture and the relationships among them.

History XI:AP American

5-6 periods

(Juniors, AP by permission of instructor) This course is an in-depth survey of American history that combines a study of political, economic, intellectual, and social history with training in the techniques of historical analysis. A textbook will supply a basic framework, but most of the reading will be drawn from primary sources and the work of historians. The aim of this course is to broaden the students' understanding of the nature of history, with particular attention to those groups whose lives and concerns are often omitted from traditional history courses. Discussion is an essential element of the course, and students will be expected to deliver seminar reports in addition to weekly essays; writing assignments will develop the student's ability to select evidence, to analyze sources, and to organize ideas. Students who successfully complete additional requirements will be prepared to take the Advanced Placement examination in American History. This course requires intensive writing.

Constitutional Law: An Introduction to the Bill of Rights

4 periods

(Elective, Juniors and Seniors) This course will provide an introduction to the meaning of and legal precedents interpreting the U.S. Bill of Rights, which are the first ten amendments to the United States Constitution. The focus will be the key decisions of the U.S. Supreme Court respecting the following Amendments: First (freedom of speech, press, religion and assembly); Second (right to bear arms); Fourth (no unreasonable searches or seizures); Fifth (protection against double jeopardy, compelled self-incrimination and deprivation of life, liberty or property without due process); Sixth (right to a speedy trial before an impartial jury, to be represented by an attorney and to cross-examine witnesses); and Eighth (no cruel or unusual punishments or excessive bail). The course will also include a review of the basis of the right of judicial review – a court's right to review and find unconstitutional the laws and actions of the federal and state governments.

History Since 1990

4 periods

(Elective, Juniors and Seniors) This class picks up where the World History and American History courses often stop: the late 1980s. The goal is to give you a chance to understand the impact of events and developments that took place since then: the dissolution of the Soviet Union, the rise of China as an economic powerhouse, growing income inequality, the invention of the internet, 9/11 and the invasion of Iraq, white nationalism in the U.S. and elsewhere, the tense relations with Russia, and accelerating global climate change, to take some prominent examples. Since there is no satisfactory textbook treatment for almost any of this, we will rely mostly on articles and film.

New York: A Living History

4 periods

(Elective, Juniors and Seniors) This course will look at New York's history from pre-European contact through the present day. It will cover pivotal moments in New York's history, such as the fabled \$24 purchase of Manhattan, the development of business and the arts, and the rise of the modern metropolis. Students will encounter a variety of primary and secondary sources to further their understanding of the city's history, including *The Island at the Center of the World*, by Russell Shorto, *Gotham: A History of New York City to 1898*, by Edwin Burrows and Mike Wallace, and *Empire City*, by

Kenneth Jackson. This course will also focus on themes such as race, gender, pop culture, and social reform, and students will use the city as a living resource to aid in their learning. Students taking this course will look deeply into the social, political, economic, and intellectual changes that have occurred throughout New York's history, and evaluate how they have shaped the city into what it has become today.

MATH

Algebra I

6 periods

(Required) This course is designed to secure the basic skills of algebra. Topics include evaluation of expressions and formulas, properties of numbers, solving linear and quadratic equations, real numbers, factoring, inequalities, relations and functions, graphing, radicals and polynomials, and problem solving. Students also apply algebraic concepts to geometry, statistics, and probability where appropriate. The TI-83 graphing calculator is used not only as an aid in calculation but also to help teach functions and graphing. (Students who have taken Algebra I in eighth grade will take Algebra II in tenth grade.)

Algebra II

5 periods

(Required) Algebra II is an intensive course where practice in the fundamentals of algebra is continued and extended to include introductions to the more advanced concepts. Topics covered include linear and higher degree equations in one, two and three variables, inequalities, the quadratic formula, functions, conic sections and complex numbers. A wide range of word problems help students integrate the basic ideas of algebra into their everyday lives as well as other school subjects. The TI-83 graphing calculator is used extensively, not only as an aid in calculating, but also to teach concepts about functions and their graphs.

Geometry

5 periods

(Required, Freshmen and/or Sophomores) This course is a study of Euclidean geometry in the plane with some work in three dimensions. Emphasis is given to the logic of geometry and to developing an appreciation of deductive reasoning. Topics covered include parallel lines, congruent triangles, quadrilaterals, similar triangles, the Pythagorean Theorem, circles, and area. Emphasis is also given to problems that apply geometric concepts to real-life situations in areas such as sports, space, biology, health, architecture, geography, history, art, and literature.

Precalculus

5 periods

(Elective, Juniors and Seniors) This course begins with both a review and an extension of advanced algebraic concepts. The two major topics emphasized are exponential and logarithmic functions and rational functions with asymptotes. The second semester consists of a thorough study of trigonometric functions, graphs, identities, and equations. The course concludes with introductions to sequences. The TI-83 calculator is incorporated into the curriculum and is used daily during class. The course is demanding, and equally stresses applications and skills together with the capacity to develop clear mathematical thinking.

Precalculus Honors

5 periods

(Elective, Juniors by permission of instructor) This course begins with both a review and an extension of advanced algebraic concepts. The two major topics emphasized are exponential and logarithmic functions and rational functions with asymptotes. There is a thorough study of trigonometric functions, graphs, identities, and equations. The second semester includes an introduction to sequences and series, parametric, polar and vector functions, limits, and an introduction to basic rules of differentiation. The TI-83 calculator is incorporated into the curriculum and is used daily during class. The course is demanding, and equally stresses applications and skills together with the capacity to develop clear mathematical thinking.

AP Calculus AB

7 periods

(Elective, Seniors, by permission of instructor) This course will cover the syllabus for the Advanced Placement Calculus AP Examination. Topics covered include limits, rules of differentiation, practical applications of differentiation, Rolles' Theorem, Mean Value Theorem, extrema, The Fundamental Theorem of Calculus, methods of integration, and practical applications of integration. The TI-84 graphing calculator is used extensively throughout the course.

AP Calculus BC

7 periods

(Elective, Seniors, by permission of instructor) This course will cover the syllabus for the Advanced Placement Calculus AP Examination. Topics covered include limits, rules of differentiation, practical applications of differentiation, Rolles' Theorem, Mean Value theorem, The Fundamental Theorem of Calculus, extrema, methods of integration, and practical applications of integration. In addition to the topics listed under AB Calculus, students will explore many ideas presented with functions in parametric, polar and vector form. Additional techniques of integration are covered as well as infinite series and Taylor series. The TI-84 graphing calculator is used extensively throughout the course.

AP Statistics

6 periods

(Elective: Juniors and Seniors, by permission of instructor) This course will cover the syllabus for the Advanced Placement Statistics Examination. The four conceptual themes in the course are:

1. Exploring Data: Describing patterns and departures from patterns
2. Sampling and Experimentation: Planning and conducting a study
3. Anticipating Patterns: Exploring random phenomena using probability and simulation
4. Statistical Inference: Estimating population parameters and testing hypotheses.

Students will investigate the properties of many different types of distributions. These include the standard normal, t-, binomial, chi-squared, and others. The inference section includes an in-depth look at confidence intervals. This class will include many real-world situations that are both challenging and interesting. Students will make use of the TI-83 or TI-84 extensively throughout the course.

Calculus 12

5 periods

(Elective, Seniors, by permission of instructor) This course will cover the fundamentals of calculus, but at a slightly slower pace and intensity than the AP Calculus courses. Topics covered include limits, rules of differentiation, practical applications of differentiation, Rolles' Theorem, Mean Value theorem, extrema, methods of integration, and (time permitting) practical applications of integration. The TI-83 graphing calculator is used extensively throughout the course.

Finite Mathematics

4 periods

(Elective, Juniors and Seniors) This course will be focused on developing business plans (Shark Tank style!), investing in the stock market, and we will spend a lot of time on marketers and their sales tactics. Business plans and marketing will cover the first part of the course, investing – the second. In the first semester, you will learn about a company's legal structure, how to develop a business plan and learn about various aspects of operating a business. And you will learn about ways marketers use psychology to get us to buy their products. In the second semester, we will look briefly at the banking industry and its characteristics and spend most of the time learning about the world of investing (i.e. stocks, bonds and mutual funds).

Personal Finance

1 period

(Required, Seniors) Once students graduate from high school and their next phase in their adulthood begins, they will be required to make financial decisions for which they may be unprepared. This is a Pass/Fail course required for all seniors, with the purpose of ensuring they'll have the information to make prudent financial decisions. Topics in the course will include how to create a budget, prepare income tax, review bank statements and balance accounts, and invest for retirement. By the course's end, students will have learned about apartment leases, the purchase of a home, the pitfalls of credit card debt, and the cost of living as it relates to location and projected income.

SCIENCE

Science IX: Biology

6 periods

(Required, Freshmen) This is an introductory course that covers the basic principles of biological science. Biology is presented both historically and conceptually, relating the material to everyday life wherever possible. In the laboratory, students have the opportunity to gain experience in scientific methods and to observe biological theories in action. The course aims to give students a broad exposure to biological concepts.

Science X: Chemistry

6 periods

(Required, Sophomores) This full-year survey course offers students sufficient elementary theory and descriptive material for a complete and thorough program of study. It prepares the student for future science courses both at the high school and college level. The laboratory work stresses understanding of chemical concepts, basic laboratory techniques, and the development of scientific accuracy. Material covered includes stoichiometry, electronic structure, gas laws, chemical bonding, organic chemistry, kinetics, equilibrium and acid-base theory, redox reactions, and nuclear chemistry.

Science XI: Physics

6 periods

(Required, Juniors) This is a full year laboratory-based course that will focus on the laws and principles connected to the concepts of matter, force, and energy. A strong emphasis will be placed on developing an understanding of the physics associated with our daily lives. Set within this context, this course will explore traditional topics such as mechanics, light, sound, and electricity. We will also extend our inquiry into advances being made in the most current lines of research and will probe even further into what scientists believe lies in our future.

AP Biology

7 periods

(Elective, Seniors by permission of instructor) This is a college-level full-year biology course. The content of this course closely follows the syllabus outline of the CEEB Advanced Placement Course Description, and each student has the option to take the Advanced Placement exam. Through this course students receive an in-depth understanding of biological processes and principles. Students will be introduced to such things as biostatistical tools used in research, appropriate computer applications, gel electrophoresis, and other advanced laboratory techniques. Students will also be made aware of the controversial aspects of modern biology and of the professional opportunities available to them.

Prerequisite Chemistry and Biology I.

AP Physics *Precalculus Required*

7 periods

(Elective, Seniors, by permission of instructor) This is a college-level full-year physics course. The content of this course closely follows the syllabus outline of the CEEB Advanced Placement Course Description, and students will take the Advanced Placement exam in May. This course involves an Algebra and trigonometry understanding of physical phenomena, problem-solving techniques, and, where possible, the application of physics to other disciplines. Topics covered include but are not limited to fluid mechanics, thermodynamics, electro-magnetism, waves and optics as well as modern nuclear physics. A laboratory component is incorporated to give students concrete experience with the concepts that are studied.

Astronomy

5 periods

(Elective, Juniors and Seniors by permission of instructor) This full-year survey course is designed to introduce the students to the fundamental principles of the study of the heavens. The course will look at an array of topics from prehistoric star gazing to modern ground and space-based studies of the sky. Although basic characteristics of our solar system are always covered, the course is tailored each year to the interests of the students and advances based on continuing research in this field. Assessment is partially based on traditional methods such as homework, quizzes, and tests, but there are also more student-driven assignments such as analysis of astronomical articles in the news and group projects and presentations. The students also benefit from a visit to the Rose Center at the American Museum of Natural History.

Human Anatomy and Physiology

5 periods

(Elective, Juniors and Seniors by permission of instructor) This full year science course will enable students to learn about the structure and function of the various human organ systems. A primary focus throughout the course will be understanding the concept of homeostasis, or how the human body is able to maintain a state of healthy balance despite external changes. This will be a lab-based course and there will be a number of lab activities designed to enable students to understand the inner workings of their own physiological mechanisms.

WORLD LANGUAGES

French I

5 periods

Covering basic structure and vocabulary, this course provides a strong foundation in speaking, listening, and comprehension for beginning French students. Elementary grammatical and idiomatic structures are introduced, as well as appropriate reading material. Students learn to communicate about a variety of topics, and engage in conversations to develop their self-expression. Students also gain an understanding of the Francophone culture.

French II

5 periods

This course enables students to develop their confidence and ability to use French in a broader range of situations by building upon vocabulary and grammar learned in French I. Short stories, newspaper articles, various media and cultural lessons broaden their knowledge and understanding of the French culture and serve as a basis for discussions and writing assignments.

French III

5 periods

This course continues to feature a review of basic and intermediate grammar concepts in order to create a strong foundation for more abstract and advanced elements of the language. Students further develop their vocabulary and acquire an ever-expanding communicative ability, as well as an increasingly detailed understanding of the Francophone culture. Discussions are conducted in French, and students are

expected to ask questions, respond, and discuss in basic French. In addition to written and oral assessments, students are evaluated through personal compositions, reading comprehension assignments, and individual projects.

French IV

5 periods

Intensive study of grammar continues in this course, as students strengthen their language skills by reading short stories, newspaper articles, and poetry. The class is conducted in French to develop fluency. All aspects of language study (reading, writing, speaking, and listening) are addressed. The course includes conversation and discussion, composition, and reading of literary and non-literary texts such as current periodicals. The study of relevant cultural topics continues.

French V: Advanced Grammar and Writing

5 periods

This class will enable advanced students to hone their knowledge and mastery of oral and written French language. Complex grammatical structures and specialized vocabulary lead the way to a more sophisticated linguistic level and greater cultural insight. An increased level of fluency is attained through oral activities, including role-playing discussions and/or presentations on pertinent topics, or literary readings. Purposely chosen audiovisual sources will enable students to reinforce their aural comprehension. Compositions complying with the French dissertation format will be written on a wide variety of subjects.

AP French Language

6 periods

(Elective, by permission of Language Chair) Designed to meet the requirements of the Advanced Placement examination in French language, this course is open to qualified students who have completed French IV. Students work intensely to strengthen their skills in all aspects of the language: aural/oral skills, reading comprehension, grammar, and composition. Students will be given assignments over the summer, and they will take several practice AP exams throughout the year. This advanced study of French deepens the students' understanding of the structure and semantics of French through their own writing, speaking, discussion, and analysis of advanced literary and journalistic texts. Students in this course are expected to take the Advanced Placement examination administered at the end of the year.

This course presents students with thematically integrated vocabulary, grammar, and culture leading to communication on a wide variety of topics. Students develop the ability to understand, write, and speak French. In partner and group activities, they engage in conversations to provide and obtain information, express feelings and emotions, and communicate opinions. Students gain an understanding of Francophone cultures through making comparisons with their own cultures.

Spanish I

5 periods

This course presents students with thematically integrated vocabulary, grammar, and culture leading to communication on a wide variety of topics. Students develop the ability to understand, write, and

speak Spanish. In partner and group activities, they engage in conversations to provide and obtain information, express feelings and emotions, and communicate opinions. Students gain an understanding of Latin American and Spanish cultures through making comparisons with their own cultures.

Spanish II

5 periods

This course enables students to develop their confidence and ability to use Spanish in a broader range of situations. They become more proficient communicators by building upon vocabulary and structures learned in Spanish I. Varied activities and special projects encourage oral and written expression. Students continue gaining an appreciation of Spanish and Latin American cultures through more advanced readings and research.

Spanish III

5 periods

In this course, oral fluency is further developed. Students expand their vocabulary base, grammar skills, and knowledge of Spanish and Latin American cultures by reading, writing, and discussing.

Spanish IV

5 periods

The class is conducted in Spanish to foster fluency. Students make presentations based upon their research, hone their composition skills, and analyze literary texts. An emphasis is placed on idiomatic phrases, as well as cultural and semantic differences across Spanish-speaking countries.

Spanish V: Culture and Conversation

5 periods

This course is designed to further develop conversational skills. With emphasis on various genres of film, the students will also use newspapers, magazines, the Internet and other “authentic” materials to engage in informed discussion, and produce skits, oral and PowerPoint presentations. The study of grammar will focus on particular difficulties, such as the distinction between *por* and *para*, *ser* and *estar*, and the preterite and imperfect tenses to advance the students’ oral and writing proficiency.

AP Spanish Language

6 periods

(Elective, by permission of Language Chair) AP Spanish Language is intended for students who wish to develop proficiency and integrate their language skills, using authentic materials and sources. Students who enroll should have an advanced knowledge of the language and cultures of Spanish-speaking peoples and should have attained a reasonable proficiency in using the language. The AP Language course will help prepare students to demonstrate their level of Spanish communicative proficiency. The course is meant to be comparable to third year (fifth or sixth semester) college or university courses that focus on speaking and writing in the target language at an advanced level.

Chinese II

5 periods

This course continues building upon the skills acquired in Chinese I. Vocabulary and grammatical concepts focusing on telling time, speaking on the telephone, taking public transportation and writing a letter are studied to further develop oral skills, aural comprehension and writing skills.

Chinese III

5 periods

This course continues to build on the skills acquired in Chinese II. Vocabulary and grammatical concepts related to giving directions, ordering meals at restaurants, and describing the weather are presented.

Chinese VI: Culture and Conversation

4 periods

This course, conducted entirely in Mandarin Chinese, is designed to expand students' communicative skills in Chinese and to deepen their cultural knowledge related to the Chinese-speaking world. A variety of texts will be discussed, including, news articles, ads, and films. Students are expected to actively participate in discussions and presentations.

Japanese I

4 periods

This course introduces the Japanese counting vocabulary. Students learn how to read a calendar, tell time, and express age as they become familiar with basic Japanese sentence structure. The elements of the phonetic alphabet of *Hiragana* and, subsequently, *Katakana*, are introduced.

Japanese II

3 periods

This course continues to build on the skills acquired in Level I. By learning such verbs as *to go*, *to come*, and *to return*, students develop their ability to compose more informative sentences and to communicate about a wider range of topics. As they improve their knowledge of the layered use of *Hiragana* and *Katakana*, students become more proficient at writing and reading Japanese.

Japanese III

3 periods

This course presents vocabulary to express ownership, preferences and suggestions while also building upon the skills acquired in Japanese II. The use and formation of adjectives and the *Kanji* writing system are introduced.

Japanese IV

4 periods

This course reinforces and builds upon the vocabulary and structures acquired in Japanese III. Students are better able to talk about their daily lives in simple conversation. They develop their ability to write words in *Kanji*, using the appropriate strokes and shapes. Students will be able to write letters and give a speech in Japanese by the completion of the course.

Japanese V

3 periods

Students in Japanese V will be able to increase their ability to express themselves in Japanese through themes such as 'Japan Festival', 'A Town Rich in History and Culture', and 'Life and Eco-friendly Activities'. The contents they will learn include how to recommend things, give instructions, and make

suggestions. They will acquire grammatical concepts such as potential verbs, conditional terms, and comparisons.

ART

Digital Photography/Visual Storytelling

1 double period

(Required, Freshmen) Art students will be using their cell phones as cameras to create a visual narrative, displayed in self-published books. We will focus on design elements, such as editing, font style, layout, and a short essay explaining the project. Class time is spent reviewing students' photographs, while they articulate their intent and artistic choices. Class participation is essential.

10th Grade Art/Photography

1 double period

(Required, Sophomores) This half-year course will explore a wide range of topics such as collage, self-portraiture, depictions of poetry and the urban landscape through photography. Much of the class time will be spent critiquing and analyzing each student's work in progress. This is an invaluable time to practice how to speak about one's intentions and receive constructive criticism from their peers. This skill will no doubt affect each student's confidence and ability to express themselves with thought and clarity. When we are not reviewing work there will be opportunities for in-class photo shots where instruction and collaboration may take place. When weather permits as a class we will explore Central Park and the surrounding neighborhoods. Each project will provide an opportunity for students to express their feelings and the way they perceive the world through the lens of a camera. They will be encouraged to take chances, embrace their creative side and dare to make something really amazing.

Studio Art XI

2 double periods

(Elective, Juniors, by permission of department) Studio Art XI stresses continued exploration of media and development of skills. The various drawing media are used realistically and abstractly. The second semester focuses exclusively on oil and acrylic painting techniques. All students complete a final painting project. A private sketchbook journal is kept.

Studio Art XII

2 double periods

(Elective, Juniors and Seniors by permission of department) This course continues the activities and emphasis of Studio Art XI and offers specific preparation of a college entrance portfolio. There is a focus on painting with the completion of a Senior project by each student. Finding one's own personal statement is the goal of this advanced studio course.

Prerequisite: Studio Art XI.

Photography I

2 double periods

(Elective, Juniors and Seniors by permission of department) This year-long course is structured around the students learning both technical and aesthetic skills. Camera assignments are given and darkroom techniques are taught. During the second semester, the students are encouraged to choose a theme or style of photography to explore more fully.

Photography II

2 double periods

(Elective, Seniors by permission of department) This year-long course focuses on the development of a personal style. Slide lectures and discussions revolve around analyzing work by master photographers and the students' own work. The final project involves the making of 11" x 14" enlargements and a portfolio in which to present their work.

COMPUTER SCIENCE

Introduction to Computer Science

3 periods

(Elective: Sophomores, Juniors, and Seniors) In this project-based course, students will investigate computer hardware and software from many different perspectives. The first semester of the course builds competency in computer electronics through hardware builds, followed by a review of web design and development using HTML/CSS. The second semester focuses on algorithmic thinking and computer programming using the Python language. Topics of study include problem analysis, data structures, control structures, program design, and basic algorithms. The course culminates in an exploration of game development with Pygame. Throughout the year, the legal, social, and ethical issues associated with use of technology in modern society will be examined. Students will also be exposed to a variety of possible career paths in computer science, technology, and engineering.

AP Computer Science

6 periods

(Elective: Juniors and Seniors. Prerequisite: Introduction to Computer Science or permission of instructor) The AP Computer Science course is designed to provide students with an introduction to topics in computer science and software engineering, including problem analysis, design of algorithms, data structures, control structures, and writing computer programs using the Java programming language. Advanced topics in the course include object-oriented programming, recursion, and searching and sorting algorithms. This course follows the College Board *AP Computer Science A* curriculum, which is designed to cover the topics typically taught in the first semester of a college-level CS course. All students will take the Advanced Placement examination in May, which gives the opportunity for students to earn college credit in some circumstances. Assignments, projects, and assessments will be both hand-written and coded on computers, and will range from short, individual assignments to long-term, team-based projects. The course contains a laboratory component, and students are expected to have access to a computer outside of class for at least three hours per week.

Advanced Topics in Computer Science Honors

5 periods

(Elective: Juniors and Seniors. Prerequisite: AP Computer Science and/or instructor permission) This course offers highly motivated students the opportunity to expand on the skills learned in the Introductory and AP Computer Science courses. The Advanced Topics class is geared towards giving

students a look at more abstract concepts that are typically covered in the second semester of a college-level CS course. Data structures, and algorithms using those data structures, will be explored in detail. Subjects of study include sorting and searching, algorithm analysis with Big O-notation, stacks, queues, and linked lists, recursion, trees, and graphs. Development of these theoretical topics is reinforced by assignments and projects coded with the Python language, and will range from short, individual assignments to long-term, team-based projects. Prior experience with Python is not mandatory, as the course begins with a Python “bootcamp” to bring everyone up to speed in that language. In class, each student needs a laptop computer with an Apple, Microsoft, or Linux operating system installed.

MUSIC AND PERFORMING ARTS

A Cappella

2 periods

(Elective, Grades 9-12, by audition only) Students who have auditioned for BWL's a cappella groups will rehearse at least twice a week, and perform at many events including the Holiday and Spring concerts. Rehearsals concentrate on vocal technique, ear training, and ensemble work. These rehearsals are expertly taught by a former member of the renowned Yale Whiffenpoofs. The MsChords is an all-girls ensemble, and the Beaux Ties is an all-boys ensemble.

Vocal Ensemble

2 periods

(Elective, Grades 9-12) Vocal Ensemble is open to all students in Grades 9-12. Upper School Vocal Ensemble performs twice a year at the Holiday and Spring concerts. Students will learn basic vocal and performance techniques.

Instrumental

1 period

(Elective, Grades 9-12) This ensemble focuses on Upper School students who wish to continue their studies in the violin, viola, and cello. It is a full year class that learns advanced and varied repertoire to perform in the Holiday and Spring concerts.

Rock Band

1 period

(Elective, Grades 9-12, by audition only) Rock Band is a combination of instrumental workshop and performance ensemble. Students pick repertoire based on interest and ability, and learn arrangements of a variety of rock, pop, and jazz classics. Rehearsals culminate in performances at the Holiday and Spring concerts.

History of American Popular Music

1 period

(Elective, Grades 9-12) An overview of American popular song and recording, with an emphasis on key styles, genres, techniques, artists and trends over the past 150 years. The subject is explored in context of the major events and trends of American history and culture. Numerous recorded examples from popular music will be presented, discussed and analyzed.

Theater Performance Master Class

2 periods

(Elective, Grades 9-12) This full-year course will give students an overall idea of what goes into creating a successful performance on the stage. Students will be active members of this class by getting up and 'performing' each week. Students will spend 2-3 weeks at a time focusing on various topics including improvisation, monologue work, scene study, and musical theatre, among others. Special guest teachers will drop by throughout the course to teach unique specialties and discuss their experience in the professional theatre world. The year will culminate in a showcase for friends and family.

Puppet Theater

2 Periods

(Elective, Grades 9-12) Explore all of the ways objects can come to life and help us tell captivating stories. This course is a project-based, hands-on exploration of various styles of puppetry including object theater, shadow puppetry, marionette, Bunraku-style, and toy theater. We'll practice making and manipulating puppets of each style, and investigate the ways they can be incorporated into live performance. We'll also take a look at the historical development of puppetry in cultures around the world. The course will culminate in the creation of original short puppet plays.

Theatrical Productions After school & some weekends

(Scheduling Varies Per Student & Production) There are three performance opportunities for students interested in theater. Auditions for the fall play take place in September with performances in the BWL auditorium occurring in Mid-November. In early December, students can audition for the combined Upper and Middle School musical which takes place in March at an off-Broadway theater. Students who are interested in being involved in these productions, but may not be interested in performing, can sign up to be a part of our technical crew. Lastly, high school students are invited to be a part of our devised show in the Spring. The devised show is a student-run production where students can choose to write, direct, and/or act. The entire process is under the guidance of a member from the Theater Department faculty.

PHYSICAL EDUCATION

Physical Education, as outlined by the New York State Department of Education, is one of the six 'core' requirements for graduation. The Physical Education Department takes this responsibility seriously and strives to help each student successfully complete varied Physical Education activities. Our philosophy is one of allowing students to participate actively in class and on teams, so as to fully realize their potential both as students and as athletes. All students are encouraged to reach their highest levels of achievement.

The development of basic fitness concepts for both immediate needs and the future demands encountered throughout life are emphasized. Students participate in a variety of activities that will help to satisfy their need for leisure-time activities with a life-long enjoyment and appreciation of the value of physical activities.

Students are given the opportunity to practice and learn a variety of fundamental motor skills through individual and group activities such as fitness and conditioning, badminton, cricket, basketball, touch football, softball, volleyball, soccer, and team handball.

Students in ninth through twelfth grades who are on varsity teams are exempted from Physical Education during their sport season to enable them to study during the school day.

Health

Students in the ninth grade must complete a course in Health Education required by the State of New York. The health class is a forum for the discussion of extremely relevant information. It provides students with an opportunity to identify their own attitudes and beliefs concerning critical health issues, as well as an opportunity to listen to the beliefs and attitudes of others.

Interscholastic Teams

Fall Varsity Soccer
Girls' Varsity Volleyball
Girls' Junior Varsity Volleyball Girls' Cross Country
Boys' Cross Country
Winter Boys' Junior Varsity Basketball Varsity Swim Team, Co-ed
Varsity Squash
Boys' Ice Hockey Team Boys' Varsity Basketball Girls' Varsity Basketball
Spring Boys' Varsity Lacrosse Girls' Varsity Tennis Boys' Varsity Tennis
Girls' Track and Field Boys' Track and Field Varsity Golf Team Boys' Varsity Baseball Girls' Varsity Softball

OTHER ELECTIVES

Newspaper

1 period

This not-for-credit course has as its primary objective the monthly to bimonthly publication of the school newspaper *The Clarion*. Students will be assigned "beats" or topics of coverage and will acquire journalistic experience in writing, layout, and editing as well as the real world expectation of meeting deadlines and attending to business matters. Staff members will meet once per week during the regularly scheduled class and then as necessary after school as an extracurricular activity.

Yearbook

1 period

This not-for-credit course will offer students a range of skills in the publishing field that has as its primary objective the completion of the annual yearbook, *Passages*. Students will acquire journalistic experience in writing and editing, as well as practical real world experience in meeting deadlines and attending to business matters. The class is organized in three sections:

- 1) The planning of our yearbook's theme and design, as well as the teaching and learning of yearbook fundamentals (desktop publishing programs, design, photography, copywriting and business management).
- 2) The production and application of all these learned skills, from the planning and designing of every page to the distribution and collection of all assignments. The yearbook staff will learn the fine art of coordinating and delegating responsibilities, which requires working as a cohesive whole towards a common endeavor.
- 3) The assembling, editing, and revising of the yearbook as it nears completion. Editors meet on Mondays and staff members on Thursdays, followed by after-school meetings.

Engineering: Robotics

BWL robotics students will work toward and participate in a series of robotics competitions throughout the year (FIRSTinspires.org). During the fall term, students prepare for the upcoming competition through a series of training sessions that focus on various aspects of robot design and construction. There is discussion of topics including modeling and design of common robot subsystems, programming and control systems, design and testing of sensors and actuators, and the safe use of hand and power tools. Most work with the team occurs after school.

An intense design and construction phase, known as “Build Season,” begins in January. During this time, students work together to brainstorm, design, construct, and test their one-of-a-kind robot. With only six weeks of build time, it is necessary for students to commit to many hours after the normal school day and some weekends. The year culminates with the annual FIRST NYC Regional competition at the Armory Track in the spring. The result—win or lose—is a fun, exciting, and stimulating environment in which all participants explore engineering concepts and learn valuable project management skills.

Library

Upper School students are encouraged to utilize the resources provided by the BWL Library. The library collection, consisting of print and electronic materials, is designed to meet the curricular needs of students and to promote lifelong interest in reading. Sources required for research assignments in all subject areas are placed on reserve for student use. In addition, numerous research databases and specific class “pathfinder” links are available through the BWL Library website. The librarian is available to assist in locating and using library materials.

COLLEGE COUNSELING

The College Counseling Team is comprised of the Director of College Counseling, the Upper School Head, and the Headmaster of the school. This team is committed to helping the students of Birch Wathen Lenox find appropriate college and university matches. While many of our graduates attend the most selective colleges in the country, we believe it is much more important that they find schools that “fit” them, schools where they are most likely to meet their full potential academically and personally. Through an individualized, supportive process, students are guided toward potential matches, taught

how to differentiate colleges and universities, and encouraged to fully research each of their prospects. The support and guidance of the College Counselor continues through the application stage and beyond, to when students make their final decisions.

While the College Counselor provides information and guidance during several meetings in students' freshman and sophomore years, the College Counseling process begins in earnest in the Junior year. Students take the PSAT in October of that year and receive their results during a one-on-one meeting with the College Counselor. During that meeting, the student's transcript performance to date is also discussed. Junior Seminar begins in the second semester. In this once-weekly class, students are introduced to tools and strategies to use during their college searches. As well, topics such as interviews, college visits, and the essay are covered in depth. At our Junior College Night in early spring, students and parents are invited to hear from two Directors of Admissions, listen to their advice regarding college admissions, and ask questions of them. Then, at the Manhattan College Fair, where Birch Wathen Lenox (along with ten other Manhattan private schools) hosts representatives from over one hundred and thirty colleges and universities, students can ask questions and request information from schools that interest them.

During the spring of their Junior year, students meet individually with the College Counselor, who provides college and university suggestions based on input from the student as well as the student's academic record and standardized testing. By the start of their Senior year, students are encouraged to have preliminarily narrowed their lists to approximately twelve to fifteen schools. Students meet with the College Counselor in early fall, first one-on-one and then along with their parents, to further refine their lists. During the months of September, October and November, representatives from over fifty colleges and universities visit Birch Wathen Lenox to meet with interested students, providing valuable opportunities for students to learn about their institutions; and at our Senior College Night, Seniors and their parents review the application process, along with in-house procedures. Students are free to meet with the College Counselor as often as they wish during the college process.

BWL STUDENT ACTIVITIES

The following activities are offered in the Birch Wathen Lenox Upper School. Students are encouraged to suggest new activities where appropriate and where a sizable group is interested.

- Birch Bots (FRC Robotics Team)
- Book Club
- Business & Finance Club
- BWL News
- Careers in Medicine Club
- D.A.I.S. (Diversity Club)
- Debate Team
- Drama Club (2 productions – Fall/Spring)
- Environmental Club
- Film Club
- Foreign Policy Club

Glamour Gals & Guys
Leaves (Literary/Photography Magazine)
Philosophy Club
Politics Club
Project EPIC
Prom Committee
Range (Fashion Magazine)
SAGA (Sexuality and Gender Acceptance)
Science Olympiad
School Spirit Club
Ski Club/Trip
Student Council
The Clarion (School Newspaper)
Women's Group
Yearbook
Young Conservatives