## 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 | $\begin{array}{l}\mathbf{3} \text { years including the study of World History (2 year sequence) and } \\ \text { American History }\end{array}$ |
| Mathematics | $\begin{array}{l}\mathbf{3} \text { years at high school level including } \\ \text { 2 years of Algebra and 1 year of Geometry }\end{array}$ |
| Science | $\mathbf{3}$ years of Laboratory Sciences: Biology, Chemistry, and Physics |
| Languages | $\mathbf{3}$ years of one language through Level III |$\}$| 2 years Art Grades 9 and 10, which includes Sculpture, Three- |
| :--- |
| Fine Arts |
| 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, Music 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 Director of Student Engagement 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 Midsummer Night's Dream, and Catcher in the Rye. Students will sharpen their analytical skills through discussion 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 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) This course presents a foundation of great literature, spanning centuries and genres, to motivated students. During highly interactive seminars, students will deconstruct the works so that they may reconstruct them through their own written analyses that develop from literary criticism, drafting, and ambition. Moving chronologically, the reading list includes select works from Shakespeare, Austen, Hawthorne, Conrad, Hemingway and Woolf, among others. Students will also read a variety of short stories and poems. Through the year, lessons will reinforce the structured writing and close reading skills that will lead to their success on the AP Literature and Composition exam in May.

## Rhetoric and Oratory

4 periods
(Elective, Juniors and Seniors) Political leaders like Eleanor Roosevelt, lawyers like Johnnie Cochran and entertainers like Chris Rock all understand the power of rhetoric. It can shape our culture and understanding of the world. This course will examine rhetorical devices and analyze both the written words and performances of influential speakers. In addition to the foundational works of Aristotle and Cicero, we will also study orators such as Abraham Lincoln, Emma Gonzalez, Robert F. Kennedy, Ronald Reagan, Dana Loesch, Barack Obama, Donald Trump, and Martin Luther King, Jr., among others. Students should come prepared to discuss the intricate mechanics of these orations, as well as the effects they have on an audience. Students will learn to write rhetorical analysis of others' works, as well as develop their own speeches to inspire, persuade, or entertain.

## Studies in Shakespeare <br> Short Stories and Creative Writing <br> 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, since these are plays written to be performed, not just read. Each student will be expected to learn at least one monologue to be performed before the rest of the class.

## Please note: Studies in Sbakespeare 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.
(Elective, Juniors and Seniors) This course introduces the basic tenets of journalism while encouraging the ongoing development of critical thinking and writing skills. The course offers a practicum on the basics of newsworthiness, interviewing and reporting, news writing, review writing, feature writing, editorial writing, and headline writing. You will be expected to read the newspaper daily, draft and revise several articles of various lengths and formats, submit articles to The Clarion, and to enter into the classroom discussions with an informed point of view. Additionally, we will read articles on discussion topics such as freedom of the press, journalism's code of ethics, the 24 -hour news cycle, the digital age, and the citizen journalist. Given time and interest, we may also delve into broadcast and digital news formats.

## 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: American/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' understandings 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.

## Sociology: Exploring Society

4 periods
(Elective, Juniors and Seniors) We live in a world that is rapidly changing. This course will introduce students to a variety of disciplines including the foundations of sociology, culture, social psychology, criminology, and social inequality. This course will give students insight on how and why society functions, while helping students understand who they are. Students will be introduced to several sociological theorists and their perspective on society and human behavior. Students will explore these perspectives and connect to the material through human observation activities, sociological experiments, and written reflections. Students will be able to explore society through hands on experiments as well as through documentaries, television shows, and movies. This course allows students to explore their creativity through collaborative work and social experiments. Students are encouraged to think outside the box and explore ideas that will help contribute to their comprehension
of society and human behavior. In doing so, students will develop the skills to view society from various perspectives. This course will help students develop greater awareness of how and why humans behave the way they do and how and why society functions the way it does.

## Civilization: Russia

4 periods
(Elective, Seniors) Civilization focuses on a country or region from many different perspectives. Past years have been devoted to the Caribbean, Southern Africa, China and India. For the 2019-2020 school year, we will be concentrating on Russia. This vast region has been home to many peoples, has seen the rise of imperialist Tsars, their downfall in 1917 during the Russian Revolution, the establishment of the Soviet Union and its disintegration. Russia has become one of the most powerful countries in the modern world, creating especially significant challenges for the United States. We will attempt to unravel the mysteries of Russia through a study of its history, geography, religions, politics, literature, the arts, film and through current events.

## The City and Society: A Social Work Perspective

## 4 periods

(Elective, Seniors) This course will examine the modern history of New York City in the 20th and 21st century through the social issues and movements that have taken place here. Using case studies from various sources, we will examine housing, health care, LGBTQ rights, veterans affairs, and other issues that have affected, and continue to affect, our city, using a social work lens on a micro (individual) and macro (citywide) scale.

## MATH


#### Abstract

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 ninth grade.)


## Algebra II

6 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.
(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

(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.

## 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.

## 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 <br> 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.

## Finite Mathematics

(Elective, Juniors and Seniors) This course differs from the previous Finite Mathematics. It will contain components of the financial investment world (stock and bond market, valuation, investment theory), accounting and financial statement analysis. The focus will be on learning terminology and basic formulas for real-world application. In addition, we will use formulas and concepts from practical mathematics for business applications and incorporate probability and statistics.

## 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. In specific cases where students are interested in taking the SAT II Biology exam, they should make their interest known to the instructor early in the year, so additional instruction can be provided.

## Science X: Chemistry

6 periods
(Required, Sophomores) This full-year survey course offer 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 Physics C: Mechanics Calculus 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 each student has the option to take the Advanced Placement exam. This course involves a calculus-based understanding of physical phenomena, problem-solving techniques, and, where possible, the application of physics to other disciplines. This course also incorporates programming techniques for analyzing experimental data and producing simulations to demonstrate physical ideas. A laboratory component is incorporated to give students concrete experience with the concepts studied; reports are written with the use of industry-standard software.

## Human Anatomy and Physiology

(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.

## 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.

## Biology AP

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.

## 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 <br> 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.

## Advanced Placement 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.

## Advanced Placement Spanish Language <br> 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 I

5 periods

This course introduces students to basic sentence structure, vocabulary and culture. By using the Integrated Chinese workbook and textbook, and other sources, including handouts, students develop oral skills, aural comprehension and written skills using simplified characters.

## 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 IV

5 periods
This class is conducted in Chinese to foster fluency and further reinforce the vocabulary and structures acquired in Chinese III. Students will be able to make appointments, describe health ailments and learn vocabulary to help them rent a residence.

## Japanese I

3-4 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

## 3-4 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

3-4 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

## 3-4 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.


#### Abstract

ART

Art IX: Digital Photography/Visual Storytelling I double period (Required, Freshmen) The ninth grade 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.


## Studio Art X

I double period
(Required, Sophomores) All students take a full year of Studio Art. The Studio Art class includes introductory drawing, collage, painting and composition. Museum visits will be incorporated into the class, which will each meet for one double period per week. All tenth graders will also take a one semester introductory Art History survey course which will meet one period per week.

## 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.

## Art: Advanced Ceramics/Sculpture

2 double periods
(Elective, Juniors and Seniors by permission of department) Advanced Ceramics concentrates on hand building techniques. There is emphasis on finishes, lustres, underglazes, china paints, and more traditional glazing. During the second semester, each student will complete an individual project.

## 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.
(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 " $\times 14$ " enlargements and a portfolio in which to present their work.

## Art History

## Fall or Spring, I period

(Required, Sophomores) This one-semester tenth-grade survey course combines slide lectures, discussions, assigned readings, and museum and gallery visits. The course encourages students to develop an appreciation of various art forms, to place art in an historical context, and to become knowledgeable about different theories of aesthetics.

## COMPUTER SCIENCE

## Introduction to Computer Science

## 3 periods

(Elective: Sophomores, Juniors, and Seniors; comfort with the use of computers, common software, and basic HTML recommended) In this course, students will investigate computer hardware and software from many different perspectives. Ethics in the application and use of computing technology will be discussed extensively. We will be working to improve software literacy and learn the basics of electronics through hardware builds. Students will also be introduced to formal programming through a series of JavaScript frameworks to develop graphical web applications and games. We will also be covering common industry tools and practices for development, including the use of UML diagrams and formal documentation techniques. Assessment is based on group discussions, homework assignments, and projects. This course is a prerequisite for the AP Computer Science A course.

## AP Computer Science A <br> 6 periods

## (Elective, Juniors and Seniors. Prerequisite: Introduction to Computer Science or permission of instructor)

 This course follows the College Board Advanced Placement curriculum. The main focus of the course is to design, analyze, and implement solutions to a wide array of problems. Students are introduced to the Java programming language as a means of accomplishing this goal. The course covers object-oriented program design and implementation, program and algorithm analysis, the creation of and interaction with common data structures, and the application of sorting and searching algorithms.Students will also discuss intellectual property law as it relates to software development, privacy and information security, and the social and ethical implications of computing. All students will take the Advanced Placement examination in May; this examination gives the opportunity for students to earn college credit in some circumstances. 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.

## MUSIC AND PERFORMING ARTS

## Music History <br> I period

(Required, Sophomores) This one-semester tenth-grade survey provides students with an overview of the history of Western music. The course covers key composers of the Medieval, Renaissance, Baroque, Classical, Romantic, Impressionist, and 20th-century eras, as well as important popular musicians of the 20 th century, contextualizing these composers and movements within their broader socio-political landscapes. Familiarity with seminal musical works is stressed, with students being taught to identify these works by ear.

## A Cappella

2 periods
(Elective, Grades 9-12) 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.

## Chorus

2 periods
(Elective, Grades 9-12) Chorus is open to all students in Grades 9-12. Upper School Chorus performs twice a year at the Holiday and Spring concerts, and is taught by Michael Roberts. Students will learn basic vocal and performance technique.

## Instrumental

I 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.

## Pop Co-op (Music Workshop) <br> I period

(Elective, Grades 9-12) Pop Co-op 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.

## Music Intensive <br> I period

Two or more electives from the Music Department can be grouped together to form one major course. The students will receive one general grade for both classes, which will be listed under "Music Intensive" on the transcript.

## Theater Performance Master Class

'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.

## Audition Technique

## 2 periods

(Elective, Grades 11 and 12) This class will be offered to $11^{\text {th }}$ and $12^{\text {th }}$ graders interested in auditioning for college theater or film programs and those who would like to submit a theater supplement/portfolio to enhance their college applications. The class will help each student pick and work through appropriate and challenging material, including monologues and songs. We will hold mock college auditions and bring in guest speakers who evaluate real-life theater applications. At the end of the year, everyone's material will be filmed and their package will be ready to submit to the college of their choice. This class is, also, appropriate for students looking to improve their general audition technique as well as those looking to enhance their audition book for professional or pre-professional auditions.

## Dance Technique \& Composition

## 2 periods

(Elective, Grades 9-12) This course will focus on the practice and creation of dance as an expressive art. Students will be introduced to various styles of dance from ballet, lyrical, musical theater dance, and/or tap. They will practice technique for each style and study the master choreographers that were instrumental in the development of each style. Additionally, students will learn the basics of choreography and practice developing their own dances both for solo performance and for small groups.

## Theatrical Productions After school \& some weekends

(Scheduling Varies Per Student E 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

I 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

I 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

I period
BWL robotics students will work toward and participate in a a series of robotics competitions throughout the year (usFIRST.org). During the fall term, students prepare for the upcoming competition through a series of classes that focus on various aspects of robot design and construction. The class serves as a planning period for students involved in the team. 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, outside of this class period.

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 competition at the Armory Track in the spring. The result-win or lose-is a fun, exciting, and stimulating environment in which all participants discover the important connection between classroom lessons and real world applications.

## Community and Social Conscience

I period
This non-credit course meets once a week for discussion of the ethical considerations of current events. Topics range from the use of Charity Navigator to judge the acceptability of charities you support to discussions of recent news articles. Students are encouraged to express their views and support their reasoning. Current community service opportunities may be researched and supported. Student leadership is encouraged.

## 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 COUNSELLING

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.

Book Club<br>Business \& Finance Club<br>BWL News<br>Careers in Medicine Club<br>D.A.I.S. (Diversity Club)<br>Debate Team<br>Drama Club (2 productions - Fall/Spring)<br>Environmental Club<br>Film Club<br>Foreign Policy Club<br>Glamour Gals \& Guys<br>Leaves (Literary/Photography Magazine)<br>Philosophy Club<br>Politics Club<br>Project EPIC<br>Prom Committee<br>Range (Fashion Magazine)<br>Robotics Team<br>SAGA (Sexuality and Gender Acceptance)<br>Science Olympiad<br>Ski Club/Trip<br>Student Council<br>The Clarion (School Newspaper)<br>Women's Group<br>Yearbook<br>Young Conservatives

