



# COURSE CATALOG

## 2022-23

AVON OLD FARMS SCHOOL  
STRIVES TO BE THE BEST SCHOOL FOR BOYS  
BY CULTIVATING YOUNG MEN OF INTEGRITY  
WHO HONOR WISDOM, JUSTICE, SERVICE,  
AND THE PURSUIT OF TRUTH.



*Avon Old Farms School admits students of any race, color, nationality, and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the School. It does not discriminate on the basis of race, color, sexual orientation, national, or ethnic origin, or disabilities in the administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other School administered programs.*



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# GRADUATION REQUIREMENTS

We believe that academic excellence is achieved by thorough instruction in the basic disciplines, the development of good study habits, and the opportunity to be challenged by increasingly complex subject matter. Because of the quality and experience of the faculty and the careful organization of time set aside for personal instruction and guidance, we believe that all boys will find a superior academic program at Avon Old Farms School.

With rare exceptions, all graduating seniors go on to college. Thus, Avon's graduation requirements closely parallel the admission requirements of many colleges.

**Avon students are expected to complete the following studies:**

English — Four years\*

History — Three years (including U.S. History)

Mathematics — Three years (Algebra 1, Geometry, Algebra 2/Trigonometry)

Science — Three years with intensive laboratory work (including Biology)

World Language — Two years of the same language

Arts — One credit

*\*The English requirement for graduation is four years, one of which must be either English 4 (two semesters), English 4 Honors, or AP Literature and Composition, taken in the senior or post-graduate year.*

Each year, a student pursues a program of studies consisting of at least five classes, including at least four core subjects chosen from the following disciplines: English, history, mathematics, science, world language, and art. In order to be eligible to receive an Avon diploma, a student must meet the requirements outlined above and satisfactorily participate in Intersession (described below). The School reserves the right to deny a diploma to any student who is not in good standing at the time of graduation due to academic or disciplinary reasons.

# ACADEMIC ADMINISTRATION



## **Grade 9**

### **Brian Cugell**

Academic Dean  
cugellb@avonoldfarms.com  
(860) 404-4233



## **Grades 10 and 11**

### **Jill Harrington**

Academic Dean  
harringtonj@avonoldfarms.com  
(860) 404-4176



## **Grades 12 and PG**

### **Robert Dowling Jr. '91**

Provost  
dowlingr@avonoldfarms.com  
(860) 404-4264



## **Graham Callaghan '95**

Dean of Studies  
callaghang@avonoldfarms.com  
(860) 404-4651



## **Trevor Stern**

Dean of Faculty  
sternt@avonoldfarms.com  
(860) 404-4512

# ENGLISH DEPARTMENT

*The English Department prepares students for college-level reading, thinking, and writing through an inquiry-based curriculum grounded in canonical and contemporary texts that explore global voices and perspectives. In the English classrooms, students cultivate empathy through the literature they read and the discussions they have with one another and the texts. Through varied styles and forms of writing, students develop written communication skills for college and beyond. In class discussions and community presentations, students develop their voices in their own pursuit of wisdom, truth, service, and justice.*

## **English 1 - Coming of Age Freshmen**

In English 1, students will build their foundational skills of reading and writing. Through the course theme of Coming of Age, students will investigate the Essential Questions: what does it mean to “grow up”? What are the different ways in which we mature across different cultures, backgrounds, and experiences? Our focus is to teach students to foster an appreciation for literature while developing composition skills and enhancing facility with language in order to communicate effectively through the written word. We will learn basic annotation and note-taking strategies interacting with classical texts such as *The Catcher in the Rye* and *Romeo and Juliet*, while also incorporating a wider range of genres and cultures including texts such as *Persepolis* and narrative short stories. Students will develop their writing skills at the foundational level in the first semester to build to formal analysis of a text. They will also develop conversation-based strategies for the classroom. By the end of the course, students will have developed foundational critical analysis and reading skills, including annotation and close reading, while developing the confidence to speak clearly about those analyses.

## **English 1 Honors Freshmen**

English 1 Honors challenges first-year students to develop their vocabulary, critical thinking and reading skills, as well as clarity and concision in their writing. Ample attention will be given to teaching the writing process, beginning with close-reading strategies, moving through brainstorming by using graphic organizers and on to outlining detailed responses that develop through closely considered commentary. Of course, copy-editing and revision are also critical stages in the writing process. Students work on developing sound fundamental writing skills at the level of the sentence and paragraph before moving on to more extended multi-paragraph writing assignments. The course seeks to engender a love of literature as well as to challenge the students as they read a variety of genre-based texts from short stories, poetry, plays, and novels. J.D Salinger’s *The Catcher in the Rye*, William Shakespeare’s *Romeo and Juliet*, Homer’s *Odyssey*, and Charles Portis’s *True Grit* have been used recently as foundational texts in this course.

## **English 2 - American Dreams and Discontents Sophomores**

In English 2, students will examine the question of what it means to be an American by identifying the core values of America and varied perspectives. Students will study early American writers like Michel Guillaume Jean de Crèvecoeur, and works like the Declaration of Independence to understand the foundation of early American identity while exploring the essential question of what it means to be an American. By reading African-American and indigenous fiction and non-fiction, including work by Frederick Douglass & Martin

Luther King, Jr., students will explore America's diversity and racial identity, as well as its tensions and injustices as they also relate to current events. Students will explore the various voices of American poetry throughout the country's storied history, while studying Individualism & personal freedom through *A Raisin in the Sun* by Lorraine Hansberry. And drawing upon *The Great Gatsby* and excerpts from *The Things They Carried*, students will be able to understand the ultimate cost of freedom & question what it means to "fight for America and the American Dream"—or against it, and debate which American values and behaviors are worth defending. Through exploring, comparing, and interrogating the assigned texts, this course is designed to reveal the depth of perspectives around understanding the American identity as it relates to race, established values, and the diversified American experience. To ensure sufficient practice with composition skills, students will write at least 2,000 words each quarter (i.e. about one page per week, through analytical, narrative, descriptive, and creative writing assignments, including poetry.)

## **English 2 Honors**

### **Sophomores**

Beginning with a close study of Early American and 19th Century American literature, English 2 Honors students will read broadly from the American literary canon as they consider how American values and American identity are reflected in different literary contexts. They will grapple with the question of what it means to be an American, and they will go on to read works from diverse and underrepresented voices in order to understand the true complexity of that question and to recognize that the American story is not a single story, but really an ever-expanding collection of stories. Class discussions, collaborative projects, and writing assignments will challenge students to not only consider these multiple perspectives but also to think more critically about how each storyteller endeavors to tell their story as well as the reasons why they feel compelled to share it. In writing, students will work to craft more sophisticated, nuanced pieces. Assignments will focus on developing detailed critical commentary that reflects more complex abstract thinking. Students will also think more deeply about their purpose for writing as they continue to cultivate and hone their own authorial voice. Course work will conclude with an extended written analysis of multiple major works studied during the year. American writers for study in this course have included Crèvecoeur, Rush, Emerson, Thoreau, Whitman, Dickinson, Poe, Hawthorne, Melville, Douglass, Chopin, Hurston, Fitzgerald, Hansberry, Miller, and O'Brien.

## **Nonfictional and Fictional Narratives - The Hero's Journey**

### **Semester One, Semester Two**

#### **Repeat Freshmen and Sophomores**

Nonfictional & Fictional Narratives are a first- and second-semester course that examines literary elements and techniques used by writers of nonfiction and fiction alike. The coursework encourages students to read closely and to consider the different ways that writers tell stories using both fact and fiction to create "truthful" narratives, and have done so for more than 2500 years. This year the course is organized around the theme of the Hero's Journey. We will begin with 2 foundational texts: Homer's *Odyssey*, and the Joseph story from *Genesis*. These texts give two archetypal journeys, that of Odysseus, and of Joseph. We then move to Plato's *Symposium*, to consider what a hero of knowing; and to the anonymous *Sir Gawain and the Green Knight*, to consider what a hero of learning. Finally, we examine the complicated heroic figures from Shakespeare's *Henry IV Part 1*, Falstaff and Hal/Prince Henry.

Through the reading and consideration of these stories - of these heroic journeys- students will engage in various writing exercises to demonstrate both by commentary and by imitation their understanding of the various strategies writers use to tell their stories. In the culminating project of the year, students tell their own heroic journeys—fictional, nonfictional, or somewhere in between.

## **English 3**

### **Juniors, Semester One**

This first semester course will look closely at the seminal texts of British Literature starting with Sir Gawain and the Green Knight and continuing with Shakespeare, Bronte, and Victorian poetry. Students will explore through class discussion and critical writing the themes, culture, influence, and evolution of literature from the British canon. In the second semester, students will have the opportunity to select an elective course in world literature.

All juniors scheduled to take English 3 will be scheduled for one of a variety of second-semester English 3 offerings that do change from year to year but are all related to the study of British literature.

### **English 3: Literature of War**

#### **Juniors, Second Semester**

In “How to Tell a True War Story,” author Tim O’Brien attempts to process his own experience with war while at the same time trying to describe what that experience is like to his readers. He explains, “War is hell, but that’s not the half of it, because war is also mystery and terror and adventure and courage and discovery and holiness and pity and despair and longing and love. War is nasty; war is fun. War is thrilling; war is drudgery. War makes you a man; war makes you dead.” In this course, we will read stories from around the globe and across recent history in order to explore war and its many contradictions and complexities. We will endeavor to investigate and understand the impact of war on people, places, and cultures by considering the different voices and perspectives of participants, victims, and bystanders. We will also discuss how sharing the experience of war through story plays a vital part in helping those who haven’t been directly involved in war relate to and empathize with those who have. Possible texts may include *All Quiet on the Western Front*; *Night*; *Atonement*; *The Sorrow of War*; *Hades, Argentina*; *The Watch*; *A Long Way Gone: Memoirs of a Boy Soldier*, and *The Shadow King*.

### **English 3: “All the World’s a Stage”**

#### **Juniors, Second Semester**

This course will explore the tradition of drama as literature and examine a survey of plays from as early as 411 BC to as recent as the 1980s. Students will read various texts from multiple different theatrical traditions to examine what is so compelling about literature being seen and performed. Possible texts may include Euripedes’ *Medea*, William Shakespeare’s *The Tempest*, Ibsen’s *A Doll’s House*, and Fugard’s *Master Harold and the Boys*. Students will learn about how form and structure influences function through use of visuals, dialogue, and dramatic irony. Through nightly readings, we will focus on critical analysis of short scenes and evaluating professional performances. As a semester course, students will continue to refine and master their use of verbal and written communication through graded discussions, projects, and essays meant to hone their understanding and analysis of critical texts.

### **English 3: 20th Century Dystopian Literature**

#### **Juniors, Second Semester**

This course will examine the meaning behind “dystopia” and investigate why speculative fiction remains so appealing to readers. We will look at foundational and newer texts to examine what aspects of our society lend themselves to a view of the future as being distinctly negative. Texts may include various short stories, seminal texts such as George Orwell’s *1984* and Aldous Huxley’s *Brave New World*, and dystopian novels from a global perspective, such as *The President’s Room* by Ricardo Romero or *The Last Children of Tokyo* by Yoko Towada. While this course will be focused on the novel, we will also incorporate film and dramatic representations of dystopian societies as we try to come to an understanding of how dystopian fiction reflects our modern-day anxieties about the world and its future. Students will continue to refine and master their use of verbal and written communication through graded discussions, projects, and essays meant to hone their understanding and analysis of critical texts.

## **English 3: Monsters in Literature**

### **Juniors, Second Semester**

Students will examine the Monster Literature genre dating back to its 19th century origins with Mary Shelley's *Frankenstein* and explore its expansion throughout the world. Students will study the development of literary monsters, and the sensational aspect that horror has played within world literature while exploring the essential question: How does the inherent balance of good versus evil of these literary monsters mirror the societies by which they are created? While the two foundational texts of Bram Stoker's *Dracula* and Mary Shelley's *Frankenstein* will highlight the Irish & British origins of the genre, students will be reading monster literature from African, European, Asian, American, & Ancient Roman authors to explore the cultural magnitude this genre has had on the creation of contemporary stories and the retelling of ancient myths and legends that have existed within cultures for thousands of years. Students will seek to understand how the tradition of telling tales is a quintessential part of the human experience. Through exploring, comparing, and analyzing these texts, *Monsters in Literature* is designed to reveal the depth of perspectives around understanding human and social identity, established cultural values of good versus evil, and the diversified cultural experience and role that monsters play within world literature. Students will study the epistolary style of writing within *Dracula* and how it dictates the manner in which the monster is perceived. Additionally, students will study Ovid's ancient Roman poetry through *Metamorphoses* to explore ancient myths, legends, and monsters to see how ingrained the "monster" is to human history and literature. To ensure sufficient practice with composition skills, students will write at least 2,000 words each quarter (about one page per week).

## **English 3 Honors**

### **Juniors**

In this year-long course, students will explore the depth and breadth of British literary influence in art and culture through studying such works as *Sir Gawain and the Green Knight*, Shakespeare's *Twelfth Night*, and James Joyce's *The Dubliners*. In the second semester, the texts will move outside of Britain to look at the influence of British colonialism on the literature of the world. Students will have the opportunity to read, discuss, and write on a variety of topics and themes relevant to the literature at hand as well as the contextual influence beyond Britain's borders.

## **21st Century American Literature and 21st Century World Literature**

### **Repeat Juniors, Semester One, Semester Two**

By continuing the consideration of themes related to the construction and representation of American identity and culture in literature, this first- and second-semester course is designed for those students who have completed a standard survey course in American literature. Course readings will contain a variety of authors and genres and will focus on themes related to gender, race, class, and culture. In the second semester course, we'll take some of these themes and look at their reflection in literature across the globe. Primary texts may include *Winter's Bone*, *The White Tiger*, *Never Let Me Go*, and *Gilead* as well as a generous selection of poems. Students will respond to course readings by writing critically and creatively; writing instruction will emphasize the continued development of correct and convincing prose with attention given to improving vocabulary and to strengthening command of standard English grammar.

## **English 4 - Studies in Writing**

### **Seniors, Semester One**

English 4 is the capstone composition course at Avon Old Farms, building upon and solidifying each student's ability to write at the college level. "Studies in Writing" is a first-semester course designed to prepare Avon seniors for the rigors and expectations of college writing and to make sure that each student leaves Old Farms with confidence in his ability to write both academically and personally. Throughout the semester, students will read and analyze great writing from across different genres and then produce original work in these genres. Using professional models as their guides, students will write personal essays, researched arguments, analytical essays, and critiques. The students will spend a good deal of their time working through the writing process

from drafting to line editing, using Betty Flower’s seminal essay “Madman, Architect, Carpenter, Judge” as their model, and working towards an understanding of the importance of revision in college level writing. Hand in hand with their work on the process of writing, students will be taught the mechanical elements of quality prose style with an emphasis on the classic style, which is both a defined and acceptable prose style for use across most of the academy. By learning what defines prose style and classical style and how to produce them, each student will leave the course armed with a style that he can reproduce and use in all of his future courses.

All seniors scheduled to take English 4: Studies in Writing will be scheduled for one of a variety of second-semester English 4 offerings that do change from year to year. The second-semester English 4 courses for 2021 included the following: “The Hero and Anti-hero in Literature,” “Poetry,” “Speeches and Speech-Writing,” “Warped Reality,” and “The Western.”

### **English 4: Satire in Novels**

#### **Seniors, Second Semester**

Satire’s technical definition is a little dry: “The use of humor, irony, exaggeration, or ridicule to expose and criticize people’s stupidity or vices, particularly in the context of contemporary politics and other topical issues.” The satirist Horace gets us closer to the mark: “Satire should, like a polished razor keen, Wound with a touch that’s scarcely felt or seen.” We will study the history of satire in novels, beginning with Swift’s *Gulliver Travels* (1726). We will continue with a political satire (Orwell’s *Animal Farm*, 1945), a war satire (Hooker’s *MASH*, 1968), and a satire of traditional masculinity (Palahniuk’s *Fight Club*, 1996). The course will culminate with each student writing a brief (1-2 page) satire on Avon Old Farms and a longer (3-5 page) satire on a modern issue of their choice.

### **English 4: Introduction to Southern Gothic Literature**

#### **Seniors, Second Semester**

The American South is filled with stories of a haunted past. Southern Gothic literature is a distinctly American genre that explores the dark secrets, fractured relationships, and grotesque violence beneath the surface of Southern beauty and tradition. This course will delve into the culture of the American South through some of its most noteworthy authors – William Faulkner, Flannery O’Connor, and Truman Capote to name a few – to discover why the sinister nature of these stories so entertains us.

### **English 4: Readings and Writings in Sports Literature**

#### **Seniors, Second Semester**

This literature and writing intensive course is designed to immerse students in the reading and writing of sports literature. Students will read nightly from selected texts and daily articles; they will create weekly essays that combine homework reading and build connections to their lives. Nightly reading also includes a daily journal response from which topics for a final essay will emerge. Students will explore: the relationship between athletics and the human condition, why do we value athletic competition, and what are the lessons we take from it? How might athletics serve as a metaphor for life? “Sports Authority” develops critical thinking, reading, and writing skills for college and beyond, and explores the ways in which we frame athletics to build relationships and navigate the world.

### **English 4: Creative Writing**

#### **Seniors, Second Semester**

The goal of this course is to provide students with a college-level study of literature through writing within the genres that they will study. Class will be run as a workshop. Students will read stories, poems, one-act plays, and creative non-fiction and then produce their own work within those genres. Students will study each genre by asking a simple question: what makes a good story (poem, play, or cnf piece)? As students read and study exemplary work within each genre, they will analyze how other authors have answered that question, and then

they will be given time to produce their own work. Through experimentation and workshops students will develop an understanding of how they best write in each genre producing a short story, one-act play, selection of poetry & a CNF piece. Authors that will be study include Anton Chekhov, Tobias Wolff, Grace Paely, George Saunders, Edward Albee, David Ives, Ursula Villareal-Mora, Patrick Rosal, Ross Gay, Toi Derricotte, & Richard Wagamese.

## **English 4 Honors**

### **Seniors**

English 4 Honors examines the relationship between Good and Evil as those two exert and assert themselves in literature. Students consider characters' psychologies and behaviors to understand how Good and Evil affect them, and in doing so, students create opportunities to reflect on how Good and Evil play a role in their own lives. Success with the course demands that students participate in regular seminar-style discussions and write regularly; students write in both creative and critical modes with an emphasis, in either case, on demonstrating independent thinking and the clear and correct use of language. English 4 Honors begins with a philosophical study of Good and Evil from a selection of shorter pieces; as the course progresses, students will read longer works and, accordingly, will be expected to respond to them with greater depth of thought and with considered attention towards the formal elements of literature. Works studied in this course will include Doerr's *All the Light We Cannot See*, Milton's *Paradise Lost*, Morrison's *Sula*, Shakespeare's *Othello*, Spiegelman's *Maus*, and Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde*.

## **AP Literature & Composition**

### **Seniors**

This rigorous course prepares select senior students for the AP Literature and Composition examination by modeling what might be expected of them in an introductory-level English course at a post-secondary college or university. Students read an array of literature from authors such as William Shakespeare, Tom Stoppard, Toni Morrison, Nadine Gordimer, and Virginia Woolf and participate in seminar-style discussions designed to encourage and refine critical, engaged, and collaborative group discussions. The students will also learn some critical literary theory, develop test-taking skills specifically for the AP exam, and write analytical essays designed to strengthen their critical-inquiry, literary-assessment, and critical-writing skills. The course culminates with the Advanced Placement Literature and Composition exam in May.

# MATHEMATICS DEPARTMENT

*Courses in the Mathematics Department range from fundamental algebra through Advanced Placement calculus and statistics to post-AP linear algebra, differential equations, and multivariable calculus. Critical thinking and problem-solving skills are essential at every level of mathematics, and faculty instruct with lessons that emphasize student activity and collaboration. Students gain the confidence to approach complex problems strategically and graduate prepared to be successful in the continued study of mathematics at the college or university level.*

## **Algebra 1 Freshmen**

Algebra 1 introduces the student to fundamental operations using signed numbers and their elementary applications. The goal of Algebra 1 is to develop fluency in working with expressions, equations and variables. Students will extend their experiences with tables, graphs, and learn to solve linear equations, inequalities and systems of linear equations. Students will generate equivalent expressions and begin to apply formulas to methodically solve questions involving motion, speed and distance. Students will simplify polynomials and begin to study and apply strategies to solve quadratic relationships. Students will use technology to learn, investigate, and develop strategies for analyzing complex situations and mathematical relationships. Topics covered in the course include grouping techniques, exponents, algebraic fractions, linear and quadratic equations, radicals, graphing, inequalities, and the solution of verbal problems.

## **Geometry**

### **Prerequisite: Algebra 1**

Geometry's primary objective is the study of Euclidean Geometry as a formal, logical system. Where possible, excursions are made into three-dimensional figures and elementary analytic geometry. Some review of algebraic materials may be included. This course begins with developing visualization and some drawing skills. Both algebraic and geometric models are introduced and are further enhanced throughout the course. Proofs are developed slowly in the first half of the course. Various proof formats, including paragraph, flow-chart, and two-column proofs are presented. The use of manipulatives is integrated into this course.

## **Geometry Honors**

### **Prerequisite: Algebra 1**

Geometry Honors begins with a strong development of visualization and drawing skills. Both algebraic and geometric models are introduced and used throughout the course. Proofs are developed slowly in the first half of the year. Various proof formats, including paragraph, flow chart, and two column proofs, are presented. Manipulatives, constructions, and the computer program Geometer's Sketchpad are also integrated into this course.

## **Algebra 2**

### **Prerequisites: Algebra 1 and Geometry**

This course expands and reinforces the concepts learned in Algebra 1 before being introduced to more advanced concepts in Algebra. Students will spend extensive time in the Cartesian plane to begin the year. A review of slopes, rates of change, and linear equations will be followed by solving systems of linear equations and piecewise functions. Students will then focus on quadratic functions. From graphing to solving by factoring and the quadratic formula, students will be well prepared to study polynomial functions before exploring the idea of

vertical and horizontal asymptotes when studying rational functions. The course will conclude with the study of special functions, such as root functions, logarithmic and exponential functions. This course will also have a standardized test preparation component as students prepare for the SAT and ACT.

## **Algebra 2 with Trigonometry**

### **Prerequisites: Algebra 1 and Geometry**

This course is a more intensive and extensive study of topics introduced in Algebra 1. The primary objective of the Algebra 2 curriculum is to prepare students for Precalculus or Precalculus Honors. The course is designed to prepare students for college-level mathematics and is beneficial for those who will pursue further study in mathematics or related fields. Extensive work is included with equalities, inequalities, absolute value, fractional and negative exponents, radicals, systems of quadratics, logarithms and trigonometric properties. The content of the course is organized around families of functions, including linear, quadratic, exponential, logarithmic, radical and rational functions. Students will learn to represent functions in multiple ways, including verbal descriptions, equations, tables, and graphs. Students will also learn to model real-world situations using functions. To help students prepare for standardized tests, this course provides instruction and practice in a variety of formats. Graphing calculator skills will be taught and used extensively in this course.

## **Algebra 2 with Trigonometry Honors**

### **Prerequisites: Algebra 1 and Geometry**

This course is an extensive, fast-moving study of the fundamental principles of algebra and trigonometry. Topics covered in Algebra 2 with Trigonometry Honors include linear equations and inequalities, functions, polynomials, complex numbers, quadratic equations and inequalities. Solving word problems and graphing (polynomial functions, exponential functions, logarithmic functions and trigonometric functions) are all major points of emphasis. Honors students will learn how to write programs on the TI-84 Calculator. Algebra is the language of calculus. Understanding this, there will be special emphasis early in the year on developing a solid working understanding of the algebraic skills and procedures necessary for success in more advanced math courses. Students will learn to define the major concepts in a second-year algebra course including polynomials, rational expressions, radical expressions, and complex numbers and then learn how to simplify, add, subtract, multiply and divide these expressions. Other major themes include: solving various types of equations and inequalities, factoring, understanding the concept of a function, and graphing functions on the coordinate plane. Linear and quadratic functions are studied in great detail. Later in the year, students will be introduced to higher degree polynomial functions and associated theorems. Students are introduced to exponents and logarithms, right triangle and circular trigonometry, and, if time permits, sequences and series.

## **Advanced Functional Analysis**

### **Prerequisites: Algebra 1, Geometry, Algebra 2**

This course consists of a more thorough treatment of Trigonometry and other selected topics in Algebra 2 with Trigonometry to prepare students for further study in mathematics. The primary objective of the curriculum is to prepare students for Precalculus. Integral to the learning process is the systematic review of earlier concepts learned in Algebra 2 and procedures in which students use previously learned skills to develop proficiency with more advanced concepts. The course includes organizational skills, communication, mathematical tools, calculators, hands-on activities and group work.

## **Precalculus**

### **Prerequisites: Algebra 1, Geometry, Algebra 2 with Trigonometry or Advanced Functional Analysis**

The primary objective of the Precalculus curriculum is to prepare students for Calculus. Integral to the learning process is the systematic review of earlier concepts learned in Algebra 2 and/or Advanced Functional Analysis and procedures in which students use previously learned skills to develop proficiency with more advanced concepts, especially Trigonometry. The Precalculus course includes exploration, communication, mathematical tools, manipulatives, calculators, hands-on activities and group work.

## **Precalculus Honors**

### **Prerequisites: Algebra 1, Geometry, Algebra 2 with Trigonometry**

Designed to prepare the more advanced student for Advanced Placement Calculus, this course provides students an honors-level study of trigonometry, advanced functions, analytic geometry, and data analysis. A faster pace also allows for the introduction of topics from calculus earlier in the second semester. Limits, continuity, the definition of the derivative, techniques of differentiation, and applications of the derivative are all explored. Applications and modeling are included throughout the course. Appropriate technology is used regularly for instruction and assessment.

## **Probability and Statistics**

### **Prerequisites: Algebra 1, Geometry, Algebra 2 with Trigonometry or Advanced Functional Analysis**

#### **Seniors**

The primary objective of Probability and Statistics is to offer students an opportunity to continue their mathematical studies in a new area. This course begins with an overview of statistics and includes an investigation of the fundamental laws of probability. It also includes such topics as distributions, sampling, regression, estimation, and hypothesis testing.

## **AP Statistics**

### **Prerequisite: Precalculus**

AP Statistics is the high school equivalent of a one-semester, introductory college statistics course. In this rigorous course, students develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance behavior. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students use a TI-84 graphing calculator, Fathom and Minitab statistical software, and Web-based java applets to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analyses of real data.

## **Discrete Mathematics**

### **Prerequisite: Advanced Functional Analysis or higher**

#### **Seniors**

Discrete Mathematics is available to seniors who want to extend the fundamental skills and understanding they have gained from a comprehensive course of study in mathematics. Discrete mathematics is the study of the application of geometric sequences, functional analysis, logic, and data manipulation. Course work will focus on problem-solving, applications, and modeling.

## **Calculus**

### **Prerequisites: Algebra 1, Geometry, Algebra 2 with Trigonometry, Precalculus**

This advanced course is an introduction to the fundamental topics comprising calculus. Algebraic, trigonometric, and transcendental functions are studied in the context of differentiation and integration. The calculus curriculum includes exploration, communication, mathematical tools, manipulatives, calculators, hands-on activities and group work. At the conclusion of this course, students should be able to use calculus methods in a variety of applications and problem solving situations.

## **AP Calculus AB**

### **Prerequisites: Algebra 1, Geometry, Algebra 2 with Trigonometry, Precalculus Honors**

This is a rigorous Advanced Placement course designed to prepare students for the AP Calculus AB exam in the spring. The course seeks to develop students' understanding of the concepts of calculus, while providing experience with its methods and applications. A multi-representational approach to calculus is employed with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections between these representations are also explored.

## **AP Calculus BC**

**Prerequisites: Algebra 1, Geometry, Algebra 2 with Trigonometry, Precalculus Honors**

This is a rigorous Advanced Placement course that prepares students to take the AP Calculus BC exam in the spring. The course seeks to develop advanced problem solving skills by stressing the application of the concepts covered in the problem solving process. The class moves quickly and covers all the material outlined by the College Board and is intended for students that have had success in precalculus or lower levels of calculus and want to challenge themselves at the highest level.

## **Differential Equations**

**Prerequisites: Algebra 1, Geometry, Algebra 2 with Trigonometry, Precalculus Honors, AP Calculus AB or BC.** Note: *This course runs in alternate years with Multivariable Calculus.*

The main objective of this post-AP course is to teach techniques to solve first and second order linear differential equations. Throughout the course differential equations will be used to model problems with real applications such as the motion of an object, population growth, heating & cooling, and mixing problems. The techniques developed will then be applied to these models to find solutions.

## **Multivariable Calculus**

**Prerequisites: Algebra 1, Geometry, Algebra 2 with Trigonometry, Precalculus Honors, AP Calculus AB or BC.** Note: *This course runs in alternate years with Differential Equations.*

This post-AP course covers differential, integral and vector Calculus for functions of more than one variable. Topics include vectors and matrices, partial derivatives, double and triple integrals and vector calculus in 2 and 3-dimensional space. Though full year, this course covers the same topics taught in a typical college semester.

## **Computer Science**

Using the C++ and Javascript programming languages, Computer Science develops problem-solving skills, computational thinking strategies, and a deeper understanding of everyday technologies. Students will learn to program by creating art, animations, simulations, and games with the Processing framework. Using Arduino microcontrollers, they will also explore physical computing by designing circuits using sensors, lights, motors, and more. Lessons are centered around engaging, collaborative projects. By the end of the course, students will have a working knowledge of programming and will be prepared for more advanced courses in computer science.

## **AP Computer Science A**

**Prerequisite: Computer Science**

This is a rigorous Advanced Placement course that prepares students to take the AP Computer Science exam in the spring. The course seeks to teach students to think critically and develop carefully planned algorithms to solve problems. Students will learn how to utilize object-oriented programming in Java throughout the course and will develop a thorough understanding of the language and concepts such as inheritance, hierarchy, polymorphism, as well as basic programming concepts such as conditional and looping statements. Upon successful completion of the class, students will be well prepared to take the AP Computer Science exam in the spring.

## **Advanced Topics in Computer Science: Data Structures**

**Prerequisite: AP Computer Science A**

This course is intended as an introduction to data structures, algorithms, and more advanced programming techniques. Students will be able to solve real-world problems by reasoning about data structure choices, choose appropriate implementations, and analyze the costs associated with those choices. Students will learn to write, debug, and test large programs systematically. The major topics within the course include: Recursion, Abstraction, Problem Solving, Software Design, Sets, Linked Lists, Stacks, Queues, Trees, Heaps, Sorting Algorithms, Graphs, and Hashing, with exposure to complexity and algorithm analysis.

## **Advanced Topics in Computer Science: Mobile Applications**

**Prerequisite: Computer Science**

### **Semester One**

This course will introduce students to common software engineering practices in the context of designing and building mobile applications. Students will use the Dart programming language to create native apps for Android and iOS. Students will learn to design responsive user interfaces, utilize public APIs, and manage large projects using GitHub. The major topics within the course include: Responsive Design, Abstraction, Version Control, APIs, Efficiency, Agile Development, and the Google Play and Apple App Stores.

### **Game Design**

**Prerequisite: Computer Science**

### **Semester Two**

Using popular game development environments like Unity, students will learn about the video game development process. As part of their exploration of this cross-disciplinary industry, students will create their own audio and visual assets then bring them to life with Unity and C# scripts, producing a publishable 2D game by the end of the semester.

*The Science Department faculty teach boys life-long lessons through science courses that inspire a fundamental curiosity about the natural world. The Science Department offers courses in traditional lab sciences as well as engineering. With emphasis on designing hands-on,*

# SCIENCE DEPARTMENT

## **Living Systems**

### **All underclassmen who have not satisfied the biology requirement**

Living Systems is the study of our living world beginning with the interconnectedness and interdependence of all living things on each other and on the nonliving world of matter and energy. This framework provides context for the subsequent study of cells, reproduction, and evolution. This course will also investigate human disruptions to those living systems (biodiversity, energy flows, and nutrient cycles) that all living organisms require and that we require for healthy economies. Laboratory experiments, class demonstrations and outdoor explorations re-enforce lecture concepts and activities.

## **Living Systems Honors**

### **All underclassmen who have not satisfied the biology requirement and by department approval**

This is an intensive study of living systems for scholarly underclassmen who have not yet satisfied the biology requirement. It is a more thorough and faster pace treatment of the general living systems curriculum emphasizing independent reading and laboratory investigations. Students will acquire a firm foundation in the general principles of biology and can proceed to other honors and advanced placement science classes. This course is designed to prepare students to progress to AP Biology.

## **Introduction to Engineering**

Introduction to Engineering Design (IED) is a foundation course in the Project Lead The Way (PLTW) Engineering Program. In IED, students will work both individually and in teams to design solutions to a variety of problems using a 3D modeling software and following the standards of an engineering design process. Utilizing the activity-project-problem-based teaching and learning pedagogy, students will progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication and other professional skills.

## **Chemistry**

### **Prerequisites: Living Systems (or a full credit in comparable biology course), Algebra 2 with Trigonometry (concurrent)**

Chemistry is the study of matter and its composition. In addition, chemistry is the science that deals with changes which matter undergoes and the energy that accompanies these changes. This course is designed to enable students to learn chemistry through experimentation and observation. More than one third of class time is devoted to solving word problems and eighteen lab experiments supplement classroom work. The primary goals of this course are for students to develop an understanding of the basic principles of inorganic and organic molecules and the processes they are involved in, both physical and chemical, and to acquire an appreciation of science as a process of questions and answers. Factor labeling or dimensional analysis is introduced as the method of choice for problem solving. The laboratory experiments are intended to familiarize students with the scientific method and the use of computer programs in data recording and analysis.

## **Chemistry Honors**

### **Prerequisites: Living Systems (or a full credit in comparable biology course) and by department approval, Algebra 2 with Trigonometry Honors (concurrent)**

This rigorous and fast paced introduction to chemistry is intended for highly motivated students who possess strong mathematical abilities. The goals of this course are for students to develop an understanding of the basic principles of inorganic molecules and their reactions, and to acquire an appreciation of science as a process of questions and answers while covering the key chemical concepts typically found in a first-year course. While the topics studied are similar to Avon's general chemistry course, the material is covered in greater depth and

with more mathematical rigor. Labs are designed to familiarize students with experimental techniques and enhance students' understanding of the material studied. Experiments include both scripted and inquiry-based activities.

## **Physics**

**Prerequisites: Full Year of Chemistry, Living Systems (or a full credit in a comparable biology course), Algebra 2 with Trigonometry or Advanced Functional Analysis**

This course examines fundamental principles and laws of the physical world through scientific exploration. The class will interpret media sources, observe demonstrations, conduct student laboratory investigations, perform conceptual and mathematical reasoning, and build hands-on projects. Students will be required to conduct prescribed and self-generated experiments. Following each lab, students will write a laboratory report. The course also shows how physics is related to the other sciences and includes some aspects of the history and philosophy of science. Topics include motion, states of matter, waves, sound and light, optics, heat, electricity and electrical circuits.

## **Physics Honors**

**Prerequisites: Full Year of Chemistry, Living Systems (or a full credit in a comparable biology course), Precalculus (concurrent)**

This honors physics course is organized around five big ideas that bring together the fundamental scientific principles and theories of general physics. These big ideas are intended to encourage students to think about physics concepts as interconnected pieces of a puzzle. The solution to the puzzle is how the real world around them actually works. Students will participate in inquiry-based explorations of these topics to gain a more conceptual understanding of these physics concepts. The course utilizes guided inquiry and student-centered learning to foster the development of critical thinking skills.

## **Forensics**

**Prerequisites: Living Systems (or a full credit in a comparable biology course)**

### **Juniors and Seniors**

The Forensics course provides an overview of frequently used laboratory techniques, instrumentation, and strategies used by forensic scientists when collecting and analyzing physical evidence. Topics will range from crime scene evaluation to collection and analyses of specific types of evidence. This course includes numerous hands-on laboratory activities. Although a science course, the nature of this class is multidisciplinary in nature, touching on the study of actual court trials and the legal system while also exploring forensics in fiction and mass media.

## **Geology**

**Prerequisites: Living Systems (or a full credit in a comparable biology course)**

### **Juniors and Seniors**

Geology is the science of the Earth. Geologists study the materials that make up the Earth, and the processes that happen to them or have happened to them in the past. Much of geology is highly practical: finding oil, clean water, metals, and other valuable aspects of the Earth; warning people of geological hazards such as severe weather patterns, landslides, wildfires, earthquakes and volcanoes. Geologists are helping in writing the "operator's manual for the Earth" to help us and the Earth live in harmony in the future. Some of geology is just plain fun—learning about the dinosaurs, for example. Much of geology is fundamental, and contributes to all of these. This course is designed to open up the minds of the students to relate all that happens in geology to social aspects, economies, politics and everyday life. Like the Domino effect, all are connected.

## **Environmental Science**

**Prerequisites: Living Systems (or a full credit in a comparable biology course)**

### **Sophomores, Juniors, and Seniors**

Environmental Science immerses students in the study of the complexity of today's global environmental issues. Concepts and vocabulary from the natural, physical, and social sciences are integrated into the study of critical systems that support life on the planet and man-made threats to those systems. The course is structured to develop students' scientific literacy and capacity for critical, informed thinking through an examination of scientific methods and through the assimilation of scientific information. Laboratory exercises are conducted on the Avon Old Farms School property and include an ecological stream study.

## **Human Anatomy and Physiology**

**Living Systems (or a full credit in a comparable biology course), Chemistry**

### **Juniors and Seniors**

This course is designed to investigate the human body, its structure, function, and systems. Students will be given an opportunity to gain an in-depth understanding of the human body through lectures, workbooks, lab work, virtual dissections, and activities. Students will examine the gross anatomy of muscles, organs, and bones to better understand how incredible the human body is and how it functions.

## **Biotechnology Honors**

**Prerequisites: Living Systems (or a full credit in a comparable biology course), Chemistry**

### **Juniors and Seniors**

Biotechnology is a laboratory-based course investigating real- world situations related to concepts learned in biology, chemistry and environmental sciences. Detailed overviews and background information including theories and molecular biology techniques will be presented in class lectures; however, the emphasis will be on hands-on experiments. Topics explored include molecular and cellular biology, genomics, genetics, immunology and proteomics. Each laboratory will culminate with an organized and well-written lab report or PowerPoint class presentation.

## **AP Biology**

**Prerequisites: Living Systems (or a full credit in a comparable biology course), Chemistry, Physics, and by department approval**

This course is equivalent to a two semester college introductory biology course and follows the recommendations of the College Board so that students are prepared to take the May Advanced Placement exam. Lectures focus on molecular and cellular biology; heredity, genetics and biotechnology; evolution and diversity; organisms and populations; and lastly, anatomy and physiology. Experimental exercises supplement student's learning by developing advanced inquiry and deductive reasoning using the scientific method as well as laboratory skills through setting up and performing the testing protocols.

## **AP Chemistry**

**Prerequisites: Living Systems (or a full credit in a comparable biology course), Chemistry, Algebra 2 with Trigonometry Honors, and by department approval**

This course is designed to prepare students for the AP chemistry exam through an exploration of topics equivalent to the ones covered in a traditional college freshman general chemistry class . The class meticulously covers the entire AP syllabus as prescribed and assessments mirror the form and content of the AP exam to better prepare students. A total of 20 experiments will be performed throughout the year and these laboratory experiments serve as an integral part of the topics covered during the course. The approach taken in this class will allow the students to memorize less but spend more time on inquiry-based learning of essential concepts that will enable them to develop analytical skills necessary to understand science practices used in the study of chemistry. The topics covered will include classification of matter, types of chemical reactions, different classes of organic compounds , stoichiometry , acids and bases , analytical chemistry, chemical equilibrium, thermodynamics, electrochemistry Lewis formulas and molecular models, solutions , types of intermolecular forces, nuclear chemistry, redox, trends in the periodic table and gases.

## **AP Environmental Science**

**Prerequisites: Living Systems (or a full credit in a comparable biology course), Chemistry, and by department approval; A full-year study of Environmental Science would preclude a student from enrolling in the AP level of this course**

AP Environmental Science is a rigorous, fast-paced course that immerses students in the complexity of today's global environmental issues and their many identifiable causes. Concepts and vocabulary from the natural, physical, and social sciences are integrated in the study of critical systems that support life on the planet and the anthropogenic threats to those systems. Preparation for the Advanced Placement exam is one of the primary intentions of the course, but the course also aims to further develop students' scientific literacy and

their capacity for critical, informed thinking. The course moves quickly through a score of major topics, so the course is only appropriate for students capable of learning a significant portion of the material through reading assignments and exercises. The blended approach to learning includes in-class discussions, concept presentation, Planet Earth series segments, TED talks, segments from the Habitable Planet video series that highlights the work of environmental scientists, and other relevant and contemporary video segments found on YouTube. Laboratory exercises are conducted on the Avon Old Farms School property and focus largely on stream ecology, forest ecology, and soil.

### **AP Physics C: Mechanics**

**Prerequisites: Living Systems (or a full credit in a comparable biology course), Chemistry, Calculus (concurrent), and Physics**

This course provides an intensive investigation of the main principles of mechanics and is representative of an introductory college course typically required for engineering and science majors. Specifically, the following six content areas will be covered: kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. The course utilizes guided inquiry and student-centered learning to foster the development of critical thinking skills and uses introductory differential and integral calculus throughout the course.

### **Aerospace Engineering**

#### **Juniors and Seniors**

This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles.

### **Manufacturing Engineering**

#### **Juniors and Seniors**

Manufacturing transforms ideas into products. In this course, students will learn about the manufacturing process, product design, and automation. They will develop their knowledge and skills in CAD (3D modeling software) to use our Haas Milling Machine, located in our new Engineering Lab. Students will apply their knowledge and skills gained in this course as they collaborate to design, build, and program our Haas TM-1p Mill.

### **Engineering Design and Development Capstone**

**Prerequisite: Full-year course in engineering**

#### **Juniors and Seniors**

Engineering Design & Development (Capstone) is a specialized course in Project Lead The Way Engineering Program. In the Capstone course, students will work in teams to identify a the real-world challenge and then research, design, and test a solution by following the standards of an engineering design process, ultimately presenting their unique solutions to a panel of engineers. This is considered a capstone engineering project offered to juniors and seniors only.

*The History Department nurtures awareness and respect for the human condition in their students to encourage a passion for lifelong learning and an appreciation of various cultures, events, and peoples. The program of study in the history department allows students to gain*

# HISTORY DEPARTMENT

## **Global Civilizations**

How did widespread civilization begin? How does geography affect the rise of a society? How is religion an offshoot of these developing communities? Why do some societies fall? Why does man engage in conflict?

This foundational course represents a core component of the history curriculum at AOF. Representing an intentional global perspective, this course will actually begin with studying Neolithic man and provide framing for the class with themes that will connect to future concentration areas (i.e. Mesopotamia, Egypt, China, Africa, Greece, and Rome). The themes examined will be: Government and Civics, Culture and Society, Economics, and Geography.

Of equal importance, this mandatory course will begin embedding the Historical Thinking Skills that will help prepare students for the rigors of college-level history courses. Reading for comprehension, note-taking, analyzing primary and secondary sources, research skills, and critical writing will form the foundation of their skill development across the students' four-year experience.

## **U.S. History**

### **Sophomores and Juniors**

*What does “American” mean? What are the origins of an “American” identity? How has the American identity developed and been contested over time?*

Students in this course will engage with these questions by studying the history of the United States as it is recorded in various primary and secondary sources. In reading and analyzing these documents, students will develop an understanding of the systems, institutions, and customs we have come to define as “American,” the causes and effects of the major trends and events in American history, and the continuity and change over time of American beliefs, practices, and policies - indeed the meaning of “American.” Students' understanding of U.S. history will be reflected in their analytic writing, presentations in class, and performance on other projects and objective assessments.

### **AP U.S. History**

#### **Sophomores and Juniors**

AP U.S. History provides a college-level approach to the American past from colonial beginnings to the present. Students are required to handle primary source and documentary materials and to grapple with the problems of conflicting historical interpretation. Course objectives are to develop the necessary tools for critical historical analysis and to stimulate an appreciation for the genuine vitality and color of our national experience.

## **Economics and Honors Economics**

**Prerequisites: U.S. History (concurrent)**

### **Juniors and Seniors**

The Economics and Honors Economics courses are both student-focused and inquiry-based and follow a similar curricular path with some exceptions. The two courses differ mostly by the higher level of analytical rigor and academic expectations in the Honors course. The underlying curriculum encourages students to actively question and reflect upon the economic choices under the condition of scarcity and opportunity costs facing individuals, businesses, and societies at large through governments—the definition of economics. The course starts with a unit on decisions individuals make with students applying lifelong personal finance skills

like budgeting, understanding credit cards, credit history, and debt, savings, and investment gains from long-term compound interest. It moves on to introductory economic concepts like market vs. command economic systems, competition, supply and demand, equilibrium, externalities like pollution, market failures, the role of the government in framing the market system, and taxes. In the second semester, the courses go further into experiential learning through the roles of an investment bank research analyst using fundamental analysis to write and present a full initiation research coverage report on a stock of the student's choice, a portfolio manager building out a diversified portfolio of stocks, different socio-economic roles playing a modified version of Monopoly to reflect upon issues related to income inequality, the role of a CEO, board of directors, and shareholders thinking through financial, legal, and ethical issues presented by the case of Enron. In the spring, the focus is macroeconomics and understanding "how the world works" through that lens as a citizen, policymaker, businessman, and investor to see the connections among economics, finance, governments, citizens, societies, and world events. It is through this student-driven and experiential Economics course that students are encouraged to develop both the ability and courage to ask "good questions" to seek knowledge and wisdom about the world around them.

## **AP Microeconomics**

**Prerequisite: U.S. History (concurrent)**

### **Juniors and Seniors**

AP Microeconomics focuses on providing students with a thorough knowledge of the principles of microeconomics and preparing them for the Advanced Placement exam. At the heart of the course are basic decision-making skills. These include the concepts of scarcity, choice, and tradeoffs, opportunity costs, the basis for trade, marginal analysis, and more. Students also learn extensively about the concepts of supply and demand, and about both the product market and the market for factors of production. The course also explores the causes of market failure, the role of government intervention in a market economy, and the concept of international trade. A key part of success in the class is the successful completion of weekly problem sets, which require effective planning and time management. Current events in business, politics, and international relations also play a significant role in allowing students to apply concepts to the real world.

## **AP Macroeconomics**

**Prerequisite: U.S. History (concurrent)**

### **Juniors and Seniors**

AP Macroeconomics is a college-level course that introduces students to the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination. It also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

## **International Relations**

**Prerequisite: U.S. History**

### **Sophomores, Juniors, and Seniors, Semester One**

International Relations is the study of the world and the people whose behaviors shape history and our current times. In this course, students will learn about the major theories of international relations; about different

influential bodies such as state governments, multi-national corporations, and non-governmental organizations; and about powerful forces and conditions that exist in the world, such as globalization and environmental issues. There will be a special focus on the United Nations and the subject of diplomacy, culminating in a trip to a Model United Nations conference.

## **World War I**

**Prerequisite: U.S. History**

### **Juniors and Seniors, Semester One**

How did two pistol shots fired during the early summer of 1914 directly lead to the deaths of over eight million people? In this semester-long course, we will examine the conditions that existed in Europe prior to the outbreak of WWI and trace the events of History's first modern war. Students will be given the opportunity to research and present in detail key battles, leading personalities, and modern equipment as we explore the 5 W's: Who, What, Where, When, and most importantly, Why this war happened.

## **Post-1945 World History**

**Prerequisite: U.S. History**

**Sophomores, Juniors, and Seniors, Semester Two**

This semester course will examine the major events, movements, and social conditions that helped define the post-WWII era around the world. Topics will include: the Cold War, decolonization, the collapse of the Soviet Union, the rise of technology, globalization, modern terrorism, and the Arab Spring. Course work will rely on a variety of media, individual and group projects, and more traditional methods of assessment. Upon completion of the course, students will be widely versed in those events that helped shape the modern era.

## **World War II**

**Prerequisite: U.S. History**

**Juniors and Seniors, Semester Two**

Were there really two world wars or just one, with a 20-year intermission in between the two acts? In this semester-long course, we will examine the outcome of WWI, the rise of dictators during the interwar years, and the outbreak of the second modern war of the 20th Century. Once we have a solid understanding of the causes, the majority of the course will trace the events, personalities, major decisions, and outcomes in both the European and Pacific Theaters. Students will be given the opportunity to research and present in detail key battles, leading personalities, and modern equipment as we explore the 5 W's: Who, What, Where, When, and most importantly, Why this event happened.

## **U.S. Government and Contemporary Crises**

**Prerequisite: U.S. History**

**Juniors and Seniors, Semester One**

## **U.S. Government and Historical Crises**

**Prerequisite: U.S. History**

**Juniors and Seniors, Semester Two**

These semester courses examine how American democracy functions under stress. We will use Connecticut as a laboratory for investigating crises faced by government and society. These crises include rising levels of income inequality, climate change, an overtaxed criminal justice system, political polarization, mass shootings, misinformation, inequities in public education, and de facto segregation. The goal will be to analyze how government responds to social problems, what works, and what's broken.

In the fall semester, the focus will be on current events. We'll visit a court in session, work in a homeless shelter, explore shoreline erosion from climate change, and interview guest speakers ranging from police officers, to politicians, a judge, a climate scientist, professors, and social workers.

In semester two, the course orientation turns to the past as we explore the historical roots of current problems. Students will visit the site of one of the earliest military confrontations between Native-Americans and white settlers in Connecticut. We'll study an act of extreme political violence in Groton during the American Revolution. We'll examine how a case of extreme weather in the 19th-century had a permanent impact on the state economy, and we'll walk the racial fault-lines created by the summer riots of 1968-69 in Hartford. Students will choose one of these case studies and use it as the basis for an original research paper.

## **AP U.S. Government & Politics**

**Prerequisite: U.S. History**

**Juniors and Seniors**

This course gives students an analytical perspective on government and politics in the United States. It examines the various institutions, interest groups, political ideas, and beliefs that together constitute the political life of the United States. Topics include the Constitutional foundation of the U.S. government, political beliefs and behaviors, political parties, pressure groups, and the mass media, the presidency, Congress, the federal courts, bureaucracy, public policy, civil rights, and civil liberties. The course addresses both the study of general concepts used to interpret U.S. politics and the analysis of specific political issues. Taking this course will prepare students for success on The College Board's Advanced Placement exam in May.

## **Introduction to Psychology**

**Prerequisite: U.S. History**

**Seniors, Semester One**

Psychology introduces students to the systematic and scientific study of human behavior and mental processes. Students learn the psychological facts, principles, and phenomena contained within the major branches of psychology. They work towards demonstrating the critical thinking skills necessary to observe complex relationships and generate an awareness of the need for reflective skepticism on apparent cause and effect. They develop their methodological critical thinking abilities by applying different research methods in psychology and evaluating the quality of existing research design. They apply different research methods in psychology and evaluate the quality of existing research designs. Charged with experiential problem solving and field research opportunities, students collaborate and develop organization and communication skills to support these team efforts.

## **Abnormal Psychology**

**Prerequisite: U.S. History**

**Seniors, Semester Two**

This course is rooted in a study of developmental psychology and the factors that might lead to abnormal behavioral conditions. Students in the course will consider perspectives of what constitutes "abnormal" psychology. The course is designed to be interdisciplinary; it will cross over with Forensics in the science department and will involve visiting speakers from various professional fields.

## **AP Psychology**

**Prerequisite: U.S. History**

**Juniors and Seniors**

Completion of Introduction to Psychology and Abnormal Psychology would preclude a student from enrolling in AP Psychology. The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatments of psychological disorders, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, evaluate claims and evidence, and effectively communicate ideas.

## **AP World History**

**Prerequisite: U.S. History**

**Juniors and Seniors**

The AP World History course is designed to help students develop a deeper knowledge of the evolution of

global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. Students gain a greater understanding of past world events by examining diverse cultures from around the world beginning in 1200 CE and working their way to the present. Throughout the year students read a variety of primary source documents, write response papers, and create projects and presentations. The course emphasizes the development of political and cultural systems and explores their relevance to the modern world.

## **Leadership, Problem-Solving, & Calculus**

**Prerequisite: U.S. History**

### **Seniors**

What is leadership? How do you become a leader? What are the important traits of a leader? These questions and more will be examined while developing the soft skills necessary for successful leadership in today's world. Of course, much of being a leader involves problem-solving. The course will aim to improve and further develop problem-solving skills and will teach students to think outside of the box for creative solutions. Implementation is often a challenge facing leaders and the course will explore how successful leadership manages these challenges. The course will utilize guest speakers who will discuss their experiences and provide challenges for the class to examine. In this class, you will learn skills such as computer programming, public speaking, and team building. So what does calculus have to do with leadership and problem-solving? You will need to take the course to find out. There will be a summer reading component to this course.

# WORLD LANGUAGES DEPARTMENT

The opportunity to learn about people and culture through a global perspective. The World Languages Department offers a variety of progressive, immersion courses in Mandarin and Spanish. Courses in Latin are offered for students interested in exploring the origins of modern language, the culture and history of the classical world, and its continuing influence today.

## **Madarin Chinese 1**

This introductory course is intended for students with minimal or no knowledge of Mandarin Chinese. This course adopts different pedagogical approaches to help students acquire basic skills in listening, speaking, reading, and writing in Mandarin Chinese, as well as additional insight into Chinese culture and society. Throughout this course, the students will learn the foundation of the Chinese language. The students will be introduced to PinYin, the Chinese phonetic system, the basics of writing characters, and vocabulary. Students will also be able to develop basic conversation skills by practicing self-introduction, introduction of family members, questions and statements about time and dates, invitations, and discussion of hobbies.

## **Mandarin Chinese 2**

This course will build upon the material learned in Madarin Chinese I and will introduce 350 more vocabulary items. It will continue to emphasize the basic training in the four language skills of listening, speaking, reading, and writing for communication in real-life situations. At this level, the students will continue to develop speaking and writing skills by expanding their vocabulary base. Along with a more extensive vocabulary, they will also explore and learn more complex grammar and sentence structures to differentiate their speaking and writing styles. A key objective for this course is to have students develop the proficiency to express a unique daily narrative of school life and to be able to discuss various points of cultural differences they have learned through the language.

## **Mandarin Chinese 3**

This course is designed for students who have already completed Mandarin Chinese II, or who can demonstrate that they have acquired knowledge of the language to the required level. This course builds upon the material learned in Manadarin Chinese I and Mandarin Chinese II. The daily lessons of Mandarin Chinese III will progress from working to read, speak, and write shorter paragraphs and dialogues to working on more extensive passages involving complex vocabulary and grammar structures. Mandarin Chinese III students are required to put their knowledge into practice by being put into verbal situations where their individuality and personal speaking style will be displayed and developed.

## **Mandarin Chinese 4 Honors**

This course, conducted mainly in the target language, offers a multifaceted curriculum with an advanced level of listening, speaking, reading, and writing in Chinese. This course focuses on important linguistic structures to build and refine learners' understanding of Chinese syntax. Situational conversational skills and reading confidence and depth will be emphasized. This course also gradually introduces more formal speech and written-style language. Chinese I, II, III, and IV form a sequence. Students taking this course will typically have taken Chinese III. Others will need to be evaluated to make sure that Chinese IV is the appropriate level for them. In this course, students will read more difficult Chinese passages with topics such as course selection, dorm life, dining and shopping, dating, education, etc. Upon completion of this course, students should be able to speak fluently in Chinese on basic conversational topics, they should be able to read texts composed of characters introduced in the textbook and they should be able to write long compositions using characters they learned.

## **Spanish 1**

The first year of study in Spanish is a comprehensive presentation of the essential elements of the language. Students will practice speaking, listening, reading, and writing in the target language from the first day of class. This is done through a variety of assessments, including journals, videos, and presentations. A strong grammatical foundation is built through use of instructional videos, authentic resources, and guided review of classroom material. Every effort is made to afford the student the opportunity to become well versed in all aspects of basic Spanish. Students will continually practice conversational Spanish with their peers with the goal of building confidence in speaking and producing content in the target language. The course will also provide cultural context for the language by examining the vast diversity of Spanish speaking cultures around the world in an effort to show students a global perspective.

## **Spanish 2**

This course is designed to strengthen a student's aural comprehension, speaking, reading, and writing. Students are given a thorough grounding in the principles of grammar, which are applied in class discussions and in short written assignments. The student gradually acquires a stronger vocabulary and mastery of the syntax that is used in both oral and written work. Authentic cultural resources, such as videos and periodicals help to further develop the proficiency of the students. Attention is also given to the culture and heritage of the people of the Spanish-speaking world.

## **Spanish 2 Honors**

This honors course is designed to meet the needs of developing multiple competencies simultaneously, not only linguistic and communicative, but also academic and multicultural. Students will not only focus on grammar, vocabulary, conversation and culture, but also will create an interdisciplinary space in the classroom where the learning will be highly motivated. Exploratory learning and content based projects will be used to help create the critical thinking skills for the student to engage with the language. Authentic materials will be used and target language will be expected at this level. Students are expected to communicate in Spanish most of the time.

## **Spanish 3**

Spanish 3 is for students who have acquired basic grammatical skills in Spanish 1 and 2. Classes are conducted predominantly in Spanish and students are encouraged to engage communicatively in conversation. The main goal of the course is to have students further the four skills (listening, speaking, reading, and writing), consolidate the tense system learned in Spanish 2, and make a more abstract use of the language like speculation or talking about hypothetical scenarios. Reading and writing the language are emphasized, and conversations strengthen the student's ability to apply grammatical principles.

## **Spanish 3 Honors**

Spanish 3 Honors is designed for the student who shows the ability and motivation to go beyond the third year of Spanish. In addition to the regular curriculum, students engage in a variety of activities chosen from books, magazine and newspaper articles, videos, and computer programs. This course is for the student who shows the willingness to work independently and beyond what is covered in the classroom.

## **Spanish 4**

Spanish 4 is for students who have satisfactorily completed the requirements of Spanish 3 and wish to continue their study, but at a more moderate pace than that required in an honors-level course. Grammar is reviewed at a more sophisticated level and writing is done on a more frequent basis. Classes are conducted predominantly in

the target language, and the student is given exercises to strengthen his oral skills. Certain literary readings are introduced.

### **Spanish 4 Honors**

Spanish 4 Honors is an advanced course emphasizing speaking, reading, and writing the language correctly. This course also endeavors to cultivate an ability to understand and accept the logic of another cultural dynamic. The main goal is to stimulate students to build knowledge through explorative and expansive learning. An advanced grammar review textbook is studied in conjunction with literary selections from Spain and Latin America. Social customs and traditions are discussed with a view toward encouraging students to compare their cultural perspective with that of a Hispanic counterpart. Students will develop skills such as collaboration, creativity, critical thinking and communication.

### **Spanish 5**

Designed for students who wish to continue their study in Spanish, but who are not AP candidates. This course uses informative and thought-provoking materials to focus on the contemporary history, art, and culture of Spain and Latin America. Films studied in this course will include fictional portrayals of real-world events and dramatizations that portray the various viewpoints and opinions that exist in the Hispanic world regarding its history and current events. Supplementary authentic resources, including: literature, texts, articles, video clips, music and presentations will provide background to historical events and broaden the students' cultural literacy. Students will participate in debates and activities that promote effective oral and written communication and develop their critical thinking.

### **AP Spanish Language and Culture**

Advanced Placement Spanish Language and Culture is designed for the motivated student who has excelled through the first three or four years of language. Conducted entirely in Spanish, this course prepares students for the Advanced Placement Language examination given in May. Students review nuances of advanced grammar with extensive reading and writing outside of the classroom and various oral activities within the classroom. A variety of media is used including audio and video, magazines, newspapers, films, and literary works. Students will integrate language in a variety of contexts from the culture of Spanish and Latin American countries, from religion, politics and economics, the environment and global challenges, families and communities, personal and public identities, science and technology to beauty and aesthetics. Cultural comparisons between countries and simulated conversations are two of the oral exam's tasks more frequently practiced in class.

### **Latin 1**

Latin 1 provides a sound grammatical background, emphasizing correct syntax and vocabulary. Since Latin is an inflected language (where word endings rather than word order determine a word's syntax), students of Latin learn a new way of coding and decoding thoughts and ideas that can prove beneficial in improving writing skills. Latin is also a verb-driven language. In Latin 1, we will focus on the indicative mood--the method of communicating facts: things that were, are or will be known, things that exist, can be counted or measured and can be observed by the five senses in various aspects of the past, the present and the future. The Latin 1 student is also introduced to the basic declensions of nouns and adjectives. Case usage of nouns for subjects, direct objects, indirect objects and in prepositional phrases are covered from the very beginning of this course, since the case endings determine the syntax of a word rather than word order, which is how English is coded. To reinforce skills and prepare for classical translations in subsequent years, students are given numerous translation exercises. Latin's close affinity to other languages is referred to throughout the course with emphasis on the role it plays in the etymology of many words in the English language.

### **Latin 2**

The Latin 2 student completes his study of essential grammar, construction, declension, and conjugation, moving to the subjunctive mood of verbs. The subjunctive, rich in Latin and nearly nonexistent in English, covers things that might be, should be or could have been, things that happen because of something else or

happen to enable something else. The student will learn more advanced constructions for reporting the speech of others and Latin language ‘shortcuts’: succinct methods of communicating complex ideas. By mid-year, the student will now possess a solid understanding of the language sufficient to begin classical translation. The texts include an introduction to myth and an introduction to history, with a view also of why those stories are important to understanding the Roman self-view. The student will begin to appreciate the differences between modern Western culture and the culture of the classical period while also developing understanding that human nature is, in many ways, unchanged. Latin’s relationship with English continues to be stressed, thus underlying Latin’s relevance to, and importance in the student’s academic life.

### **Latin 3**

After a brisk review of the grammar and vocabulary covered in Latin 1 and Latin 2, Latin 3 students are introduced to the translation of classical prose.. Students are encouraged to become more “free” in their translation, moving away from the literal and developing an individual interpretation of classical writings. Beginning with the introductory myth and history texts used in Latin 2, students will move onto reading Caesar’s De Bello Gallico-his account of his eight-year conquest of Gaul (modern France). We will also read selections from Sallust’s accounts of the Catilinarian Conspiracy and the Jugurthine War, and a satire by Petronius.

### **Latin 4 Honors**

By now the students will be comfortable with Latin grammar and have a good working vocabulary. Latin 4 Honors focuses on Latin poetry. Beginning with the poet Catullus, the Romans adapted Greek forms for lyric, didactic and epic poetry. We will spend a great deal of the course on Vergil’s Aeneid, perhaps the most foundational piece of Western Literature. We will also read Ovid’s Ars Amatoria. Time permitting, we may also read some of Horace’s Satires.

*Courses in the Art Department are offered across a variety of mediums and are designed to give students individual voice and strengthen their confidence while building technical skill*

# VISUAL ARTS DEPARTMENT

*unique space and inspiration in the creative process. Art teachers foster a fun and safe studio environment that encourages experimentation with many types of media and the sharing of artistic inspiration.*

## **Introduction to Digital Photography/Advanced Digital Photography**

This course prepares students to examine and understand the world around them through a photographic lens. The course will focus on core photographic concepts as well as some more advanced techniques. The course will include hands-on demonstrations with the camera as well as basic and advanced digital image editing techniques. We will discuss the work of iconic photographers alongside your own photographs in order to better understand the fundamentals of composition to create compelling imagery.

## **Studio Photography**

**Prerequisite: Introduction to Digital Photography**

### **Semester Two**

This course is geared to help students explore the dynamic range studio photography offers. Students will learn how to generate a strong and diverse portfolio of images, ranging anywhere from fashion to sports photography. Students will learn various lighting techniques and apply them to their weekly projects. Students will also learn post processing techniques in photoshop and high-end retouching methods to help bring their images to life. Each week will build off the previous week as students will master various studio techniques. By the end of the year, each student will be a master in studio photography and in directing their own photoshoot, but most importantly, each student will be able to communicate what's important to them through imagery.

## **AP 2D Design/Painting, Drawing**

Students take a minimum two years in the arts before signing up for AP and need permission from the teacher upon review of artwork for registration in the course. AP art students submit a portfolio of artwork of 15-20 images in May of their 2nd year in the course, demonstrating a fundamental competence of various visual strategies and methods, completing a process-driven, personal investigation on a theme. 2D Design portfolios include a mix of digital art, photography, graphic design, mixed media, drawing, illustration, etc. Conceptual images investigate the animal world, fantastical drawing, self-portraiture, narratives, objects and symbolism, and more.

Drawing and Painting portfolios are more formal and focused on the demonstration of skill and concept in form, value, composition. Projects may include but not limited to themes around identity, social media, fantasy and illustration, portraiture, narrative, etc.

Students in these courses are expected to work outside the classroom and beyond scheduled periods.

## **AP Photography**

Students take a minimum of 2 years in the photographic arts (including digital photo and darkroom, as well as graphic design) before signing up for AP and need permission from the teacher upon review of artwork for registration in the course. These art students submit a portfolio of artwork of 15-20 images in May, demonstrating a fundamental competence of various visual strategies and methods, completing a process-driven, personal investigation on a theme. Class projects will include but not limited to straight photography using studio and on-site lighting methods, experimental and non-traditional printing methods such as cyanotype, photoshop manipulation for digital art, sculptural and more abstract variations on the purpose and concept of the photograph and meaning beyond the printed image. Students in these courses are expected to work outside the classroom and beyond scheduled periods.

## **Darkroom Photography 1**

### **Semester One**

This class explores technical and artistic elements of traditional film photography. Students learn black and white photographic film processes through the manual capture, manipulation, and creation of images. Students experiment with photograms, pinhole cameras, Holgas, and SLR cameras. They learn traditional darkroom developing techniques with various films and silver print processing. The class includes a brief history of photography along with a survey of historically impactful photographers from the 19th/20th century.

## **Darkroom Photography 2**

### **Prerequisite: Darkroom 1**

### **Semester Two**

This class takes the skills learned in Darkroom 1 with wet processing and 35mm film, and offers students the opportunity to print larger and use a variety of films including 120 film for medium format cameras. Students move into collage, multiple exposure, and other alternative and advanced processes in the darkroom. Students continue to engage in an ongoing discussion of the history of photography and its role in society from inception through the modern day, knowledge of which allows them to effectively explore their own creative interests.

## **Drawing 1**

### **Semester One**

Drawing offers a wide variety of drawing experiences with emphasis placed on art structure and technique. Assignments divided between the two semesters will include: contour, gesture, value, enlargement, perspective, design and figure. Materials introduced include pencil and colored pencil, charcoal, oil and chalk pastel, pen. Students will develop their observational and accuracy skills as they progress through the semester with a variety of assignments including still life, fantasy, self-portrait, perspective and landscape.

## **Drawing 2**

### **Prerequisite: Drawing 1**

### **Semester Two**

Drawing 2 builds on Drawing 1 includes more complex applications of the above where students need to demonstrate understanding of line, value, basic color theory, pattern, proportion to succeed as they begin designing and composing more personal images.

## **Sculpture**

This course is structured for the student to explore visual communication through three-dimensional design and fabrication. Fundamental elements and principles of sculpture are introduced, while also emphasizing the student's individual artistic vision. This is a 'hands on' studio course, using such materials as plaster, cement, air-dry clay, polymer clay, paper, and wood. Craftsmanship and creativity are stressed. Major projects include both abstract and figurative sculpture.

## **Digital Graphic Design 1**

Graphic design is the art of creating exciting visual content for problem solving and communication purposes. Combining art and technology, students in this course will gain a foundation of basic graphic design elements and principles, become familiar with Adobe Photoshop, and will work on an array of creative projects requiring visual solutions. Project choices to include magazine covers, posters, advertisements and logos, typography, packaging, photoshopped images, and more.

## **Digital Graphic Design 2**

### **Prerequisite: Digital Graphic Design 1**

## **Painting 1**

## **Advised Prerequisite: Drawing I**

### **Semester One**

Painting 1 is a hands-on studio course, where students will learn the fundamentals of painting approaches and techniques. Projects will include still lifes, (self) portraiture, landscapes, and more - working primarily with water mixable oil paints and acrylics. Students are expected to understand relevant terminology, and learn various approaches to painting. Effective brush control, good compositional design and craftsmanship are all stressed. Original imagery is also emphasized, so photos taken with student's cell phones could play a role.

### **Painting 2**

#### **Prerequisite: Painting 1**

### **Semester Two**

## **Introduction to Woodworking**

### **Semester One**

This is the first level of woodworking at Avon. It is a shop-centered class about learning how to operate safely in a shop environment. Students will learn how to use hand tools as well as power tools to shape rough sawn lumber into flat dimensional stock specific to each project. Students will learn the basics of woodworking joinery, completing pre-selected tasks in order to develop skill. The student will also learn the basics of Google Sketchup, a computer-aided design program to draft projects.

## **Woodworking 1**

#### **Prerequisite: Introduction to Woodworking**

### **Semester Two**

This course builds on the basic skills learned in Intro to woodworking. It will focus on the study of design and construction of fine furniture. Students will design a small shaker table and build it from hardwood sourced in the Avon Old Farms Schools forest. Students will also complete a few small projects of their own design such as a small box or a turned bowl.

## **Woodworking 2**

#### **Prerequisite: Woodworking 1**

Woodworking 2 will give students the opportunity to work more independently, further developing their design and woodworking skills. They will build upon their computer aided design skills to plan and shape each project from concept to completion. They will be expected to make more difficult projects and be more self motivated in this class.

## **Advanced Woodworking**

#### **Prerequisite: Woodworking 2**

Advanced woodworking is a 3rd year class building on previous years in the shop. Each student should come prepared to accomplish projects of increasing difficulty with a longer time commitment. The design process is much the same but expected to be more detailed. The student will operate in a smaller class size with the opportunity to express their creativity while developing more skill in woodcraft.

*Music education offers a unique learning opportunity to explore individual creativity, artistic expression, and in-depth understanding of cultures in the diverse world. Students may elect*

# PERFORMING ARTS DEPARTMENT

*ability. The Music Department believes that the study of music is crucial in developing the whole boy since it requires empathy, self-discipline, and collaboration.*

## INSTRUMENTAL COURSES AND PROGRAMS

### **The Avon Big Band—Jazz Ensemble**

As members of the Big Band, students learn the basics of playing and the history of jazz. The band plays in an ensemble setting and course requirements include at least three performances during the school year. Students are introduced to the greatest jazz musicians and their impact on the genre. This course is open to all students at any experience level.

### **Super G Jazz– Jazz Ensemble Honors**

Starting as a student inspired jazz combo, Super G Jazz has become a mainstay in the Music Department since 2012. The ensemble plays and studies traditional jazz standards, and has many performing opportunities throughout the year. Meeting one evening a week, the group is designed for students that wish to explore and improve their improvisation skills beyond the Big Band setting. Emphasis is placed on increasing the students jazz vocabulary, while learning classic melodies of Miles Davis, John Coltrane, Sonny Rollins, Charlie Parker, Wayne Shorter, Horace Silver, Herbie Hancock, Grant Green, and many other legends of jazz.

### **The New Avon Sound—Elite Jazz**

This elite jazz band is a select number of instrumental students who show exceptional skills in reading and improvising. This group plays music at the advanced level and performs numerous times throughout the year. In the past, the group has performed at neighboring schools such as Pine Grove Elementary and Miss Porter’s School. The curriculum includes advanced techniques in improvisation and the history of jazz music. Students will learn to transcribe and play solos, as well as how to develop their own improvisational skills.

### **Guitar**

#### **Semester One and/or Semester Two**

Guitar Now Online (GNO) is a web-based course designed to cater to guitarists of all levels, from beginner to advanced. Students watch and learn pre-recorded video lessons, take online quizzes, and record themselves playing exercises, while following the GNO Learning Maps that are appropriate for their level and experience. Recording software will also be used in this course, as students learn songs and styles of their choice. All students are encouraged to sign up for as many semesters of guitar as they wish, and semesters do not need to be taken consecutively. A laptop computer and an electric guitar are required for this course. Each semester is .5 credit.

### **Chamber Ensemble**

The Chamber Ensemble accepts any instrumentalist interested in playing “classical” repertoire; from Bach, Mozart, and Beethoven, to arrangements of contemporary music from movie soundtracks, Broadway, and popular music. Instrumentation includes traditional orchestral instruments, as well as pianists and keyboardists. The ensemble meets two evenings a week, and performs 4 concerts a year.

## VOCAL MUSIC CHORUSES AND PROGRAMS

## **Chorale**

The Chorale is open to all students regardless of grade level or experience. In daily rehearsals, students prepare for performances while learning to sing with healthy and age appropriate vocal technique. Students will explore basic music theory and history and will encounter the music of many different cultures and traditions. The Chorale performs on campus frequently throughout the school year.

## **Honors Chorale**

Students who have completed at least one year of Chorale or an equivalent at a previous high school are welcome in Honors Chorale. The ensemble is curricular and requires an audition. Students in Honors Chorale continue to refine their vocal technique and expand their understanding of music theory. Sight-singing is a regular part of the Honors level, and students work on their musicianship skills daily in class. Honors Chorale performs a wide variety of choral repertoire at regular performances on and off campus.

## **Riddlers**

Named after the school's founder, Theodate Pope Riddle, the Riddlers are the top choral ensemble at Avon Old Farms School. The twenty members of the Riddlers are selected through a competitive audition process and have progressed through the various stages of choral training. Prospective members must display outstanding vocal technique, rehearsal technique, and initiative. The Riddlers' repertoire is extensive and includes medieval chant, renaissance polyphony, romantic part songs, folk songs, and contemporary classical music. The Riddlers rehearse and perform independently and with the school's larger choral ensembles. They travel for performances at major concert venues in New York City and Boston and have recently toured internationally in Ireland, Greece and Canada. In 2014, the Riddlers were selected to perform at the American Choral Directors Association Eastern Division Conference in Baltimore. In February 2017, they will perform Randall Thompson's Testament of Freedom at Carnegie Hall as part of the DCINY concert season.

## **Music Production**

This course will introduce students to the theory and fundamentals of using software and hardware tools for commercial music production (computer, multitrack recording software, waveform editor, signal processing, synthesizer keyboards, and microphone techniques). The class will stress application and creative content, using a series of creative activities and projects that expose student improvising and performing with electronic and other instruments, multitrack recording, music arranging, and equipment configuration. Upon successful completion of this course, students will demonstrate familiarity with digital music and sound recording software. Students will use the basic building blocks of music to compose, organize, and arrange music. In addition, students will construct and setup the proper signal-pathway of sound using microphones, cables, sound mixing boards, and DAW software.

## **Music Appreciation**

This course is designed to introduce the history of music to musicians and non-musicians alike. Although the course is open to all students, the design is catered to introducing the great music and composers of the past 400 years in a way that no formal music training is required. Using online resources, students will be asked to listen to and identify major works from Bach, Mozart, Beethoven, Debussy, Stravinsky, Copland, as well as many others, while they improve their listening skills. The course will also survey American music from the 18th century to today, focusing on Blues, Jazz, Swing, Pop, Rock, Country, and Rap. Assignments and discussions will focus on how social and political events have shaped the way music was written and enjoyed. Students will also interact with music using GarageBand and other digital audio workstations. This course will satisfy the arts requirement for graduation.



AVON OLD FARMS  
SCHOOL