



Rocky Hill School

2018-19 UPPER SCHOOL COURSE OF STUDY

Graduation Requirements in the Upper School:

- A. Academic Credits: 20 (1 year-long course = 1 credit)
- **English:** 4 credits
 - **Mathematics:** 2 credits and through Algebra II
 - **Science:** 2 credits of lab sciences, including Biology
 - **History & Social Science:** 3 credits, including US History
 - **Modern & Classical Language:** 2 credits, through Level 3 of a language. English Language Learners must take, or place out of, the ELL program courses through Level 3.
 - **Arts:** 2 credits in any combination of Music *or* Visual Arts
 - **Elective Courses:** 5 credits in any combination of courses from any department, excluding required courses
- B. Community Service: 40 hours, prior to beginning the Senior Internship
- C. Senior Internship Project: Successful Completion
- D. Athletics/Co-Curricular: 4 years, 2 years per season.
*9th grade and New Students must participate in the Fall

The Upper School *strongly* recommends the following course of studies:

- 4 years of English
- 4 years of Mathematics
- 4 years of a Modern or Classical language
- 3-4 years of Science
- 3-4 years of History & Social Science
- 1-2 years of Music
- 1-2 years of Visual Arts

Course Load

The *required* minimum for each semester's work is five 5 academic courses. Students are *strongly* encouraged to take 6 academic courses each semester through junior year. The Upper School *strongly recommends* that students not take more than 6 academic classes so that they have an open block in their schedule for doing school work, pursuing extra help, or for taking advantages of other opportunities on campus.

Advanced Placement Maximum

The *maximum* course load in Advanced Placement is 4 courses at any one time.

Independent Research / Study

Students who wish to conduct independent research, or study on a particular area or subject of their interest may apply for an **Independent Research / Study**. Working with a faculty or staff member, students develop a plan, including learning objectives and assessment methods, and propose what credits would be given for successful completion of their research / study. Any member of the Rocky Hill School faculty and staff may serve as the student's sponsor / supervisor, based on that person's own experience and expertise, and their interest and willingness to participate. If the proposal is accepted and approved by the Head of Upper School, the student is enrolled and expected to work independently, with support from the sponsor / supervisor. Please note that applications will only be approved for work that is significantly different than what is offered in RHS courses.

Senior Internship

The Senior Internship is a four-part project that spans the length of students' senior year and is the culmination of their Rocky Hill experience. At the beginning of the selection process, students contact professionals in areas of interest and arrange a one-month internship commitment. The final choice may reflect possible career choices, a commitment to community service, or a unique one-time opportunity. A primary requirement is that students pursue a passion and organize a program that provides a significant learning opportunity but that is uncompensated.

Once an internship has been secured, students are responsible for managing all of the details of the schedule, setting objectives, initiating all communications necessary to ensure the success of the internship, and preparing a final presentation of the results of their internship. Students also engage in substantial research related to the field and the organization/business. The student's adviser plays an important role in supporting the student throughout this process.

Standardized Testing for College Admissions

All students will receive individualized testing advice from the College Counselor but the following plans apply to most students:

Sophomores and juniors will take the **PSAT** in October each year. Students are also given the opportunity to take a **practice ACT** at school in their junior year. With the help of the college counselor, students will develop a testing plan. Based on the comparison of PSAT and diagnostic ACT results, the college counselor advises students as to which tests are best suited for them: SAT or ACT, and when to take them next. **Students are encouraged to take the SAT or ACT with Essay/Writing component at least once.** Many colleges no longer use the essay/writing section.

Many students take both the ACT and SAT at least once, and then repeat the test they are most comfortable with. It is not necessary for most students to take a standardized test more than twice. Standardized tests should be taken at the point at which students have maximum content knowledge, preparation, and confidence.

The ACT and SAT are held in equal esteem and substitute for one another in the admission process at all college and universities. They are different tests, which is why we offer practice in both and help students choose their 'target' for improvement by comparing the results. Taking tests for the first time in the spring and the second time in the fall is optimal. Remember, many colleges are now test optional.

Students with documented learning differences or disabilities can apply to the College Board (PSAT, SAT, AP's) or ACT for accommodations on these tests. Documentation must be no less than three years old at the time of application. Students and families should contact the Director of College Counseling who coordinates Services for Students with Disabilities on standardized testing for college admission.

Academic Courses by Department

Note: Courses are offered with consideration of student interest. Courses are sometimes not offered in a particular year due to low student interest, master schedule considerations, or faculty staffing reasons.

ENGLISH

Overview

Throughout the four-year journey, students will study the world's finest examples of literature and written expression to enhance their own thinking. Students will try their hand at writing creative fiction, analytical essays, poetry, memoirs, drama, personal narratives, letters, blogs, and everything in between. To bolster student reading comprehension, writing skills, and verbal communication, teachers are equipped with a bevy of instructional methods, some of which include Harkness discussions, Project-based Learning, inquiry-based pedagogy, and other student-centered methodologies. The curricula also include a thoughtful, age-appropriate progression in a variety of skills including grammar and research. At the center of English class is the drive to becoming an engaged citizen, capable of critical thought, and possessive of an informed sense of self. Courses between grades 9 and 11 feature two tracks - Honors and regular; the former is distinguished by the level of rigor and occasionally features more texts in the semester. Courses are all year-long except for electives, open to sophomores, juniors and seniors, which are semester-long.

GRADE 9 (Honors option), full year, 1 credit

On the cusp of their own journey through high school, ninth graders at Rocky Hill read a number of texts centered around the theme of journeys, both literal and figurative. These texts represent literature from diverse time periods and cultures, from Ancient Greece to modern Iran, and genres such as graphic novels and poetry. With students coming from many different middle schools, ninth-grade English serves as a bridge between middle school and the rest of the upper school by mixing review of foundational skills and concepts with new material and increasing skill levels. Possible texts include *The Epic of Gilgamesh* (Mitchell translation); *The Odyssey* (Homer, Lombardo translation); *Twelfth Night* (Shakespeare); *Persepolis* (Satrapi); *Brown Girl Dreaming* (Woodson); and *The Immortal Life of Henrietta Lacks* (Skloot) as well as a variety of short stories and poems throughout the year.

GRADE 10 (Honors option), full year, 1 credit

The thematic context for English 10 is the human condition. Through challenging texts and thought-provoking writing assignments, students examine how the world's diverse social, cultural, and racial landscapes amplify and enrich their response to the question, "What does it mean to be human?" Texts may include: *1984*, *Frankenstein*, *Othello*, *The Chocolate War*, *A Raisin in the Sun*, *Brave New World*, *Black Ice*, *Night*, *Cry*, *the Beloved Country*, and *Our Town*.

GRADE 11 (Honors option), full year, 1 credit

Juniors at Rocky Hill examine the American experience through the lens of literature, and explore how the concept of being American is different for many people, and how it has changed over time. Building on individual and global perspectives in English 9 and English 10, English 11 invites students to consider why the extraordinary experiment we call the United States remains so vital and captivating. Texts considered include The Bedford Anthology of American Literature, Adventures of Huckleberry Finn, The Great Gatsby, Their Eyes Were Watching God, The Catcher in the Rye, and several poems, short stories, and other works that represent the major movements of the American literary canon. Those can include pieces by Amy Tan, Toni Morrison, Charlotte Perkins Gilman, Henry David Thoreau, Maya Angelou and others.

AP (12), full year, 1 credit

Prerequisite: Successful completion of English 11 or Honors English 11 and recommendation of the English Department.

AP English Literature is intended to prepare students for success in college by providing the experience of sophisticated critical reading and discussion of, and writing about, the major literary genres. The pace is swift and writing assignments frequent. The reading list is derived principally from the AP exam and reflects variety and balance in the coverage of periods, cultural origin, and gender. Students in AP English are expected to complete a summer reading and writing assignment prior to the start of the 12th grade. Students enrolled in this course must take the AP exam at the conclusion of the course. Texts used in this course may include Pride and Prejudice, Heart of Darkness, Things Fall Apart, Hamlet, Atonement, and The Things They Carried, in addition to a wide variety of poems, essays, and short stories.

AFRICAN LITERATURE, semester, .5 credit

Prerequisite: None

Open to Sophomores, Juniors, and Seniors

This course serves as an introduction to modern African literature and its cultural, political, literary, and linguistic contexts. It aims to touch on authors from several countries in order to explore the commonalities and differences among the cultures—and literature those cultures produce—of the African continent since the end of formal European Imperialism. Students will also read texts from a variety of genres, including essays, memoirs, novels, short stories, and poems. These texts will serve as the basis for discussions and analytical writing and will also serve as a springboard for understanding the social, cultural, and political issues at stake in their countries of origins. Possible texts can include Decolonizing the Mind (Ngugi); One Day I Will Write about this Place (Wainaina); Fantasia (Djebar); The Thing around your Neck (Adichie); and Waiting for the Barbarians (Coetzee).

BEYOND THE MARGINS, semester, .5 credit

Prerequisite: None

Open to Sophomores, Juniors, and Seniors

In this course, students will read works from authors who have been marginalized and underrepresented for historical reasons. Students will read works that address issues of class, gender, race, ethnicity and sexual orientation. This course will ask students to explore the following questions: How does being part of a marginalized group impact a person's identity? What are the challenges that a person faces? How does a person overcome these challenges? What changes must the power group make in order to become a more inclusive and welcoming society?

CREATIVE WRITING, semester, .5 credit

Prerequisite: None

Open to Sophomores, Juniors, and Seniors

In the first half of this course, students read, and analyze a variety of types of creative writing (stories, poems, plays, songs, blogs and creative non-fiction) and experiment with short pieces in these various genres (to be determined in part by the interests of the students in the class). The second half of the course involves students continuing to look at a variety of styles and genres while focusing on creating their own portfolio, which might be organized around a theme, genre, or style (for example, a student could write exclusively for a blog, or work on a novel, or write song lyrics for an album, while in the first quarter, they'd be required to try a variety of genres). Note: students are encouraged to take this course in consecutive semesters (first and second, A & B), but it is open to students who wish to only do one semester.

LATIN AMERICAN LITERATURE, semester, .5 credit

Prerequisite: None

Open to Sophomores, Juniors, and Seniors

The political landscape of 20th century Latin America gave rise to a rich body of literature amongst the Latin American community from North, Central, South America and the Caribbean. This course will provide a survey of Latin American literature of the 20th and 21st centuries and the relationship between literature and social change. Students will read poetry, short stories, plays, testimonial literature and novels. Students will explore the different genres of literature. Literature will be used as the vehicle to explore history, geography, politics, human rights, social justice and activism, as well as gender and class issues.

MAGICAL REALISM, semester, .5 credit

Prerequisite: None

Open to Sophomores, Juniors, and Seniors

For millennia, people have written and read fiction in order to better understand themselves, their cultures, and their world. Starting with magical realism in mid-twentieth-century Latin America and continuing into the twenty-first century with texts from around the world, students will consider why for some artists, key elements of magical realism, such as its hybridity, serve as a useful method for depicting the realities of twentieth and twenty-first-century life. In this course, students will reflect on the nature of fiction and its ability to express truth as they read from a selection of global texts and compare those texts across cultures in class discussions and written work, both analytical and creative. Possible texts: *Collected Stories of Gabriel Garcia Marquez* (Garcia Marquez); *The Stories of Eva Luna* (Allende); *A Tale for the Time Being* (Ozeki); *Stars of the New Curfew* (Okri); *The Underground Railroad* (Whitehead); *The Elephant Vanishes* (Murakami) as well as films such as “*Pan’s Labyrinth*” (del Toro) and “*Like Water for Chocolate*” (Arau).

NAVIGATING RHETORIC IN THE DIGITAL AGE, semester, .5 credit

Prerequisite: None

Open to Sophomores, Juniors, and Seniors

Rhetoric is often viewed as anathema or simply confined to political speech. During this digital age, we are constantly bombarded by rhetoric. Although we may not be aware of it, rhetoric plays a huge role in our daily lives. In order to navigate the digital age, we must understand how to decode the messages so that we can make informed decisions. We will examine the foundations of rhetoric, as well as essays, speeches, popular culture text, imaginative literature, visual imagery, advertisements and social media. In this course, you will learn how to think, write and speak logically. Students will learn how to persuade and craft a message in various formats---written, spoken, digital--so that they will become empowered to analyze, create and participate as an informed citizen in the digital age.

SHAKESPEARE, semester, .5 credit

Prerequisite: None

Open to Sophomores, Juniors, and Seniors

In this course, students study the writings of William Shakespeare by closely reading and considering his plays and sonnets. In order to better understand and appreciate his genius, students will even try their hand at acting, evaluate cinematic adaptations, read aloud in class, write and produce a play of their own making, and otherwise engage in the mentally stimulating activity that is reading the bard. Some questions that will guide our studies include: what role do our eyes and heart play in conveying truth? What relationship do humans have with works of art? What is the difference between a private and public

persona? Texts may include: Shakespeare's Sonnets and Poems, The Winter's Tale, The Merchant of Venice, King Lear, Measure for Measure, and Titus Andronicus.

TELLING AND RETELLING, semester, .5 credit

Prerequisite: None

Open to Sophomores, Juniors, and Seniors

"Telling and Retelling" or "Tales Retold" looks at retellings of stories and considers why people retell stories and what doing so can add to our understanding of the stories and of our own cultures/societies. Possible texts include: Grimm's fairy tales and various retellings of fairy tales (from Disney movies to *Kissing the Witch*, a feminist, LGBTQ collection of retold fairytales) to *1001 Arabian Nights* and Salman Rushdie's *Two Years, Eight Months, and Twenty-Eight Nights*.

MATHEMATICS

ALGEBRA FOUNDATIONS, full year, 1 credit

Prerequisite: None

This course provides students with a foundation in algebraic skills to prepare them for Geometry. Much emphasis here is put on solving and graphing linear equations. Quadratic and exponential functions are also studied. Applications from other disciplines and everyday life are an important part of the course. Graphing and curve sketching are integral parts of this course as well. Students learn how to construct graphs by hand, by using the Texas Instruments TI-NSpire CX graphing calculator and the Geometer's Sketchpad software. The calculator is introduced in an Algebra I setting, and used extensively in the mathematics courses that follow.

GEOMETRY CONCEPTS, full year, 1 credit

Prerequisite: Algebra

This course is about shape, dimension, patterns, and measurement. Students study the classic geometric figures—polygons and circles—as well as the meaning of parallelism, congruence, and similarity, and develop connections between these geometric concepts and algebra. To the greatest extent possible, students develop their understanding of these concepts and connections through experiment and discovery. Students will gain an understanding of how proofs are developed and used in geometry. The class makes extensive use of the Geometer's Sketchpad. Successful completion of this course, along with Algebra II, can prepare a student for Pre-calculus, Statistics, or Functions and Modeling.

GEOMETRY, full year, 1 credit

Prerequisite: Algebra

This course is about shape, dimension, patterns, and measurement. Students study the classic geometric figures—polygons and circles—as well as the meaning of parallelism, congruence, and similarity, and develop connections between these geometric concepts and algebra. To the greatest extent possible, students develop their understanding of these concepts and connections through experiment and discovery. Students also learn to develop logical persuasive arguments—proofs—about the figures they study. The class makes extensive use of the Geometer's Sketchpad. Successful completion of this course, along with Algebra II, can prepare a student for Pre-calculus, AP Statistics, Functions and Modeling.

HONORS GEOMETRY, full year, 1 credit

Prerequisite: Successful completion of Algebra I (usually 85% or better), high scores on the mathematics portion of the SSAT and the Rocky Hill Math Placement Test, as well as the recommendation of the current mathematics teacher.

This course covers the same topics as Geometry, but in more depth and with more challenging problems. Students also investigate topics in solid geometry, fractal geometry, and the geometry of polyhedra. Triangle trigonometry is introduced in some depth. Successful completion of this course, along with Algebra II, can prepare a student for Pre-calculus, AP Statistics, or Functions and Modeling.

ALGEBRA II with APPLICATIONS, full year, 1 credit

Prerequisite: Algebra Foundations, or Algebra I.

The main focus of Algebra II is to familiarize students with elementary functions, their graphs, and their applications. Students master the study of functions including linear, exponential, logarithmic, quadratic, radical, polynomial, rational, and trigonometric. There is extensive use of the Texas Instruments TI-NSpire CX graphing calculator and laptops in class. Experiments with Fathom, Geometer's Sketchpad, Microsoft Excel software, and real data help students explore the characteristics of functions. Students also learn to apply solutions to systems of equations, compute elementary matrix operations, and explore the complex number system. This is a project-based course and students will primarily be evaluated using alternative assessments. This course does not prepare a student for Pre-calculus.

ALGEBRA II, full year, 1 credit

Prerequisite: Algebra Foundations, or Algebra I.

The main focus of Algebra II is to familiarize students with elementary functions, their graphs, and their applications. Students master the study of functions including linear, exponential, logarithmic, quadratic, radical, polynomial, rational, and trigonometric. There is extensive use of the Texas Instruments TI-NSpire CX graphing calculator Excel software, and real data help students explore the characteristics of functions. Students also learn to apply solutions to systems of equations, compute elementary matrix operations, and explore the complex number system. Successful completion of this course prepares a student for Pre-calculus, Statistics, or Functions and Modeling.

HONORS ALGEBRA II, full year, 1 credit

Prerequisite: Honors Geometry (usually 85% or better) or Geometry (usually 90% or better) and recommendation of the Mathematics Department.

In Honors Algebra II, students develop and expand their knowledge of functions through investigations involving extensive use of the TI- 84 graphing calculator, Microsoft Excel, Geometer's Sketchpad, and Fathom. Around the discussion table, students cultivate the

ability to express their mathematical thoughts effectively. Additionally, they are challenged to synthesize previously learned concepts in new situations, and thereby expand and deepen their algebra skills. On successful completion of this course, students have a solid understanding of linear, exponential, logarithmic, quadratic, radical, polynomial, rational, and trigonometric functions, as well as systems of equations. Students are prepared for Pre-calculus, AP Statistics, or Functions and Modeling.

PRE-CALCULUS, full year, 1 credit

Prerequisite: Geometry and Algebra II (not Algebra II with Applications).

This course prepares students for Calculus. The first part of the course is a detailed study of linear, quadratic, polynomial, rational, exponential, and logarithmic functions. The functions are studied analytically, graphically, and algebraically. Applications of these functions are studied in depth. The Texas Instruments TI-NSpire CX graphing calculator is used extensively in these investigations. The second part of the course consists of a detailed study of trigonometry. Topics include triangle geometry, including the Law of Sines and the Law of Cosines and their applications, radian measure, arc length, area of sector, trigonometric addition formulas, and trigonometric equations. Polar coordinates are also introduced. Students convert rectangular coordinates to polar, graph polar coordinates, and use polar coordinates to find roots of complex numbers. The conic sections are also studied. Students see many real applications of the mathematics.

HONORS PRE-CALCULUS, full year, 1 credit

Prerequisite: Successful completion of Honors Algebra II and Honors Geometry (usually 85% or better) or Algebra II and Geometry (usually 90% or better) and recommendation of the Mathematics Department.

This course covers the same material as Pre-calculus, but in greater depth. There is more discussion of the subtle properties of functions and their inverses. Students also investigate challenging applications of the mathematics in science, social science, engineering, and finance.

CALCULUS, full year, 1 credit

Prerequisite: Pre-calculus

The course is an introduction to the concepts of differential and integral calculus. After a rigorous review of several topics covered in their previous Geometry, Algebra, and Pre-calculus courses, students examine limits, derivatives, and basic integrals. The meanings and uses of these topics are carefully handled so that students become adept at solving many types of related problems, and feel comfortable tackling a college-level calculus course in the future.

AP CALCULUS (AB), full year, 1 credit

Prerequisite: Successful completion of Honors Pre-calculus (usually 85% or better) or Pre-calculus (usually 90% or better) and recommendation of the Mathematics Department.

This college-level course is an introduction to the concepts of differential and integral calculus. Students examine limits, derivatives, and basic integrals and their meaning along with related problems. Students enrolled in this course must take the AP exam at the conclusion of the course. Because of the volume of material that must be covered to adequately prepare for the AP Calculus exam, students may also be required to attend seminars over and beyond regular class time.

AP CALCULUS (BC), full year, 1 credit

Prerequisite: Successful completion of AB Calculus (usually 85% or better) and recommendation of the Mathematics Department.

This college-level course covers sequences and series, methods of integration, differential equations, and the calculus of polar and parametric equations. Students enrolled in this course must take the BC Calculus AP exam at the conclusion of the course.

MATHEMATICAL MODELING, full year, 1 credit

Prerequisite: Algebra II or Algebra II with Applications

This course explores the applications of mathematics in various real-world settings from science to business, industry, and medicine. Students see the numerous uses of algebra, geometry, and statistics in everyday life and make extensive use of computers, calculators, calculator-based laboratories, and the Internet. Students also explore the use of spreadsheets, databases, and statistical, graphics, and presentation software.

STATISTICS, full year, 1 credit

Prerequisite: Algebra 2

This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The course is activity based with an emphasis on the use of technology and written analysis of data. A key aspect of examining real data and using statistical techniques is to put that analysis into context and to understand the impact of that analysis. The course covers exploratory analysis of data, designing studies, sampling data, and correlation and introduction to statistical inference.

AP STATISTICS, full year, 1 credit

Prerequisite: Successful completion of Honors Algebra II (usually 90% or better), Honors Pre-Calculus (usually 85% or better), or Pre-calculus (usually 90% or better), and recommendation of the Mathematics Department.

AP Statistics is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The course is activity-based with an emphasis on the use of technology and written analysis of data. A key aspect of examining real data and using statistical techniques is to put that data into context and to understand the impact of the analysis. The topics for AP Statistics are divided into four major themes: exploratory analysis, probability, planning a study, and statistical inference. This basic order is followed throughout the year. Students enrolled in this course must take the AP Statistics exam at the conclusion of the course. Because of the volume of material that must be covered to adequately prepare for the AP exam, students may also be required to attend seminars over and beyond regular class time.

SCIENCE

BIOLOGY CONCEPTS AND APPLICATIONS, full year, 1 credit

Laboratory Science, fulfills biology requirement for graduation

Students will learn basic biological concepts along with their real-world historical and modern applications, while developing and consistently using laboratory skills. Concepts taught will include understanding and practice of the scientific method and experimental design, biological molecules, ecology, the cell, plant growth and reproduction, bioenergetics, Mendelian genetics, the central dogma, evolution, the classification of life, viruses, and immunology. Applications include connecting biological content to social issues and understanding how present knowledge of biology topics is developed through the work of scientists, often in a cooperative and/or sequential way. The approach will suggest to students that they are expected to continue to make connections as an essential skill for responsible members of society. This course is intended for students who will benefit from a less quantitative approach to the subject and prefer a social science approach.

INTRODUCTORY BIOLOGY, full year, 1 credit

Laboratory Science, fulfills biology requirement for graduation

The theme of form as it relates to function in nature unifies the concepts covered in this biology course as students seek to gain a clear understanding of the process of scientific investigation while being introduced to a wide variety of general biology topics. Students begin the year with an introduction to experimental design and data analysis. To take advantage of New England's warm autumn weather and our natural waterfront classroom, the year continues with a study of ecology, including an investigation into the invertebrate community at the shoreline. As the weather turns colder, students enter the laboratory to examine life on the molecular and cellular level. In the lab, students explore cell structures, cell metabolism, cell division, genetics, and gene expression. The year concludes with an introduction to the concepts in evolution and classification. This conclusion includes an introduction to the animal and plant kingdoms, as spring invites students outside to campus locations to see organisms in the field.

HONORS INTRODUCTORY BIOLOGY, full year, 1 credit

Laboratory Science, fulfills requirement for graduation

This course is for incoming freshmen with genuine science interest that are motivated, strong readers and have outstanding organization skills. While covering similar material as Introductory Biology, Honors Biology emphasizes the molecular developments in the understanding of biology and the development of advanced scientific skills and techniques. This course continues the use of data collection software, advanced graphing techniques,

statistical analysis, computer simulations, and scientific journal articles to enhance students' own investigations and writings. The course is fast-paced with assumed reading comprehension with an emphasis on the application of concepts.

INTRODUCTORY CHEMISTRY, full year, 1 credit

Laboratory Science

Prerequisite: Successful completion of Introductory Biology and Algebra I, and enrollment in or completion of Geometry.

This course is an introduction to the basic subjects of chemistry such as heat, matter, atomic structure, reactions, chemical bonding, reaction kinetics, and equilibrium. The concepts of chemistry are learned through a mixture of lecture, laboratory exploration, projects, and class discussions. Students acquire skills such as careful measurement techniques, scientific notation, formula writing, and molecule and compound naming. These skills are then used to study more advanced chemical concepts which may include electrochemistry, organic chemistry, nuclear chemistry, and biochemistry. The continuing development of scientific writing and data analysis with computers is emphasized.

HONORS CHEMISTRY, full year, 1 credit

Laboratory Science

Prerequisite: Successful completion of Introductory Biology and Geometry, as well as recommendation of the Science Department.

This course is for students with exceptional science interest, who have demonstrated outstanding achievement in Introductory Biology. In addition to the material covered in the Introductory Chemistry course, the advanced mathematical background of students taking Honors Chemistry allows for a faster pace, more advanced subjects, and a greater quantitative approach to laboratory investigations. The ability to complete independent work effectively is a critical determinant of a student's success in this course.

DISCOVERING PHYSICS, full year, 1 credit

Prerequisites: Successful completion of Algebra II and Biology.

The Discovering Physics course, traditionally taken during a student's junior or senior year, is an investigation of the fundamental principles of the physical world. Starting with mechanics, the students will investigate the world around them, learning about motion, force, momentum, and energy. Upon completion of mechanics, the course will move to electricity & magnetism where students will explore electric and magnetic fields, and the fundamentals of basic circuitry. If time permits, concepts such as waves, optics, and thermal physics may then be studied. As the title of the course suggests, material will mainly be viewed through the lens of both discovery and exploration, thus making this course more hands-on and experimental, and less quantitative and abstract than its Honors

counterpart. Projects such as “Mythbusters”, “Into the Mind of a Physicist”, and “Are Laws (of Physics) Made to be Broken?” will be used to uncover important material found in a typical classical physics class. Laboratory design and execution is emphasized, and there will be opportunities to create and revise student-led experiments throughout the course. A strong interest in experimental design is required, as well as an understanding of algebra concepts and basic trigonometry.

HONORS PHYSICS, full year, 1 credit

Prerequisite: Successful completion of Algebra II and Biology, and recommendation of the Science Department.

This course is for students with exceptional science interest, who have demonstrated outstanding achievement in prior science coursework. In addition to covering the material in Introduction to Physics, the advanced mathematics background of students taking Honors Physics allows for more rigorous quantitative analysis of physics concepts. As a result of the faster pace of this course, more advanced topics such as Special Relativity and Quantum Physics are covered. Students are also responsible for outside reading in order to place scientific discovery in both historical and modern-day contexts.

AP BIOLOGY, full year, 1 credit

Laboratory Science

Prerequisite: Successful completion of Introductory Chemistry, and Biology, and/or the recommendation of the Science Department.

This is a college-level, lab-based course taught with the expectation of College Board rigor accompanied by genuine student interest and curiosity. AP Biology is fun, interesting, and requires a commitment to the volume of reading and independent research for the thematic units. Some students earning high grades in non-Honors Biology, demonstrating a genuine interest in biology and commitment to learning, may have had successes with the AP Course. Building on the broad survey of topics covered in Honors Biology, AP Biology takes an integrated approach to several focused questions and prepares students for advanced placement in college science courses. The year begins with an in-depth, molecular study of gene expression and control, and recombination. Throughout the year, proposed questions are addressed by laboratory investigations—self-designed experiments, research projects, and outside reading assignments. ***Students must take the AP Biology exam at the conclusion of this course.***

AP CHEMISTRY, full year, 1 credit

Laboratory Science

Prerequisite: Successful completion of Chemistry and recommendation of Science Department.

AP Chemistry is intended to prepare students for advanced placement in college science courses by providing a rigorous review of basic chemistry topics, the experience of sophisticated critical analysis and discussion of chemistry topics, and an introduction to a more quantitative approach to chemical concepts. The ability to work effectively in the laboratory and to conduct independent problem solving are critical skills for students enrolled in this course. Because of the volume of material that must be covered to adequately prepare for the AP exam, students may also be required to attend seminars and to complete laboratory work over and beyond regular class time. ***Students must take the AP Chemistry exam at the conclusion of this course.***

AP PHYSICS (LEVEL C), full year, 1 credit

Laboratory Science

Prerequisite: Enrollment in, or completion of, Calculus and recommendation of the Science Department.

The Advanced Placement Physics/ Level C is an in-depth exam covering the general topics of mechanics, electricity, and magnetism. This AP course prepares students for college level physics courses by combining theory and problem solving skills with the review of the basic principles of physics. Laboratory work is done in conjunction with the topics covered in class, and the independent problem solving is emphasized. Because of the volume of material that must be covered to adequately prepare of the AP exam, students may also be required to attend seminars over and beyond regular class time. ***Students must take the AP Physics exam at the conclusion of the course.***

GLOBAL BIOETHICAL ISSUES, year long, 1 credit

Prerequisite: successful completion of a Biology course

This cross-discipline introductory course examines ethical issues such as those related to biotechnology and healthcare, including abortion, organ allocation, assisted suicide, health issues, research ethics, biomedical science, genetic counseling and new reproductive technologies. This course develops both ethical and global awarenesses in the minds and hearts of Rocky Hill School students as they explore hypothetical and actual cases of bioethical dilemmas. Viewpoints examined include those of health professionals, theologians, lawmakers, ethics committees, and common people. This course requires students to both understand the basic science referred to in the ethical issues, and then to consider the multiple factors which create and impact these same ethical issues. Students will communicate a supported, plausible opinion about the selected topics with mock documentary style media, debates and essays. Projects that tackle some of the dilemmas students are passionate about will be created in an effort to increase awareness and possibly affect change in realistic ways for students.

FORENSIC SCIENCE 1, semester, .5 credit

Laboratory Science

Prerequisite: successful completion of a Biology course

This course focuses on the collection, identification, and analysis of crime scene evidence. Emphasis will be placed on the methods that link suspect, victim, and crime scene. Laboratory exercises will include fingerprinting analysis, handwriting analysis, blood typing, blood spatter analysis, body decomposition, hair and fiber examination, and DNA analysis. Case studies and current events will be explored; online activities and professional visits are part of this course. This fun course should allow students to see how science is used to answer questions rather than just learning science concepts. Note: students are encouraged to take this course in consecutive semesters (first and second), but may enroll in the first semester only.

FORENSIC SCIENCE 2, semester, .5 credit

Laboratory Science

Prerequisite: successful completion of Forensic Science (Level 1) and of a Biology course

This course is a continuation of the learning and fun from the first level of Forensic Science. Emphasis will be continued to be placed on the methods that link suspect, victim, and crime scene. Laboratory exercises with evidence analysis will include forensic anthropology (bone analysis), cyber-forensics, toxicology, glass evidence and casts and impressions. The course will culminate with designing a "crime scene" with planted evidence for either a middle or upper school class to learn some basic forensics from the experienced students.

HUMAN PHYSIOLOGY, full year, 1 credit

Laboratory Science

Prerequisite: successful completion of both a Biology and a Chemistry course, and the recommendation of the Science Department.

Honors-level Elective: this course is for students with genuine science interest, who have demonstrated dedication and achievement in Biology.

How are bones formed and repaired? What is Alzheimer's disease? How does the eye function to create images the brain can understand? How is muscle formed in a fetus? How does the human heart create its own heartbeat? What happens to food from the time it enters your mouth until it is absorbed as organic molecules in the small intestine? What is an ulcer? What is an allergy? Human physiology is all about the human body. Understanding how the human body works is to move toward understanding one of the most magnificent and complicated natural machines. Students with a genuine interest in human biology will enjoy this elective, which also offers laboratory experiences without the formal lab report. Basic anatomy is covered as 8 of the 11 basic body systems are studied

in detail. Assessment is system unit testing, personal choice projects and presentations, and writing summaries of reviewed articles.

INTRODUCTORY ENVIRONMENTAL SCIENCE, full year, 1 credit

Laboratory Science

Prerequisite: successful completion of a Biology course

This is a cross-disciplinary science course that examines the geological, chemical, biological, and physical processes that drive the environment on the planet, focusing on the interrelationships of these processes in the natural world. Students identify and analyze environmental topics through hands-on activities and laboratory exercises that promote problem solving through an environmental lens. Students are expected to have a basic understanding of experimental design and data analysis. The year begins with a study of the relationship between living organisms and the habitats in which they reside. We examine the relationships among the many different biomes that exist around the planet, including rainforest, savannas, deserts, tundra, deciduous forest, and coniferous forests. Students examine marine biomes as well, with an emphasis on the school's local salt marsh and estuary. Students should be prepared for research and field investigations to pair with their in-depth study of ecology. As the weather changes, students enter the laboratory to examine other environmental science topics, including human population demographics, geology and soil science, atmosphere and weather science, energy use, pollution, and environmental management. Students will gain an understanding of human impacts on the environment and examine sustainable solutions for resolving and/or preventing them.

MARINE BIOLOGY, semester, .5 credit

Laboratory Science

Prerequisite: successful completion of a Biology course

Students use the shoreline of the school's adjacent salt marsh and estuary to become familiar with and identify the many species that reside locally. There is a lot of shoreline fieldwork associated with this course. The taxonomy of marine species, including microorganisms, macroalgae, marine plants, invertebrates, and marine vertebrates is examined in detail in this course. Students should be prepared to conduct dissections of ocean species to reach a better understanding of the adaptations in the anatomy and physiology that give them advantages in the marine world. Students conclude the semester with an investigation into marine habitats and relationships between organisms in marine communities, including a study of the human impacts on these communities. Throughout the semester, topics such as marine productivity, fisheries science, aquaculture, and conservation are explored.

ENDANGERED SPECIES MANAGEMENT, semester, .5 credit

Laboratory Science

Prerequisite: successful completion of a Biology course and the recommendation of the Science Department.

Honors-level Elective: this course is for students with exceptional science interest, who have demonstrated outstanding achievement in Biology.

In this modern era our world is going through an unprecedented amount of environmental change. This course will take an in depth look at the resulting problem of species endangerment and will investigate modern solutions to the problem. Since the conservation of endangered species is synonymous with the conservation of biodiversity, this course will explore the efforts being made to sustain the earth's natural diversity. Students will learn about the fundamentals, requirements, and procedures for complying with the Endangered Species Act. Rocky Hill School is fortunate enough to be situated on a campus where an endangered species resides. Students will analyze the current management plan of the Diamondback Terrapins on campus. Case studies will be examined which will require students to produce real life solutions to the problems hindering the population growth of these Diamondback Terrapins.

HISTORY & SOCIAL SCIENCE

Students are required to take World History I in 9th grade, World History II in 10th grade, and US History in 11th grade. Students entering after 9th grade with courses transferred from other schools will be considered on a case-by-case basis.

WORLD HISTORY I, (Honors option) full year, 1 credit

How do the issues faced by ancient rulers mirror those currently faced by the United States and other national governments? What lessons can we learn from ancient civilizations that can help modern leaders deal with current problems? This course examines these questions by surveying the history of past civilizations and analyzing the impact of their policies and actions. It examines empires and dynasties from Asia, Africa, Europe, and the Americas, using the lenses of government, military power, economics, culture, and religion.

WORLD HISTORY II, (Honors option) full year, 1 credit

World History II provides an introduction to the major economic and political events and figures of the modern period, beginning in the 15th century. Emphasis is placed on the social history of the people who experienced these changes firsthand. Students develop historical thinking skills: to comprehend historical narratives, to interpret historical evidence, to evaluate conflicting historical perspectives and explanations, and to pursue historical research. The subject matter is presented as a dynamic, thought-provoking process of investigation and analysis, not as an exercise in memorization. On completion of the course, students should be able to read historical material with an eye for bias, propaganda, and purpose—rather than with a single emphasis on factual content.

US HISTORY, full year, 1 credit

US History explores the development of the American nation from the Colonial period up to the 21st century. Through discussion, projects, debate, quizzes, and tests, students strengthen their understanding and interpretation of American history. Topics studied include Colonial government and society, revolution, independence, expansion, slavery and the Civil War, imperialism, social reform, the World Wars, and the Cold War. Assigned essays focus on the use of evidence in support of a thesis and research from varying sources. In the first semester, all students complete a research paper and presentation on a United States history topic of their own choosing.

AP US HISTORY, full year, 1 credit

Prerequisite: Successful completion of a World History II course, or US History, and the recommendation of the department.

This course offers an introduction to the study of history at the college level, while preparing students for the AP exam. Students explore history further in depth both factually and conceptually. Readings and essays are geared toward the multiple-choice section, document-based essays, and free response essays that appear on the AP exam. In the first semester, all students complete a research paper and presentation on a United States history topic of their own choosing. Students enrolled in this course must take the AP exam at the conclusion of the course.

CURRENT EVENTS, semester, .5 credit

Open to all students, with preference to Juniors and Seniors

Every two to three weeks, students in this course will focus on a different contemporary issue (social, economic, political, local, national, international). Students will research current events, identify and analyze news sources for validity and bias, discuss and debate points of view, formulate and support theses in writing, and attempt to interest local news outlets (print or online) in some of the collective work. Students will write point papers, analytical essays, op-ed pieces, as well as conduct debates. In addition to the final products, students will be evaluated on the quality with which they use class time to research and prepare their assignments. Time outside of class will also be required to complete research and writing tasks.

EAST ASIA STUDIES: JAPAN, CHINA, AND KOREA, semester, .5 credit

Open to all students, with preference to Juniors and Seniors

Students in this course will study the complex relations between the United States, Japan, China, and Korea by studying the history, economies, governments, military, and international politics of this ancient, influential, dynamic, and enigmatic region. Students will also examine the culture of the region as they develop and hone policy analysis, research, presentation, videography, and website development skills.

ECONOMICS, semester, .5 credit

Open to all students, with preference to Juniors and Seniors

In this class, students learn how to “think like an economist” and see the importance of economics not only in sectors of business and government, but also in their day-to-day lives. Students will be introduced to major economic concepts, examine the many interconnected components of the economy, and study some of the major economists and their theories. Some topics covered include scarcity, choice, opportunity cost, supply, demand, investing, and much more. Students will complete at least two independent projects, one pertaining to a less-developed country and the other pertaining to a stock market simulator.

MARITIME STUDIES, semester, .5 credit

Open to all students, with preference to Juniors and Seniors

Maritime Studies uses Rocky Hill School's majestic waterfront setting as a lens for students to understand the local history, economics, policy, and politics that shape the identity of southern New England. By examining multiple maritime industries - including the U.S. Navy, Rhode Island tourism, environmentalism, marine research and more – students will develop a greater understanding of the microeconomic forces at play in Rhode Island. Questions to guide the course include: How does maritime culture affect the local economy? How has government policy been shaped by this ocean side setting? How has Rhode Island leveraged its maritime heritage to integrate itself into the global economy? Students will gain a greater appreciation of our historic, ocean-side locale, while sharpening their global perspective.

PSYCHOLOGY, semester, .5 credit

Open to Juniors and Seniors

Psychology gives students the opportunity to explore major topics in psychology, the science of behavior and mental processes. Students will use readings, films, documents, and projects to examine various topics of Psychology. Specific topics covered are the history and science of Psychology; the biology of mind; consciousness and the two-track mind; nature, nurture, and human diversity; developing through the life span; sensation and perception; learning; memory; thinking, language, and intelligence; motivation; emotions, stress, and health; personality; psychological disorders; therapy; and social psychology.

U.S. MILITARY HISTORY, semester, .5 credit

Open to all students, with preference to Juniors and Seniors

This semester long course will trace the development of the military in the United States, from the American Revolution up until present-day interventions in the Middle East. This course will focus not only on battlefield tactics and technologies, but also on various ethical, psychological, and geopolitical factors involved with the United States military. Students will read numerous sources from a variety of perspectives, including military philosophers, policy makers, and soldiers. Throughout the course, students will be assessed on critical reading, writing, and presentation skills, and will complete a research project on the topic of their choosing.

SPORTS IN AMERICAN SOCIETY, semester, .5 credit

This semester long course will examine the role of organized athletics in American society. Topics will include the role of race, class, gender, age, professionalism, and amateurism play in sports of all levels. Readings will address the topics of the role that athletics have

played in education as well as the dynamics of professional and amateur sports. Projects may include working with younger student-athletes at Rocky Hill, organizing and participating in athletic activities at school, and observing organized sports at the youth, high school, college, and professional levels with an eye towards what is truly valuable about athletics in society. Students will continue to work on their writing, discussion, and critical thinking skills as they complete an independent project on the topic of their choice, as well as reflect on their experiences both participating and observing athletic events.

MODERN AND CLASSICAL LANGUAGES

FRENCH I, full year, 1 credit

This is the introductory language course for students who have studied little or no French, as well as for those who might previously have experienced difficulty in learning the language. This class introduces the question of identity (as a student, a friend, a family member, a citizen, etc.) through the analysis of various materials that allow students to learn to listen, speak, read, and write in the target language from the beginning. Grammar and vocabulary are taught in an inductive way, allowing students to be involved more fully in understanding the language as they work out different rules, and to increase their motivation. Culture, geographical, and historical facts are interwoven throughout the class. All classes aim to be taught exclusively in the target language.

FRENCH II, full year, 1 credit

Prerequisite: French I

This course continues to introduce major grammatical and conversational points and includes a review of those studied in French I. While still considered a beginner level course, students are taught to express themselves with more sophisticated vocabulary and grammar. Students learn how to appropriately behave and act in real-world situations and analyze various authentic materials in order to allow them to strengthen both their linguistic and cultural proficiency in the target language. Grammar and vocabulary are taught in an inductive way, allowing students to be involved more fully in understanding the language as they work out different rules and to increase their motivation. All classes aim to be taught exclusively in the target language.

FRENCH III, full year, 1 credit

Prerequisite: French II

In the third Level, students review the grammar presented in Levels I and II and are introduced to the remaining grammar rules, while they also start engaging the subtleties of the language. Students continue to learn how to appropriately behave and act in increasingly complex real-world scenarios, while they also explore and analyze a wide range of authentic materials in order to strengthen both their linguistic and cultural proficiency in the target language. Grammar and vocabulary are taught in an inductive way, allowing students to be involved more fully in understanding the language as they work out different rules and to increase their motivation. All classes aim to be taught exclusively in the target language.

FRENCH IV: THE FRANCOPHONE SOCIETY, PART I, full year, 1 credit

Prerequisite: Successful completion of French III and recommendation of the Language Department.

After completing the foreign language requirements of Rocky Hill School, students may be invited to participate in this advanced course on Francophone society. This class will give students a chance to engage the subtleties of the language while analyzing and discussing a wide range of authentic materials portraying various aspects of the Francophone world. This class intensely works on strengthening students' communicative skills in order to prepare them for the AP French Language and Culture class. All classes aim to be taught exclusively in the target language.

FRENCH V: THE FRANCOPHONE SOCIETY, PART II, full year, 1 credit

Prerequisite: Successful completion of the Francophone Society, Part I and recommendation of the Language Department.

This course continues to explore and discuss various aspects of the Francophone world such as current issues, literary works, art, historical events, and so on. This course is offered to students who have successfully completed The Francophone Society, Part I course and who wish to continue with their language studies. While this course will allow students to continue learning about French syntax, it will mainly focus on strengthening students' communicative skills. This course is an excellent preparation for AP French Language and Culture.

AP FRENCH

Prerequisite: Successful completion of French III and/or French IV/V and recommendation of the Language Department.

The AP French Language and Culture course will strengthen the students' communicative skills by allowing them to use interpersonal (interacting with someone through speaking or writing), interpretive (listening and reading), and presentational (present information through writing or speaking) skills in real-life situations. Students will continue to expand and diversify their vocabulary, refine their mastery of French syntax, and develop their cultural awareness of French-speaking countries. Throughout the year, students will be exposed to a variety of contemporary and historical materials. At the end of the year, students will take the AP French Language and Culture exam.

LATIN I, full year, 1 credit

This is the beginning language course for students who have studied little or no Latin or for those who might have experienced difficulty in learning the language previously. Latin I formally introduces the fundamental grammatical constructions and the basic vocabulary of the language. Students learn to think about language in a way that English rarely requires. Students learn to treat a Latin sentence as a collection of puzzle pieces that fit

together through logical analysis. The textbook presents the fundamental form and structure of the Latin language in a methodical, straightforward manner. Background lectures on the history, art, architecture, culture, and daily life of the Romans are provided to help students understand that Latin was once a living language that contributed so much to English.

LATIN II, full year, 1 credit

Prerequisite: Latin I

Latin II bridges the gap between introductory language study and the reading of actual Latin texts. The course begins with a rapid review of the major principles presented in Latin I, and then introduces more complex sentence structures, notably uses of participles and subjunctive moods. A single form of a Latin word may have several grammatical interpretations, and as students find themselves with more and more options, the task of translation requires them to remember all these options and sift through them carefully until they find the best one. Throughout the year, students read passages from the works of Caesar, Cicero, and Catullus, adapted at first, then eventually unaltered. Additionally, students will tackle some of Caesar's *Dē Bellō Gallicō*. We'll relive the thrilling showdown between Vercingetorix and Caesar on that fateful day on the hilltop in Alesia.

LATIN III, full year, 1 credit

Prerequisite: Latin II

In Latin III, students complete their study of Latin grammar and devote themselves to the translation of unedited Latin passages. This course features the prose of Cicero and Sallust and an introduction to the poetry of Catullus and Ovid. Students also complete a creative project based on the "Cena Trimalchionis" from Petronius' *Satyricon*. The translation of unadapted Latin literature requires instinct as well as intellect, and the former can only be developed through practice and patience, both of which are emphasized in this course.

LATIN IV/V, full year, 1 credit

Prerequisite: Successful completion of Latin III and recommendation of the Language Department.

Latin IV/V will begin with a focus in the first semester on the intent and impact of Roman satire through the works of such notable authors as Horace and Juvenal. It will conclude in the second semester with an exploration of the many roles which women served in Roman society with a particular focus on the extent to which their roles as members of a male-dominated society were indispensable to the progress of pre-to-post Imperial Rome. Students will be able to gain understanding of the zeitgeists that were prevalent throughout the formative and waning periods of Roman expansion by focusing on unadapted poetic texts that sought to be illustrative of fact via expression of hyperbole.

Students will also read selections from Ovid's *Metamorphoses*, going a journey from the far Eastern corners of the the Roman empire west towards Rome itself by reading Ovid's episodic narrative. They will consider the power dynamics and politics embedded within Ovid's retelling of Greek myths and legends. Because the course texts change during alternate years, students not eligible for or interested in AP Latin may enroll for a second year for Latin V credit.

AP LATIN, full year, 1 credit

Prerequisite: Successful completion of Latin III and/or Latin IV/V and recommendation of the Language Department.

The AP Latin course will cover approximately 2,000 lines of Virgil and Caesar. Students will translate selections from books 1, 2, 4 & 6 of the *Aeneid*, books 1, 4, 5, & 6 of *De Bello Gallico*, and read the entirety of both works in English. Since the students have a solid grounding in grammar, when preparing their translations they will go beyond simply giving a literal translation by also considering rhetorical devices and literary themes in these passages. They will also practice reading at sight. Sight translations strengthen language skills in that they help students to think on multiple levels while translating. Students must be able to have a broad understanding of the text, as well a careful attention to detail. Another component of reading at a more advanced level is placing the texts in their historical and literary context, and students will discuss in class how these authors discussed important figures and events in the late Republic and early Empire. Students are required to take the AP exam at the conclusion of the course.

SPANISH I, full year, 1 credit

This is the beginning language course for students who have studied little or no Spanish or for those who might have experienced difficulty in learning the language previously. Students discuss the cultures of Spain and Latin America and make basic cultural comparisons. Dialogues, reading, writing, and grammar study are presented to students in lively, everyday situations, ranging from simple survival tasks such as introducing themselves to more complex topics such as making travel plans. All classes aim to be taught exclusively in the target language.

SPANISH II, full year, 1 credit

Prerequisite: Spanish I

This course begins with a brief review of the first-year program, and continues the study of Spanish with greater emphasis on oral communication in daily contexts. Students learn many new verb tenses and apply their correct usage to both their writing and speaking proficiency. Students expand their vocabulary and participate in more analytical

discussions of cultural comparisons. All classes aim to be taught exclusively in the target language.

SPANISH III, full year, 1 credit

Prerequisite: Spanish II

Grammar concepts studied in Spanish II, especially verb tenses, are reviewed thoroughly, with an emphasis on more accurate application of grammar concepts to both speaking and writing proficiency. Students improve their conversational ability and demonstrate a solid knowledge of Hispanic culture in class discussions in Spanish. All classes aim to be taught exclusively in the target language.

SPANISH IV, full year, 1 credit

Prerequisite: Spanish III

Students review all grammar structures taught the previous three years and are introduced to new concepts and vocabulary to strengthen writing and speaking proficiency. Students present higher-level cultural comparisons during class discussions and in writing assignments. In addition, students begin literature analysis through the introduction of short readings of prominent Hispanic authors. All classes aim to be taught exclusively in the target language. Students not eligible for or not interested in AP Spanish Language and Culture may enroll in Spanish 5: Language and Culture of the Spanish-Speaking World.

SPANISH V: LANGUAGE AND CULTURE OF THE SPANISH SPEAKING WORLD, full year, 1 credit

Prerequisite: Spanish IV

Students will develop an appreciation of major themes in contemporary Hispanic society and their historical origins. Authentic materials such as films, news articles, newscasts, television shows, podcasts, songs, and literature will be used to explore various social and economic issues from a truly global perspective. Students will participate in class discussions, essays, and oral presentations. Grammar topics will be reviewed as needed and some more advanced grammar topics will be presented. The class will be conducted in Spanish.

AP SPANISH LANGUAGE AND CULTURE, full year, 1 credit

Prerequisite: Successful completion of Spanish III and/or Spanish IV/V and recommendation of the Language Department.

The AP Spanish Language and Culture course has been designed to provide advanced high school students with a rich and rigorous opportunity to study the language and culture of the Spanish-speaking world. It offers them the opportunity for advanced placement in their college language study. Both formal and informal oral and written proficiency is emphasized. The AP Spanish Language and Culture course takes a holistic approach to

language proficiency and recognizes the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. All classes aim to be taught exclusively in the target language. Students enrolled in this course must take the AP exam at the conclusion of the course.

MANDARIN I, full year, 1 credit

The first year of Mandarin Chinese is to develop the ability to communicate orally, emphasizing vocabulary development and basic language functions. Students will use the language to exchange information about topics relating to themselves, their families, and leisure activities. Students will learn basic radicals and stroke order in writing and be introduced to Chinese culture.

MANDARIN II, full year, 1 credit

Prerequisite: Mandarin I

In Mandarin II, students continue their study of Mandarin Chinese by further expanding their knowledge of key vocabulary, complex phrases, correct pronunciation, and grammar concepts. In this course, students will begin to comprehend listening and reading passages without guided assistance, and they will also start to express themselves more meaningfully in both speaking and writing. Even though character recognition and practice on correct stroke order is still a key focus of the course, pinyin is also presented with characters throughout the course to aid in listening and reading comprehension. By the end of the course, students are expected to be actively engaged in their own language learning, understand common vocabulary terms and phrases, and use a wide range of grammar patterns in their speaking and writing. Students will be able to participate in conversations and respond appropriately to conversational prompts, analyze cultural practices, and compare similarities and differences between domestic and Chinese culture, such as food, clothes, and transportation.

MANDARIN III, full year, 1 credit

Prerequisite: Mandarin II

Mandarin III reinforces and expands upon the four skills: speaking, reading, writing, and listening, which were established in Mandarin II. In this course, students will continue to develop and refine their speaking proficiency, with an emphasis on oral interaction in more complex and detailed scenarios. By the end of the course, students will be able to initiate, sustain, and conclude a conversation with other speakers of Mandarin. Students will also continue to develop their writing, and by the end of this course be able to write “formally” (a register appropriate in a business setting). In addition, course participants will continue to develop cultural awareness through the study of Chinese culture and important

historical events. One major goal to be achieved by the conclusion of the class is for the instructor and students to use only Mandarin during the instructional sessions.

MANDARIN IV, full year, 1 credit

Prerequisite: Mandarin III

Mandarin IV reinforces and expands upon the proficiency of four skills: speaking, reading, writing, and listening, which were established in Mandarin III. In this course, students will continue to be engaged in reading simple literature, such as stories about Chinese idioms and other authentic reading materials. Students are expected to give and follow a series of directions, instructions, and requests, and meet practical writing needs to compose short letters, blogs or notes by using both high-frequency vocabulary, new vocabulary, and learned grammatical structures. Upon course completion, students will be able to comprehend verbal exchanges by using listening and reading strategies to make inferences and draw conclusions. In addition, students will have gained the ability to summarize, explain, and critique information from a variety of oral and written sources. One major goal to be achieved by the conclusion of the class is for the instructor and students to use only Mandarin during the instructional sessions.

ENGLISH LANGUAGE LEARNERS (ELL)

The ELL program helps students whose native language is not English make the transition to mainstream classes at Rocky Hill School. The curriculum develops proficiency in reading, writing, speaking, and listening comprehension. Recognizing the special and unique needs of international students, the ELL teacher provides support and guidance in areas of cultural adjustment, family correspondence, and academic advising as students grow accustomed to Rocky Hill School.

When a non-native speaker of English enrolls at Rocky Hill School, their TOEFL or Duolingo score, in conjunction with the recommendation of the ELL teacher, will determine placement in the appropriate ELL level class. Newly enrolled students who earn a score of 100 or higher on the TOEFL or the Duolingo equivalency may opt out of the program.

Currently enrolled students who take a TOEFL exam ***in the United States*** or a Duolingo exam ***on the RHS campus*** and earn a score of 100 or higher, may exit the program at the start of the subsequent academic year. Students who earn a very low writing score in the TOEFL or Duolingo will be required to take the ELL Writing Seminar.

ENGLISH COMMUNICATION 1, full year, 1 credit

This English language course is designed to aid non-native English speakers in further developing their combined listening, spoken, and written language skills. This course specifically focuses on enhancing vocabulary and applying new vocabulary and phrases to various contexts and situations. The course also focuses on citation methods, plagiarism, American academic classroom culture, basic presentations, grammar and mechanics.

ENGLISH COMMUNICATION 2 &/or 3, full year, 1 credit

Prerequisite: English Communication 1 or permission from the instructor

This English language course is designed for students who have mastered competencies of English Communication 1. This course focuses on paragraph and short essay writing in the American style, advanced grammatical structures, transition words, eliminating sentence errors such as fragments and comma splices. The course prepares students to perform pre-college level writing tasks successfully.

ENGLISH COMMUNICATION 4 - ADVANCED WRITING SEMINAR, full year, 1 credit

Prerequisite: English Communication 3 or permission from the instructor

This elective course allows for English language learners to strengthen their proficiency in college-level reading, research, and writing tasks in the American style. The skills acquired

move well beyond those required for the TOEFL test, and thus more accurately prepare a student for college. The course will provide opportunities for students to learn about new academic disciplines as well as allowing for students to explore their own research interests in great depth. The course requires students to create, build, and maintain a digital writing portfolio. There is an additional ELL fee for this course.

ARTS: MUSIC

MUSIC & VISUAL ARTS FOUNDATIONS, full year, 1 credit

This is a foundational course in music and the visual arts, and is the first art course a student takes in the Upper School. On the days spent in the music rooms, students will learn fundamental musical skills as well as gain performance experience in either chorus or band. Instrumentalists must have previous experience on their instrument, while no experience is needed to join chorus. The visual arts foundations course includes both 2D and 3D visual arts projects and provides students with a strong and comprehensive foundation in visual art before they move on to the more advanced courses. Students are introduced to the elements of art and principles of design through exciting exploration of various media and techniques. Composition, observation, and rendering skills are emphasized. The structure of the course will consist of guided exercises, class projects, artist videos, art historical context, group discussion and critiques. In this introductory art class, students are also introduced to the significant role of the artist sketchbook in the creative process.

CHORUS: full year, 1 credit

This course provides all students with the opportunity to participate in the school's Choral program. Students will focus on the development of vocal skills, ear training, musical notation and performance practice. The singers will apply these skills as they prepare and perform throughout the year, both on and off campus. Students will have the opportunity to perform as a large group as well as in smaller ensembles as they explore all genres of music, ranging from contemporary and folk music, to musical theater and traditional choral repertoire. No prior experience is necessary. Students may take consecutive semesters of this course, as the repertoire will change with each new semester.

BAND, full year, 1 credit

Prerequisite: Permission of the instructor.

This course prepares students to perform with expression and technical accuracy, both individually and within an ensemble. All the qualities of good musicianship are emphasized, including tone quality, sight-reading, blending, rhythmic accuracy, interpretation, and intonation. A variety of musical selections are rehearsed and performed both on and off campus.

ARTS: VISUAL ARTS

ART FOUNDATIONS, full year, 1 credit

Prerequisite: None

Art Foundations is a foundation course and also the first art course a student takes, usually, but not always, in Grade 9. Students gain experience in a variety of materials, and develop problem-solving skills. The course includes both 2D and 3D projects and provides students with a strong and comprehensive foundation in visual art before they move on to the more advanced courses. Students are introduced to the elements of art and principles of design through exciting exploration of various media and techniques. The structure of the course will consist of three rotations including one quarter of ceramics, one quarter of drawing and painting, and one quarter of mixed media, culminating with a student driven *Capstone* in the fourth quarter. In this introductory art class, students are also introduced to the significant role of the artist sketchbook in the creative process.

DRAWING AND PAINTING 1, semester, .5 credit

Prerequisite: an Arts Foundations course

This course is for the students who have completed Art Foundations and want to continue their exploration of two-dimensional art in more depth. A variety of drawings will be completed using different media such as graphite, charcoal, pastel, ink, and mixed media. The elements of art, the principles of design, and color theory will be emphasized and lead into painting. Students will have the opportunity to work in watercolor, acrylic, and oil paints. We will explore basic techniques as well as more sophisticated concepts and objectives. There will be a strong emphasis on art historical context as well as contemporary artistic practice. Each class will examine the various processes and methods that artists employ to conceptualize and create work. Students will be asked to document their research and creative process in their sketchbooks. First and foremost, the studio will be a place where students can learn to think critically and creatively while developing solid problem solving skills.

DRAWING AND PAINTING 2, semester, .5 credit

Prerequisite: Drawing and Painting 1

This course is for the students who have completed Drawing and Painting 1 and want to continue their development. A variety of drawings will be completed using different media such as graphite, charcoal, pastel, ink, and mixed media. The elements of art, the principles of design, and color theory will be emphasized and lead into painting. Students will have the opportunity to work in watercolor, acrylic, and oil paints. We will explore basic techniques as well as more sophisticated concepts and objectives. There will be a strong emphasis on art historical context as well as contemporary artistic practice. Each class will

examine the various processes and methods that artists employ to conceptualize and create work. Students will be asked to document their research and creative process in their sketchbooks. First and foremost, the studio will be a place where students can learn to think critically and creatively while developing solid problem solving skills.

AP STUDIO ART: 3D DESIGN, 2D DESIGN, DRAWING, full year, 1 credit

Prerequisite: an Arts Foundations course, one year of art electives, and the recommendation of the instructor.

The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. The AP Studio Art Program consists of three portfolios-2D Design, 3D Design, and Drawing. AP Studio Art is for highly motivated students who are seriously interested in the study of art; the program demands significant commitment. Students create a portfolio that consists of three sections: Quality, Concentration, and Breadth. The students will create a total of 25 pieces at minimum to fulfill the requirements of the portfolio. AP Studio Art students develop greater command of technical skills and various media while pursuing more thematic depth and complexity, as well as a wider range of creative responses in their work. The students spend a great deal of time developing their Concentration. A Concentration is a body of related works that demonstrate a student's commitment to the thoughtful investigation of a specific visual idea. The Concentration should grow out of the student's idea and demonstrate growth and discovery through a number of conceptually related works. AP students will complete assigned summer work prior to the AP Studio Art course.

CERAMICS 1, semester, .5 credit

Prerequisite: an Arts Foundations course

This course is an introduction to ceramics for students who have completed Art Foundations. The goal of this course is to equip students with confidence in creating three-dimensional clay forms. Furthermore, this course will foster a deeper appreciation for ceramics within a cultural and historical context and explore the capabilities of ceramics as a medium of self-expression. During the semester, students will demonstrate basic pottery skills necessary to complete projects such as pinch pots, coil pots, slab pots, and glazing techniques. Students will build upon basic skills with an introduction to textural techniques including paddling, graffito, slip trailing, and piercing. After gaining proficiency in these foundational skills, students will move on to the potter's wheel.

CERAMICS 2, semester, .5 credit

Prerequisite: Ceramics 1

This course will begin by ensuring that students have achieved a solid foundation in the fundamental skills of the potter's wheel including centering clay, trimming techniques, and

how to store and finish a thrown pot. This will prepare students to move on to more complex forms and skills. As students progress into more advanced ceramics techniques, there will be frequent opportunities to make connections with other fields such as technology, mathematics, and history. This course emphasizes the refinement of craftsmanship, concept, and methods.

CERAMICS 3, semester, .5 credit

Prerequisite: Ceramics 1 and 2 (may be taken without taking Portfolio Ceramics)

This course will allow students to refine their technical ability in order to stimulate individual creativity. Projects will demand that students utilize and integrate all previously learned technical skills in order to express an artistic vision. Advanced topics covered include learning about various clay bodies, glazes, kilns, and firing techniques. In order to expose students to the full potential of ceramics as a modern medium of self-expression, students will conduct research into the work of ceramic artists.

PORTFOLIO CERAMICS, semester, .5 credit

Prerequisite: Ceramics 1, 2, 3 and the recommendation of the instructor.

This class is for advanced students who are committed to developing their work. Students work independently, exploring the relationships between form, process, and content. They are encouraged to question their work and expand their ideas and approaches to their work. Group and individual critiques help students develop a better vocabulary with which to speak and think about art making. All students are required to produce a cohesive body of work that reflects their personal style.

INTRODUCTION TO PRINTMAKING, semester, .5 credit

Prerequisite: Art Foundations

Introduction to Printmaking exposes students to a wide range of printmaking techniques including relief printing, and intaglio processes. The major emphasis is on the development of printmaking skills, and students are encouraged to explore personal modes of creative expression, as well as the cultural and historical backgrounds of the techniques.

INTRODUCTION TO DIGITAL PHOTOGRAPHY, semester, .5 credit

Prerequisite: an Arts Foundations course

Introduction to Digital Photography is a semester course that focuses on the basic operations and functions of a digital camera and the manipulation of its settings to achieve a specific result. Students will learn about photographic elements of art and principles of design, composition, and lighting. They will explore the history of photography learning about its scientific and technological developments, important innovators in the field, and relevance in diverse cultural contexts. Students will learn image techniques and digital

manipulation using Adobe Photoshop, Lightroom, and Bridge, teaching them how to archive, organize, and optimize their photographs for print or web purposes. Students will learn how to manage and creatively alter digital images as well as critically analyze the use of visual media as a means of communication in our society today. The students will explore the significance of photography within the larger context of the art world. Students will need a digital camera (preferably SLR) for this course.

DIGITAL PHOTOGRAPHY 2, semester, .5 credit

Prerequisite: Introduction to Digital Photography

In Digital Photography 2, students will be introduced to tools and genres used by professional photographers. During class, the students will be instructed to use both on-camera flash and studio lighting techniques. Students will produce professional quality headshots and environmental portraits, as both subject and photographer. Students will also learn the basics of table-top studio photography (photographing small to medium sized objects in the classroom) and editorial photography. Together we will explore the relationship between photographer and client playing the roles of each in our projects. Using historic examples students will be exposed to the Documentary, Still Life, Fashion, Photo Illustration, and Art Photography genres. Students will choose one of these genres in which to make a personal final project.

MIXED MEDIA 1, semester, .5 credit

Prerequisite: Drawing and Painting 1, Introduction to Printmaking

Note: The Mixed Media course is a good alternative for juniors and seniors who would like to continue to take art but are not ready for AP Studio Art.

The Mixed Media 1 course will focus on image making through the application of various artistic genres including painting and drawing, collage and assemblage of found objects. Color theory, linear perspective, pictorial composition, figure/ground relationships, visual perception, spatial concepts, and critical thinking skills will all be emphasized extensively. This class uses printmaking, drawing, and painting media as a way of exploring how to combine those various media and techniques to allow the student to develop imagery with a personal thematic approach.

COMMUNITY ARTS, semester, .5 credit

Prerequisite: Drawing and Painting 1 and Digital Photography 1 or Ceramics 1

Note: The Community Arts course is a good alternative for juniors and seniors who would like to continue to take art but are not ready for AP Studio Art.

The Community Arts course will examine throughout history and today how artists impact social, political, local and global needs. Students will be exposed to many local art-focused organizations as well as contemporary designers influencing current societal conflicts.

They create works of art that positively inspire the RHS community in new ways. Artwork created in the class will include independent projects ranging in 2-D, 3-D, and digital media, a collaborative public art installation, and a charity-based fundraiser. Students will also learn how to plan and facilitate community-based art activities. An emphasis on writing, communication, and social skills will accompany a focus on development of advanced design and manipulation of materials. The course will include guest speakers and field trips.

VIDEO PROJECTS, semester, .5 credit

Requirements: a video camera (with at least 720p 24fps capability; a phone camera is fine), a computer with video editing software that can operate at adequate speed.

Students will focus on developing their own projects and seeing them through to completion. Projects will be of their own choosing, and students will write scripts, storyboard, cast, direct, record video and audio, process, edit, post, and show their video or series of videos. Possible projects might be a single documentary or fictional piece, but could also be a collection of shorter works such as college sports recruiting videos, a vlog series, or internal school news reports. Students will refine their skills in all areas of video making. This course can be taken more than once, but new projects or major segments that are additional chapters of existing projects must be completed by the end of each semester.

OTHER ELECTIVE COURSES (NON-DEPARTMENTAL)

MAKER, full year, 1 credit

In this course, students will learn by doing as they explore various elements of the Maker movement. While completing several projects in the span of the course, students will learn about electronics, robotics, woodworking, and design software such as SketchUp and TinkerCAD. Traditional tools such as drills, saws, and rotary cutters will be combined with cutting edge methods like 3D printing and laser cutting to complete projects in our Makerspace. We will utilize [Raspberry Pi](#) computers in some assignments, and this will introduce programming and computer science elements that will help with the extensive robotics unit. Design principles, creativity, and teamwork will be emphasized throughout the year and students will have a chance to discover their inner engineers. Note: Maker does not fulfill an Art graduation requirement.

PROGRAMMING AND DESIGN FUNDAMENTALS, semester, .5 credit

Approaching programming as a thinking process, this course will introduce the fundamental concepts and structures that are common to all programming languages. Using Python as our language, students will design simple and complex applications and games with an emphasis on game theory and the user experience. The range of concepts will include basic programming structures to object oriented programming tools. No prior programming experience is required. Students will have the opportunity to create a project that can integrate with one of their other classes or projects. The culminating project will include the full development of a game for display and use by other Upper School students. Students will design the game, write instructions or guides, develop a prototype for testing, and present their game to the Rocky Hill community.

iOS APP DEVELOPMENT, semester, .5 credit

Applying core programming concepts to create and publish an app will be the focus of this course. Using Swift and Xcode students will build a range of apps leading to a student-designed culminating project which will be submitted for publishing in the Apple App Store. Background knowledge of core programming concepts and access to an Apple laptop are essential for this course. Students will create apps that will incorporate the various modules of Swift and Xcode. While the first couple of projects will be prescriptive, students will quickly be able to create a wide range of apps that can be applied to different content areas. Ideally, students will create an app for submission to the App Store that has some connection to the Rocky Hill or broader Rhode Island community.

TECHNOLOGY, PHILOSOPHY, & ETHICS, semester, .5 credit

The course will explore the impact of technology on our society. Building from the idea of the goodness of humanity, students will explore ethical boundaries and how technology has been used to extend these accepted norms. Students will engage in conversation, debate and analysis of technology events in the context of philosophical works.

SERVICE LEARNING, semester, .5 credit

Prerequisite: An accepted project proposal

Students in this course will experience the rewards of service learning and gain valuable experience in organization, leadership, collaboration, and project design. **Prior to enrollment in the class**, an interested student, or small team of students, will identify an area of need and propose a project to address that need. Once accepted into the class, students will work independently, under the mentorship of a RHS faculty or staff member, to develop and implement their project design over the course of the semester. Motivated and self-directed students will be better positioned to be successful in this course.