Course Offerings

Computer Science

Major Courses

INTRODUCTION TO COMPUTER PROGRAMMING (FALL OR SPRING)
In this course, students will learn basic programming skills and concepts using Python. The course is designed for students with little or no programming skills. Completion of one year of Algebra is required.

SYRACUSE UNIVERSITY PROJECT ADVANCE: INTRODUCTION TO INFORMATION SECURITY (FALL OR SPRING - 3 CREDITS)
Introduction to Information Security is intended to teach fundamental elements in information security and introduce the key areas of security challenges, countermeasures, and real-life examples. Topics include security properties, vulnerabilities, cryptography, security policies, access control, authentication, firewalls, wireless security, Internet security protocols, security management, security evaluation, and case studies. Students will also have hands-on experiences in information security through customized online labs. *For Sixth Formers.*

Minor Course

INNOVATION LAB (FALL OR SPRING)
This course is a hands-on, experiential class where students will have the opportunity to get their hands dirty by deconstructing, constructing, and repurposing materials in the pursuit of developing problem solving skills in a fun, non-traditional format.

English

Fifth and Sixth Formers, except students in Honors Race Theory, AP Language and AP Literature, select two semester-long English electives.

LANGUAGE AND LITERATURE
This class is a combined skills course integrating acquisition of and improving on all four skill areas of English: listening, speaking, reading and writing. Students will practice new vocabulary in writing and speaking. This class also focuses on increasing listening and reading skills and strategies with an intensive focus on vocabulary development. Students will develop sentence, paragraph, and essay

writing skills. Focus will be on learning grammatical structures and using this knowledge within the writing context. Furthermore, students will have the opportunity to develop strategies to improve their organizational skills and to expand and practice new vocabulary.

THIRD FORM ENGLISH – THE ELEMENTS OF LITERATURE & COMPOSITION
Studying a variety of short stories, plays, novels, and poems, students look at the ways authors use literary tools to tell moving stories. Readings may include *The Old Man and the Sea, The Lord of the Flies, The Penelopiad* and *A Raisin in the Sun*. Students learn to write effective sentences and paragraphs and have the opportunity to practice writing the above-mentioned essay modes. The study of grammar includes instruction on avoiding the more common writing problems. *Honors section available.*

FOURTH FORM ENGLISH – AMERICAN VOICES
This course will define the term "American Voice", as well as explore what it means to write with a unique American voice. We will consider how this definition has evolved since the birth of our nation by tracing its development through literature and non-fiction. Students will explore current issues and high interest topics through the close analysis of literature. The course includes all genres — novel, poetry, non-fiction, drama, short story, and film. The writing curriculum gives students the opportunity to focus on writing organized paragraphs and extended essays while practicing the various essay modes of the English Department writing curriculum. *Honors section available.*

ADVANCED PLACEMENT ENGLISH LANGUAGE
This course cultivates the reading and writing skills that students need for college success and for intellectually responsible civic engagement. Students are guided to become curious, critical, and responsive readers of diverse texts, and become flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in the course should deepen and expand their understanding of how written language functions rhetorically: to communicate writers' intentions and elicit readers' responses in particular situations. The course prepares the student to take the AP English Language examination in May. *For Fifth Formers.*

HONORS RACE THEORY
Students will participate in a complex study of race in America by reading selections from the following authors: K.J. Williams, Richards Wright, Ralph Ellison, Langston Hughes, Martin Luther King, Jr., Malcolm X, and Barack Obama. We will round out our study in race in America by viewing two documentaries, ESPN's *The Fab Five* and Spike Lee's *When the Levees Broke*. Students will be expected to write daily and our emphasis will be on the personal narrative and using theory to do close readings of the texts. *For Sixth Formers.*

ADVANCED PLACEMENT ENGLISH LITERATURE
This course seeks to help students read, write, and think more carefully and deliberately. As readers, they focus on authors' use of language to elicit responses from their readers. As writers, they strive to write consciously rather than as an afterthought, seeking to communicate ideas more effectively. By improving their reading and writing skills, the students learn to think more clearly and precisely. In addition, they develop their vocabulary by focusing on bases, prefixes, and suffixes and combinations of those particles in words. The course prepares the student to take the AP English

Literature and Composition examination in May. *For Sixth Formers.*

Fifth and Sixth Form Electives

BILDUNGSROMAN - THE NOVEL OF EDUCATION (FALL)
"Bildungsroman" means "novel of education," and in this course, we will investigate both formal and informal modes of education in a variety of novels and texts spanning over two hundred years. What does it mean to come of age? Why has the coming of age story fascinated readers since the nineteenth century? Do we ever become fully formed adults? We will examine how these texts stand the test of time and how they engage with other issues surrounding the bridge between adolescence and adulthood.

CHARACTERISTICS OF THE PSYCHE (FALL)
Consumers of works of horror willfully frighten themselves to experience a psychological thrill that comes with fear. The course will discuss why consumers of the genre chase this thrill and how the producers of the genre prompt this response. Students will discuss common characteristics of this genre and what makes each work unique. Readings will include assorted poems, short stories, and novels by Hawthorne, King, Lovecraft, O'Connor and Poe.

LITERATURE OF THE VIETNAM CONFLICT (FALL)
Of all the American wars and conflicts throughout history, none has inspired a greater volume of literature than The Vietnam Conflict. The emotional trauma and confusion of that war has led to countless novels, non-fiction narratives, memoirs, song lyrics, and poems often written by those who had fought there, but also by those who had to deal with the aftermath of the fighting. The writing continues to this day as many still try to make sense of what once happened in a small southeast asian country over forty years ago. In this semester course we will examine the voice of an American soldier, the voice of a daughter who lost a father to the conflict before she could even meet him, and a voice from the enemy side. This course is offered in honor of Charles L. Bergevin '62, David M. Burke '65, and Paul M. McGrath '62, Canterbury Alumni who lost their lives in the conflict.

MYTHS, LEGENDS AND FANTASY (FALL)
The foundation of myths, legends, fantastical ideas, and the world beyond reality will be examined in this course. We will start with foundational information on the origin myths, proverbs, and legends spanning all cultures and study their similarities and differences. In addition to being able to recognize mythological metaphors, allusions, analogies, and symbols, students will also analyze the significance of man's use of the myth/legend.

ROMANTICISM (FALL)
This semester course focuses on the literature of the British Romantic Period, approximately 1810-1840, with special emphasis on the poetry of Wordsworth, Shelley, and Keats. Students read Mary Shelley's *Frankenstein* and an extensive collection of poems. The course also traces the logical extension of literary structures and themes into the American Romantic Movement that followed using works by authors such as Poe, Whittier, and Longfellow.

CREATIVE WRITING (SPRING)
This course in creative writing combines theory and practice. As students study the techniques of past and present poets, novelists, and playwrights, they practice applying those models and methods to their own work. The goal of this course is for students to produce a collection of their original work that would be publishable.

NARRATIVE CRITICAL ANALYSIS (SPRING)
What makes a film critically acclaimed? How do we assess what we see on the big screen? What are the intricacies of film production? In this course, we will explore a wide variety of film spanning a little over a century—from 1915 to 2019—in order to grasp the development of filmmaking and shifts or experimentation in narrative and storytelling. We will learn to write critically and analytically about film using film terminology.

POST-COLONIAL LITERATURE (SPRING)
"The Empire Writes Back": It is often said that history is written by victors; however, literature is written by everyone. The texts of the course are written by authors from former colonies. The course will explore and discuss the challenges and conflicts faced by the colonized and how, even though the authors are from a variety of geographical regions, the concerns of these authors share commonalities (identity, history, cultural heritage, nationhood, freedom, etc.).

POST-INDUSTRIAL LITERATURE (SPRING)
A century ago leisure time was limited, and life on the farm and in the factory was hard. Over time, the labor movement, the industrial revolution, and the technology revolution have allowed more time for sports and pastimes. As more people watched and participated in leisure time activities, a body of literature inspired by these activities emerged. Our games have given us a rich variety of real and fictional characters as well as a window into the hearts and souls of towns, regions, and nations.

SHAKESPEARE (SPRING)
This course will explore Shakespeare's tragedies, comedies, and sonnets. Through reading, writing, and active discussion, students will appreciate the universal themes and wonderful language of his works. Readings will include *Hamlet, King Lear, The Tempest, A Midsummer Night's Dream,* and others.

COLLEGE WRITING (FALL OR SPRING)
This course prepares students for college composition, including essays, studies, and narratives. Students analyze models of the various genres to recognize their components and techniques, which they then apply to their own writing. The course includes methods of research and documentation. The class is collaborative and participatory, with presentations and peer-editing. Since revision is critical to writing, the course directs students to better, more efficient and effective expression. The purpose of the course is for students to write quickly and well on a college level. *For Sixth Formers only.*

Fine Arts
Major Courses

INTRODUCTION TO VISUAL ART* (FALL OR SPRING)
This course introduces the studio experience through the exploration of in-depth design concepts, terminology, and various media. Projects include drawing, painting, printmaking, and 2D and 3D Design. The course is strongly suggested as a prerequisite for further work in studio art. *For Third Formers.*

DRAWING* (FALL OR SPRING)
Students study the expression of visual thought through drawing. Areas covered include contour drawing, still life, portrait, perspective drawing, and experimental techniques. Students use pastels, charcoal, ink, pencils, markers and other medium. Students will be assigned projects that utilize images from everyday surroundings and their imagination to form unique compositions.

CERAMICS* (FALL)
This course investigates various ways to create functional and sculptural objects with clay. Hand building techniques include pinch, slab, and coils. *For Fifth and Sixth Formers.*

PRINTMAKING* (FALL)
This course provides students with an introduction to various experimental and traditional printing processes and their relationship to composition and color. Among the types of prints that may be covered include the use of digital imagery, monotype, linoleum, woodblock, embossing, and screen print. Assignments may include a t-shirt logo design, postcard project, and a large-scale transportation design using various textures including tires from large machinery. Experimentation is encouraged!

PAINTING* (SPRING)
Through experimentation and related exercises, students learn about painting as a medium of visual expression. Basic studies include drawing, color theory, and composition. Students explore a variety of subject matter from direct observation as well as from their imagination. Materials may include watercolor, acrylic, and collage.

SCULPTURE* (SPRING)
This course explores the processes of modeling, carving, construction, and assemblage in wood, paper, plaster, wire, and found materials. Students begin with projects that help them visualize the transition from two to three-dimensional design. Assignments progress into sculpture-in-the-round or free standing works.

ARCHITECTURE* (SPRING)
This introductory course concentrates on giving students a broad view of architecture in both the technical and creative sense. Drawing assignments may include freehand drawing, an imaginative proposal project that combines various drawing types, a community park design, and the design and development of a residence. For the final project students design a set of plans (floor, elevation and site plans) and build a scale model.

ADVANCED PLACEMENT TWO-DIMENSIONAL DESIGN* (OFFERED AS STUDENTS QUALIFY)

This course is for the serious art student whose prior work exhibits advanced technical experience and conceptual thought processes. Students work in drawing, painting, photography, collage and mixed media. Students spend the academic year focusing on a chosen theme or concentration. Explored in-depth, this theme is expressed using various color, design, and compositional techniques. AP Portfolios are submitted in May. *For Sixth Formers only.*

ADVANCED PLACEMENT THREE-DIMENSIONAL DESIGN* (OFFERED AS STUDENTS QUALIFY)
This course is for the serious art student whose prior work exhibits advanced technical experience and conceptual thought processes. The course focuses specifically on developing advanced spatial design solutions. An understanding of drawing, painting and sculpture is expected. Students spend the academic year focusing on a chosen theme or concentration. Explored in-depth, this theme is expressed using various color, design, and compositional techniques. AP Portfolios are submitted in May. *For Sixth Formers only.*

ADVANCED PLACEMENT DRAWING * (OFFERED AS STUDENTS QUALIFY)
This course is for the serious art student whose prior work exhibits advanced technical experience and conceptual thought processes. The course focuses specifically on using a variety of drawing media. Students spend the academic year focusing on a chosen theme or concentration. Explored in-depth, this theme is expressed using various color, design, and compositional techniques. AP Portfolios are submitted in May. *For Sixth Formers only.*

ADVANCED CERAMICS, ADVANCED ART PORTFOLIO, ADVANCED PAINTING, ADVANCED PRINTMAKING, AND ADVANCED 2-D OR 3-D DESIGN* (OFFERED AS STUDENTS QUALIFY)
These courses build on the same techniques and media learned in the introductory courses. The advanced courses emphasize a more conceptual approach and development of personal style. Students also use these courses to help them prepare a portfolio for college entrance or to enhance their college application.

Music
Director of Music: David Overthrow
Director of Choral Studies: Sarah Armstrong
Music course credits count toward fulfilling the Fine Arts credit.

Major Courses

CONTEMPORARY MUSIC BAND
The Contemporary Music Band is a select group of instrumentalists who perform music in many styles of modern jazz including blues, funk, fusion, swing and Latin. Students learn about playing in a rhythm section, improvising, and interpretation of style. Students of any instrument in Intermediate to Advanced level may audition. This group gives five performances throughout the year. Students have the opportunity to learn jazz improvisation, as well as techniques for playing jazz in a small group setting. The group will play music in the styles of popular music, rock & roll, and jazz. *By audition.*

VARSITY VOICES
Varsity Voices is Canterbury's high-level vocal acapella ensemble, specializing in contemporary and popular music. Explore tight vocal harmonies, complex rhythms, and advanced vocal techniques in this challenging and fast-paced environment. Varsity Voices is an auditioned ensemble for all voice types and students who have experience in vocal percussion/beat boxing. This ensemble will perform regularly both on and off campus. *By audition.*

ADVANCED THEORY FOR MODERN MUSIC (OFFERED AS STUDENTS QUALIFY)
This course offers students a new understanding of how music functions. Students are introduced to a systematic approach to the learning of theory and composition in rock, pop, and other modern music idioms. Exploration of melodic, harmonic, and rhythmic principles, standard popular music song forms, analysis of published works, and arranging considerations will all be topics covered. Students will also develop ear-training skills through performance and dictation study of melodies, rhythms and harmonic progressions. After completing this course students will be able to write short original musical compositions as well as identify, by ear, common rhythmic harmonic and melodic musical phrases. *Department approval required.*

COMPUTER MUSIC 1: USING GARAGEBAND (FALL)
This is a course open to beginners as well as those experienced with GarageBand. Students learn how to record and edit music, create beats, and mix tracks. After taking this class students will be able to record a project, record a podcast episode and record a movie score.

COMPUTER MUSIC 2: USING PRO-LOGIC (SPRING)
In this class students learn how to create, record and mix music with Logic Pro X. This course is open all students. Students will learn how to create their own music with Apple Loops, record MIDI with software instruments, learn how to write beats and learn how to record audio. At the end of this class students will be able to create their own beats and songs with the powerful Logic Pro X Software. *(Computer Music 1 is not a requirement of Computer Music 2)*

Minor Courses

CHORALE
Canterbury Chorale is the place where anyone can find their singing voice. This choir emphasizes the healthy habits of ensemble singing through a variety of genres and styles. Canterbury Chorale is open to all students, without audition, and performs at various concerts and special events throughout the school year.

CARILLON GUILD
This course introduces students to the art of playing the carillon. Students will work on the practice clavier, preparing music suitable for the instrument. Canterbury has the unique honor of housing one of Connecticut's eleven Carillons. Located in the Chapel of Our Lady, Canterbury's Carillon was installed in 1931 making it one of the oldest in Connecticut, as well as, the smallest with twenty-three bells. When a student has reached an appropriate level of mastery on the practice

clavier, they will have the opportunity to perform on the chapel's Carillon.

JAZZ/ROCK/POP ENSEMBLE
This band is open to all instruments. Students with little experience such as late beginning to intermediate levels are welcome. All that is required is the desire to improve as well as work towards a common goal with others. Students will play music in the styles of popular music, rock & roll, and jazz.

ORCHESTRA
The Canterbury Orchestra will perform various selections from an expanded repertoire including styles of music ranging from symphonic to contemporary pop selections. The material will be chosen based on the ability of the group as a whole. Students will be expected to participate in all rehearsals and performances of the Orchestra. *Prerequisite: This is not a class in instrumental instruction. Students must have played an orchestral instrument (woodwind, brass, or string) and have the basic knowledge thereof. This instrument must be available to the student for full time use. Private lessons are encouraged but not necessary, as long as the student can perform the music assigned. By audition.*

CLASSICAL CHAMBER
Classical Chamber is made up of small groups of two to four players, and rehearses and performs selections from the standard chamber music repertoire and contemporary pop selections. The material is chosen based on the ability and instrumentation of each group. This is an excellent opportunity for students to be exposed to material that is often not studied on the pre-college level. Each student will be expected to participate in all rehearsals and performances of the ensemble. *Prerequisite: These ensembles are for more advanced students, and are not classes in instrumental instruction. Students are expected to have an instrument available for full time use. Private lessons are encouraged but not necessary, as long as the student can perform the music assigned. By audition.*

ROCK BAND
Rock Band is a select group of students who will perform music in a variety of subgenres of rock & roll music. Students will learn the stylistic elements of a variety of rock styles and focus on both rhythm section playing and creating solos while performing at several concerts throughout the year. This course is open to guitarists, bassists, drummers, vocalists, keyboard players (pianists), percussionists, saxophone and trumpet players. If you are interested in rock music this is the group for you. Students must have a background of at least intermediate level on their instrument. *By audition.*

INTRODUCTION TO GUITAR (FALL)
Students will have the opportunity to explore music through the medium of guitar playing. Students will have hands-on work in every class and may work independently on occasion. Topics include chord shapes, strumming patterns, rhythm guitar playing, playing in a group, and the use of a capo. Students will also learn to read chord charts and tablature. This course is ideal for any student who is interested in learning how to play the guitar. For students who do not own a guitar they can rent one or use guitars in the classrooms for practice.

ACOUSTIC GUITAR (SPRING)

In this course students learn a repertoire of pop and rock songs classic through modern. Students review major and minor chords and learn a variety of techniques used to play popular songs such as flatpicking, finger-picking, as well as strumming and rhythmic patterns. *Prerequisite: Intro To Guitar or students already familiar with major and minor chords.*

PRIVATE LESSONS

Private instruction is offered on guitar, bass, piano, voice, drums, sax, trumpet, clarinet, violin, and cello. All private instructors are experienced musicians in the fields of music education and performance. Private lessons meet once a week and can count towards fulfilling the Fine Arts credit requirement. This is a great opportunity for any student who wishes to learn an instrument or excel on an instrument they have experience in playing. *A fee is charged for private instruction.*

Theater

Theater Director: Sarah Armstrong
Technical Theater Director: Lisa Bonelli
Theater course credits count toward fulfilling the Fine Arts credit.

THEATER PRODUCTION (FALL)

Student actors, through rehearsal and performance in the fall play, practice techniques unique to theatrical production. Analyzing character, understanding relationships between characters, vocal projection and body expression are all part of the course. Actors are expected to display disciplined work ethic, teamwork and personal responsibility as basic requirements for participation. Two performances on the Canterbury stage for audiences culminate the course. This counts as either minor (.25) or major (.5) credit, depending on time commitment. *By audition.*

MUSICAL THEATER PRODUCTION (SPRING)

Student actors, through rehearsal and performance in the spring musical, practice performance techniques unique to musical productions. Singing, dancing and the art of performance in this genre are part of the course. Actors are expected to display disciplined work ethic, teamwork and personal responsibility as basic requirements for participation. Two performances on the Canterbury stage for audiences culminate the course. Counts as either minor (.25) or major (.5) credit, depending on time commitment. *By audition.*

TECHNICAL THEATER (FALL OR SPRING)

Students will obtain knowledge of the behind-the-scenes collaboration that takes a production from an initial script selection through design and implementation to the final curtain. Students will learn the basics of set building, lighting, and sound design for drama productions and will be well prepared to handle operations on their own at showtime. Students will become familiar with the proper use of tools for set building, gain an understanding of set design as it applies to Canterbury's theater space and learn the basics of stage maintenance, lighting, and sound needs for the actors. Instruction will emphasize terminology, basic concepts and safety. Two performances on the Canterbury stage for audiences culminate the course. This course counts as either a minor (.25) or major (.5) credit, depending on time commitment. *By audition.*

History

FOUNDATIONS OF CIVILIZATION

Foundations of Civilization is offered primarily to Third Formers with the purpose of establishing the basis for historical study. The course is designed not only to cover the content of emerging civilizations, but also to introduce and develop organizational, analytical, research, and writing skills. The course begins with an exploration of the history of ancient civilizations in Mesopotamia, China, Africa, and India as well as the "classical" civilizations of Greece and Rome. Students then focus their studies on the formation of empires in Russia, East Asia, Africa, and the Middle East before discussing the European Middle Ages and the formation of early modern Europe. Students complete a number of writing assignments including a short research paper. *Honors section available.*

WORLD HISTORY

World History is offered primarily to Fourth Formers. The course builds on the "Foundations of Civilization" studied during the Third Form year by exploring several important turning points in European history and assessing their impact on modern civilization. Topics include the Renaissance & Reformation, the Age of Exploration, the Scientific Revolution & Enlightenment, the French Revolution, the Industrial Revolution, Imperialism, the two World Wars and the Cold War. Emphasis is given to the continued instruction and the practice and development of essential skills needed for the study of history including reading comprehension, analyzing primary source documents, outlining historical arguments and applying an open mind to the study of historical issues. In addition to continuing their development of historical thinking and writing through independent assignments, students work collaboratively throughout the year on a series of "mini-projects" designed to develop specific research skills using a variety of library resources.

HONORS WORLD HISTORY

Honors World History is offered primarily to Fourth Formers. The course uses a thematic approach to explore European history from the Renaissance to the fall of the Soviet Union and to assess the role of historical themes such as culture, religion, geography, technology, economics, war, and ideology in shaping modern western civilization. Students broaden their understanding of critical events by reading and analyzing a variety of source materials, thinking interpretively, and writing persuasively. Students are encouraged to "think 360" by exploring topics from a variety of perspectives and engaging in experiential learning through extended debates and simulations before casting judgment on a variety of historical issues. In addition to continuing their development of historical thinking and writing through independent assignments, students work collaboratively throughout the year on a series of "mini-projects" designed to develop specific research skills leading to a small research project in the spring semester.

ADVANCED PLACEMENT WORLD HISTORY

AP World History is primarily for Fourth Formers. The course builds an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. This understanding is advanced through the acquisition of selective factual knowledge, the application of appropriate analytical skills, and the integration of small research tasks into the class curriculum. The course highlights the nature of changes in international frameworks, their causes and consequences, and comparisons among major societies. Students enrolled in this course are required to take the AP

World History exam in May and complete a short research paper.

UNITED STATES HISTORY

United States History is offered primarily to Fifth Formers. The course is presented chronologically from European arrival to the post World War II era with an emphasis on acquiring core knowledge and interpreting the meaning of the essential events and issues that make up the American heritage. Students continue to develop the essential skills needed to think and write like a historian by applying active reading strategies and engaging in student-centered enrichment activities designed to promote analysis of controversial issues. Each chapter is supplemented with primary source documents from the Stanford Reader series designed to develop skills in critical reading, source analysis, and interpretive thinking. Along the way, students continue to develop their persuasive writing and research skills by completing an independent research project during the second semester. *Required for graduation.*

HONORS UNITED STATES HISTORY

Honors United States History is offered primarily to Fifth Formers. This course is structured around this central question: what does it mean to be an American? By this, we mean to search our history from the colonial period to the post-World War II era to discover the beliefs, character traits and institutions which make America unique. Content is presented thematically by focusing on the role of citizenship, the role of the west, and connecting past to present in an effort to understand the consistencies and the contradictions in the American Dream. Students engage in experiential learning in the classroom through extended simulations, trials, and debates to promote historical thinking by analyzing controversial issues through a variety of perspectives before casting judgment as an historian. Students learn strategies for critical thinking, persuasive writing, and research which culminate in an interpretive project during the spring semester.

ADVANCED PLACEMENT UNITED STATES HISTORY

AP United States History prepares students for intermediate and advanced college courses. Students learn to assess historical materials, weigh evidence and interpretations presented in historical scholarship, arrive at conclusions based on informed judgment, and to present reasons and evidence clearly and persuasively in an essay format. Students enrolled in this course are required to take the AP United States History exam in May and to write a research paper.

ADVANCED PLACEMENT EUROPEAN HISTORY

AP European History introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world. The course provides context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop an understanding of some of the principal themes in modern European History, an ability to analyze historical evidence and historical interpretation, and an ability to express historical understanding in writing. Students enrolled in this course are required to take the AP European History exam in May.

History Electives

HONORS DECADES OF CHANGE (FALL)
This course is designed to explore the decades of change in the United States from World War II to 1980. Students examine the political, diplomatic, economic, and cultural forces that have defined America in the post-World War II era. The course promotes experiential learning through a variety of student-centered activities including mock trials, congressional debates, "situation room" simulations and re-run elections designed to foster engagement in the issues and an appreciation for the significance of past events. Students continue to develop the skills of interpretation, research, and writing needed to draw relevant meaning from past events. The goal of the course is to instill an appreciation for the study of history, to promote open mindedness, and to encourage a sense of civic responsibility. *Prerequisite: United States History.*

HOLOCAUST (FALL)
This course introduces students to the historical origins of anti-Semitism and surveys German history from the twentieth century to World War II. Emphasis is placed on the political and social developments which elevated the persecution of Jews to official government policy and almost succeeded in the total extermination of Jews from Europe. Through independent reading and research, students will further hone their ability to read and write analytically. A short research paper is required.

REVOLUTIONS AND REVOLUTIONARIES (FALL)
This course will compare and contrast a variety of political, social and intellectual revolutions that have profoundly shaped the modern world. Besides examining the dramatic events surrounding the respective French, Russian, Chinese, and Iranian Revolutions, an analysis of other transformational episodes in history will be studied, including the Industrial and Digital Revolutions. The human agents of major change that we will look at include Lenin, Mao, Ayatollah Khomeini, Martin Luther King, Malala Yousafzai, Mark Zuckerberg, and Jackie Robinson. The continued fallout of both the Orange Revolution and the recent "Arab Spring" will be the focus of a current events component of this class.

HONORS DECADES OF CHANGE (SPRING)
This course is designed to explore the decades of change in the United States from the Reagan Revolution to the election of 2020. Students examine the political, diplomatic, economic, and cultural forces that have defined America in the post-World War II era. The course promotes experiential learning through a variety of student-centered activities including mock trials, congressional debates, "situation room" simulations and re-run elections designed to foster engagement in the issues and an appreciation for the significance of past events. Students continue to develop the skills of interpretation, research, and writing needed to draw relevant meaning from past events. The goal of the course is to instill an appreciation for the study of history, to promote open mindedness, and to encourage a sense of civic responsibility. *Prerequisite: United States History.*

MODERN MIDDLE EAST (SPRING)
This course will provide students with an in-depth study of the Middle East Region in the 20th and 21st Centuries. Beginning with the downfall of the Ottoman Empire after World War I, this course

examines the European influence on the Middle East, the formation of nation states, and the modernization of the area. It also covers the major events in the region including the Arab-Israeli conflict, the Iranian Revolution, Islamic radical movements, the Gulf War and US intervention in the region, culminating with the Arab Spring and current events in the region. Students will analyze the causes and effects of the tensions in the region and their global impact. A short research paper is required.

MODERN TIMES (SPRING)
Students in this course will study contemporary world events involving political, social, cultural, and economic issues. Emphasis is placed on world events and the prevailing trends and leaders who are influencing current affairs. Students regularly examine periodicals and evaluate the opinions of reputable commentators reflecting on present day developments. The course challenges students to further refine their ability to read analytically and write a persuasive historical argument. A short research paper is required.

AMERICAN GOVERNMENT (FALL OR SPRING)
This course is designed to help students understand the history and structure of the American government. The class begins with a study of the Articles of Confederation, the Constitution, and the three branches of government. The course then moves on to such topics as state and local government, the responsibility of the government in domestic affairs, and U.S. foreign policy throughout the years. Through the examination of American government, students will be better equipped to make informed decisions as citizens. A short research paper is required. *Prerequisite: United States History.*

ECONOMICS (FALL OR SPRING)
This course covers fundamental economic concepts in microeconomics and macroeconomics and examines how the global economy operates. The course allows the students to study, analyze, and dissect trends in American business as well as the growing issues in the current economy. Other concepts covered are the issues of allocating resources in markets where goods and services are bought and sold, and how this process affects supply and demand curves. All students are required to research, examine, and present a current events topic of their choice.

RUSSIA - ROMANOVS TO PUTIN (FALL OR SPRING)
This course will explore the historical events of the twentieth century to better understand the world as Russians see it in the present. Topics will include the decline of the Romanovs and the czarist regime, the Russian Revolution and the rise of Lenin, modernization and World Power under Stalin, the Cold War from Khrushchev to Gorbachev, the collapse of the Soviet Union and the rise of modern Russia. The course will conclude with a study of the issues and challenges facing Russia's international relations today. Students continue to develop the skills of interpretation, research, and writing needed to draw relevant meaning from past events. The goals of the course are to promote a better understanding of the Russian world view and an open mind toward international diplomacy. *Prerequisite: United States History.*

Languages

French

FRENCH 1
In French 1 the students acquire useful, high frequency vocabulary. By the end of the first year, the students are able to express themselves in the present and past tenses. Thematic vocabulary includes family, home, school schedule, sports, clothes, colors, numbers, dates, and life at Canterbury.

FRENCH 2
By the end of Level 2 the students are studying the basics of the subjunctive mood. Students in French 2 master the past tenses the imparfait and the passé composé. Thematic topics of vocabulary include talking on the phone and sending texts, personal relationships, life at home and at Canterbury, going on a date, fashion, shopping, school life.

FRENCH 3
In French 3 the students round out their study of French grammar, continue the mastery of the past tenses and future, conditional and subjunctive. An emphasis on oral and more advanced written communication also continues at this level. We use video clips to expose the students to native speakers. *Honors section available.*

FRENCH 4
In French 4 the students refine their grammar through a final review of the major grammatical topics and verb tenses. In addition, the students study culture through film, original literature, and music. A series of film shorts supplements the classroom. *Honors section available.*

ADVANCED PLACEMENT FRENCH LANGUAGE AND CULTURE (OFFERED AS STUDENTS QUALIFY)
Students in the AP Language class prepare for the AP Language and Culture exam. Conducted exclusively in French, the course continues to develop all the language skills. The students also compose and express more complex thoughts and ideas, review grammar, and become familiar with the format of the AP exam. Though the AP exam is the final assessment, this class continues the acquisition of structures and fine-tunes language use and skills. Students enrolled in this course are required to take the AP French Language exam in May.

Spanish

SPANISH 1
In Level 1 the students acquire useful, high frequency vocabulary. By the end of the first year, the students are able to express themselves effectively in the present tense and can recognize the past tenses. Thematic vocabulary includes family, home, school schedule and sports, at the airport, clothes and colors, numbers and dates, and life at Canterbury.

SPANISH 2
By the end of Level 2 the students are studying the basics of the subjunctive mood. Students in Spanish 2 master the past tenses, the imperfect and preterit. Thematic topics of vocabulary include talking on the phone and sending texts, personal relationships, life at home and at Canterbury, going

on a date, fashion, shopping and school life.

SPANISH 3
In Spanish 3 the students complete their study of grammar, focusing on the perfect tenses and the subjunctive. We continue the emphasis on oral and more advanced written communication at this level. Students who have shown a knack and ease with the language may be selected for the honors Spanish 3 class where we begin to focus on Advanced Placement tasks. *Honors section available.*

SPANISH 4
In Spanish 4 the students refine their grammar through a final, sweeping review of the major grammatical topics and verb tenses. In addition, the students study culture through film, original literature, and music. A series of film shorts supplement the learning. *Honors section available.*

ADVANCED TOPICS IN SPANISH - CONVERSATION AND CONTROVERSY
In this post- AP course, students will cover a variety of topics ranging from deforestation to immigration, racism, and the many challenges that arise with these issues. Through authentic documentaries, articles, and podcasts, students will live the issues facing many Spanish speakers in the United States and in their home countries. With the use of debates, speeches, and persuasive writing, the students will culminate their language experience by covering current topics and being able to speak to the topic in the second language. *Department approval required.*

ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE
Conducted exclusively in Spanish, this course continues to develop language skills. Students will also compose and express more complex thoughts and ideas, review grammar, and become familiar with the format of the AP exam. Though the AP exam is the final assessment, this class continues language acquisition and fine-tunes language use and skills. Students enrolled in this course are required to take the AP Spanish Language exam in May.

ADVANCED PLACEMENT SPANISH LITERATURE AND CULTURE (OFFERED AS STUDENTS QUALIFY)
Students in this class read representative prose (short story, novel and essay), poetry, and drama from the Spanish speaking world. This is a survey course that follows the reading list published by the College Board. The students make connections between the works read and the historical period and regions in which they were written. Students develop a deeper understanding of the cultures of the Spanish-speaking world. Students enrolled in this course are required to take the AP Spanish Literature exam in May.

Classics

LATIN 1
Students learn the fundamentals of Latin grammar, vocabulary, and syntax as they focus on reading Latin and using conversational Latin. The reading passages are adapted from Plautus to Boethius, through which the students come to understand many facets of the Roman and post-Roman world.

LATIN 2

Students expand their learning of basic grammar and vocabulary as they read about Heloise and Abelard, Charlemagne, and Christopher Columbus. Cultural study includes aspects of the use of Latin in the Middle Ages, the Renaissance, and in early modern life.

LATIN 3
Students begin the year by reading excerpts from Julius Caesar's *De Bello Gallico* and selections from Catullus and Cicero. In the second semester, the students read selections from books 1-6 of Vergil's *Aeneid* as well as excerpts from Horace's *Odes* and Ovid's *Metamorphoses* within the cultural context of the Augustan age. Finally, they will read post-antique era authors, including Erasmus, Petrarch, and John Parke. *Honors section available.*

LATIN 4
Students in Latin 4 will read selections from Vergil's *Aeneid*, books I-VI, and will study the necessary grammar and syntax as well as versification and figures of speech. Students will take periodic tests on the material and will write essays on the meaning of the poetry and the historical background of the poem. *Honors section available.*

Mathematics

ALGEBRA 1
Basic concepts and properties of elementary algebra are introduced early to prepare students for equation solving. Concepts and skills are introduced algebraically, graphically, numerically, and verbally, often in the same lesson to help students make connections. Frequent and varied skill practice ensures student proficiency and success. Special attention is given to signed numbers, positive and negative exponents, linear equations, factoring, radicals, simultaneous equations, verbal problems, and test-taking strategies.

GEOMETRY
This full year course regards the properties of right triangles, similar triangles, polygons, and circles. Their geometric properties are treated synthetically with logic and proof, as well as analytically with coordinates and algebra. Multiple formats are supported through mastery including two column and indirect proofs. Students learn to value the need to think logically and present ideas in a clear order. Traditional geometry concepts and deductive reasoning are emphasized throughout, while measurement and applications are integrated to motivate students via real-world connections. Algebra 1 skills are reviewed at point-of-use, ensuring students maintain these skills. *Honors section available.*

ALGEBRA 2
The goal of the intermediate algebra course is to introduce and automate the middle-level algebra skills. Practice in the fundamental topics (linear equations, exponents, logarithms, graphs, verbal problems, systems of linear and nonlinear equations, complex numbers, right triangle trigonometry, quadratic equations, and linear and quadratic functions) is provided. *Honors section available.*

ELEMENTARY FUNCTIONS

Topics covered in this course include a review of linear functions with related applications, a thorough study of matrices, matrix algebra and applications, and an introduction to the mathematics of finance. This course offers the opportunity to investigate mathematics beyond Algebra 2 and to study topics outside the traditional high school curriculum. This course is calculator intensive and includes an introduction to discrete mathematics.

PROBABILITY AND STATISTICS
This course provides an elementary introduction to probability theory and mathematical statistics that emphasize the probabilistic foundations required to understand probability models and statistical methods. Topics include: basic combinatorics, discrete and continuous random variables, probability distributions, mathematical expectation, hypothesis testing, confidence intervals, and linear regression.

PRE-CALCULUS
Pre-Calculus prepares students for a college-level Calculus course by extending the student's knowledge and skills acquired in previous courses. The course begins with a thorough review of selected topics—linear systems, polynomial functions, exponents, logarithms, sequences, series—and continues with an extensive study of trigonometry both as the solution to triangles and as the study of circular functions. At a more rapid pace, the honors section includes the usual topics treated at the beginning of a Calculus course (limits, derivatives, applications of derivatives). *Honors section available.*

CALCULUS
This course covers many of the topics included in a college-level Calculus course. Topics include limits, methods of differentiation, related rates, maximization, Riemann sums, methods of integration, and area. The course is not as rigorous as AP Calculus and will not cover all of the topics on the AP syllabus.

ADVANCED PLACEMENT CALCULUS
This course closely examines the theory behind and the applications of the derivative. A strong background knowledge of elementary functions and analytic geometry is required. The second half of this course closely examines integral calculus. The course curriculum satisfies the AB syllabus of the AP program. Students enrolled in this course are required to take the AP Calculus exam in May.

ADVANCED PLACEMENT STATISTICS
This course covers the AP syllabus with specific emphasis in data exploration, experimental design, probability, and statistical inference. AP Statistics is a non-calculus based course which introduces students to methods and tools for collecting, analyzing, and drawing conclusions from data. This course is graphing calculator intensive. Students enrolled in this course are required to take the AP Statistics exam in May.

Science

BIOLOGY (LAB)*

This introductory laboratory course explores a molecular approach to the study of living systems by examining evolutionary development, genetic continuity, and biological and ecological diversity. Using actual data from laboratory evidence, the student develops analytic skills consistent with the biological themes of change, diversity, energy, homeostasis and scientific inquiry. In the lab students investigate the molecular and cellular structures of living organisms, proceeding to larger and more inclusive organizational levels. This course provides many of the primary skills and knowledge necessary for success in the study of subsequent science courses. *Primarily for Third Formers.*

HONORS BIOLOGY (LAB)*

This course includes an in-depth coverage of living systems with extensive laboratory experiences. Students develop analytic skills consistent with the biological themes of change, diversity, energy, homeostasis and scientific inquiry. Students must demonstrate excellent understanding of the molecular and cellular structures of living organisms. In the lab, students investigate the molecular and cellular structures of living organisms, proceeding to larger and more inclusive organizational levels. In inquiry-based laboratory experiments students learn to critically analyze and interpret data. Students are prepared to take the SAT subject test in biology at the end of the school year. *Primarily for Third Formers.*

ADVANCED PLACEMENT BIOLOGY (LAB)*

Students explore science as a process where new properties emerge at each level in the biological hierarchy. They explore how organisms interact with each other and with the physical environment, energy transfer and transformation, and the correlation of structure and function at all levels of biological organization. Studying cells as an organism's basic unit, they proceed to studies of the heritable continuity of life in the form of DNA, the feedback mechanisms that regulate biological systems, and evolution as the overarching theme of biology. A strong emphasis on advanced laboratory analysis is critical for understanding the molecular and chemical functions of living organisms and systems. Students enrolled in this course are required to take the AP Biology exam in May. *Minimum prerequisite: Honors Biology and Honors Chemistry. For Fifth and Sixth Formers.*

CHEMISTRY (LAB)*

This introductory laboratory course covers fundamental chemical concepts and helps students develop their critical thinking and problem-solving skills. Students learn about matter, physical and chemical properties and changes, chemical composition and nomenclature, reactions and stoichiometry, energy, modern atomic theory and bonding, gases, liquids, solids, solutions, acids and bases, and equilibrium. The course may be blended and include interactive activities and assignments in both traditional and web-based formats. Students practice collaboration and problem solving in the laboratory as well as at the whiteboards. In weekly laboratories, students observe and explore chemical phenomena in inquiry-based labs. Students keep a laboratory notebook and learn to collect, analyze, interpret, and present experimental data. A balance of traditional low-tech equipment and state-of-the-art probeware is used. *Minimum prerequisite: Algebra 1. For Fourth and Fifth Formers.*

HONORS CHEMISTRY (LAB)*

This in-depth laboratory course covers fundamental chemical concepts and helps students develop their critical thinking and problem-solving skills. Students learn about matter, physical and chemical properties and changes, chemical composition and nomenclature, reactions and stoichiometry,

energy, modern atomic theory and bonding, gases, liquids, solids, solutions, acids and bases, equilibrium, electrochemistry, and nuclear chemistry. The course is blended and includes interactive activities and assignments in both traditional and web-based formats. Students practice collaboration and problem solving in the laboratory as well as at the whiteboards. In weekly laboratories, students observe and explore chemical phenomena in inquiry-based labs. Students keep a laboratory notebook and learn to collect, analyze, interpret, and present experimental data. A balance of traditional low-tech equipment and state of the art probeware is used. Students are encouraged to take the SAT subject test in chemistry at the end of the school year. *Minimum prerequisite: Algebra 1. For Fourth and Fifth Formers.*

ADVANCED PLACEMENT CHEMISTRY (LAB)*

Students perform advanced chemical calculations (using data acquired) during laboratory experimentation. Critical thinking and problem-solving skills are developed as students learn about atomic theory and structure, chemical bonding, nuclear chemistry, gas laws, and kinetic-molecular theory, reaction types, stoichiometry, equilibrium, and thermochemistry. *Minimum prerequisite: Honors Algebra 2 and Honors Chemistry. For Fifth and Sixth Formers.*

PHYSICS (LAB)*

This is an introductory, laboratory-based course that emphasizes a conceptual understanding of physics. Topics covered include kinematics, Newtonian mechanics, momentum, collisions, energy, electricity and magnetism, heat, sound and light. Numerous real-world applications are explored so that students come away from the course understanding the rules of nature and how things work. In the laboratory, students observe and explore physical phenomena and ultimately design experiments in inquiry-based labs. Experimental design methods, laboratory data analysis techniques and error analysis are covered. A balance of traditional low-tech equipment and state-of-the-art probeware is used to appeal to a wide variety of learners. *Minimum prerequisite: Algebra 2, concurrently. For Fifth and Sixth Formers.*

ADVANCED PLACEMENT PHYSICS 1 (LAB)*

In this college level course, topics are covered in-depth and the material is cumulative. In the first semester, students study kinematics, Newton's laws, work, energy and power, as well as momentum and collisions. In the second semester they study circular motion and the universal law of gravitation, simple harmonic motion, introductory circuits, mechanical waves and sound. Additional topics may include optics, thermal physics and modern physics. Collaborative work is promoted in problem solving, laboratory experiments, and presentations. In the laboratory, students observe and explore physical phenomena and ultimately design experiments in inquiry-based labs. Experimental methods and techniques of data collection, interpretation and error analysis are covered. A balance of traditional low-tech equipment and state-of-the-art probeware is used. Students are required to take the AP Physics 1 test in May. *Prerequisites: Honors Chemistry, Honors Pre-Calculus, concurrently. For Fifth and Sixth Formers.*

ADVANCED PLACEMENT PHYSICS C (LAB)*

In this college level course, topics are covered in-depth and the material is cumulative. In the first semester, students study kinematics, Newton's laws, work, energy, and power, linear momentum and collisions, circular motion and rotational oscillations and the universal law of gravitation. In the

second semester they study electrostatics, conductors and dielectrics, circuits, magnetic fields and electromagnetism. Introductory differential and integral calculus is used throughout the course. Collaborative work is promoted in problem solving. In the laboratory, students observe and explore physical phenomena and ultimately design experiments in inquiry-based labs. Experimental methods and techniques of data collection interpretation and error analysis are covered. A balance of traditional low-tech equipment and state-of-the-art probeware is used. Students are required to take the AP Physics C Mechanics test and the AP Physics C Electricity and Magnetism test in May. *Minimum prerequisites: Honors Chemistry and Calculus, concurrently. For Fifth and Sixth Formers.*

ADVANCED PLACEMENT PSYCHOLOGY

The Advanced Placement Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Students are required to take the AP Psychology exam in May. *For Sixth Formers.*

Electives

ECOLOGY (LAB)* (FALL)

This semester lab course introduces basic concepts in the ecology of individual organisms, their populations, and the biological communities in which they live. Emphasis is on terrestrial plant and animal ecology. The historical, evolutionary, and ecological processes determining the distribution of ecosystems, habitats, and species are introduced. Theories of competition, predation, disease, and mutualism help explain the functioning of biological communities. *For Third and Fourth Formers.*

ANATOMY AND INJURY (LAB)* (FALL)

Anatomy and Injury instructs the student in the basic structural and functional anatomy of the human body as it relates to the injuries typically treated by a certified athletic trainer. This course is recommended for those interested in majoring in athletic training at the college level. In addition to class instruction and homework assignments, students must complete required observation hours in the training room where they make basic evaluations of injured fellow students. *For Fifth and Sixth Formers.*

BIOME ECOLOGY (FALL)

The science of Biome Ecology classifies Earth's terrestrial ecosystems into major ecological units that are correlated with regional climate types. The course begins with a basic overview of the principles of ecology. Students study Tropical Rainforests, Tropical Dry Forests, Tropical Savannas, Temperate Grasslands, Mediterranean Scrub Forests, Taiga, and Temperate Rainforests, Deserts, Deciduous Forests, Tundra, and Rivers and Lakes. Students study the human impact on each of the ecosystems. Students must have successfully completed a course in introductory biology. *For Fifth and Sixth Formers.*

FORENSIC SCIENCE (FALL)

This semester course introduces students to the principles and practices found in the field of

forensic science, which draws from the biological and physical sciences. The course begins by examining the theories and concepts necessary to effectively examine, analyze, and reconstruct a major crime scene. Specifically, the legal issues related to the search and seizure of physical evidence, crime scene documentation techniques, and basic crime scene reconstruction methods will be studied. Students will also study trace evidence and how it is analyzed, compared, interpreted, and used in criminal investigations. Types of trace evidence to be discussed will include glass, paint, hair, fiber, and fingerprints. Case studies of actual crimes and trials will be discussed to illustrate how the science and techniques may be used in the real world. *For Fifth and Sixth Formers.*

OBSERVATIONAL ASTRONOMY (FALL)
This semester course is an introduction to the mysteries of the heavens. Readings in the course are centered on how we view the sky from earth's perspective. Using college-level simulations, we study the geometry of many celestial systems. We start with the planetary configuration of our solar system and Kepler's Laws of Orbital Motion. We continue with the examination of the celestial sphere and use it to understand the seasons, the paths of the sun, and the apparent motion of the night sky. Next, we take an in-depth look at how the earth-sun-moon geometry gives rise to the phases of the moon as seen from earth. Lastly, we learn the inner workings of both reflecting and refracting telescopes. *For Fifth and Sixth Formers.*

SCIENCE OF WEST AFRICA (FALL)
In this course students study the sub-Saharan region of Africa. Through investigations of the impact of biology, ecology, and geography the students learn about the complex struggles people face in their struggle to become a modern global society. Students study biomes and resources to better understand the ecological issues of concern in West Africa. Students learn about the life-threatening impacts of human disease, desertification, and population pressures. Also included in the course studies are examinations of the relationship of geographical and ecological issues to political trends and events such as colonialism, civil wars, slavery (past and present), and genocide. *For Fifth & Sixth Formers.*

COSMOLOGY & ASTROPHYSICS (SPRING)
This semester course takes a look at the universe as a whole and ties ideas of physics and chemistry with the cosmos. Readings in the course explore modern theories of cosmology and the efforts of 20th century astronomers to explore and explain the universe. This course begins with a brief overview of the fundamental physics principles that are central to an understanding of astronomy: forces and motion, the nature of gravity, and light and optics. We continue with an examination of our sun and move on to a more general study of stellar evolution and galaxy formation. Next, we explore a wide range of exotic astronomical phenomena that the heavens hold—quasars, pulsars, black holes, and supernova—as fascinating as they are bizarre. The study of these objects leads into a discussion of Einstein's General Theory of Relativity. Finally, we consider the possibility of extraterrestrial life and ponder the question: "Are we alone?" *For Fifth & Sixth Formers.*

ENVIRONMENTAL SCIENCE (LAB)* (SPRING)
Using the Canterbury environs as a case study, students explore forest, field, and pond ecosystems, pollution of air, water and soil, toxic waste, carbon footprints, population growth, and environmental activism. Primary reading sources include the Internet, newspapers, and scholarly

journal. Students conduct laboratory studies of water quality and the dominant populations of living organisms on the East Aspetuck River in New Milford. In conjunction with the Connecticut Department of Environmental Protection, students collect chemical and biological data and analyze it to determine levels of water quality.
For Third and Fourth Formers.

MARINE SCIENCE (SPRING)
Students study the diversity of marine organisms, from the smallest plankton to the largest whales. Investigations of the major marine environments focus on the complexity of living systems and the resulting interactions between organisms. Students learn that global weather patterns, currents, and tides are crucial to marine life. Lecture presentations, interactive discussions, multimedia materials, and laboratory studies are used to stimulate interest and to promote academic success. The class takes a full-day field trip to the Maritime Aquarium in Norwalk, CT. The day includes a research trip or excursion on Long Island Sound. Students must have successfully completed an introductory biology course to enroll in this class. *For Fifth & Sixth Formers*

NEUROSCIENCE AND BEHAVIOR (SPRING)
This course is a survey of neurophysiological systems and how they affect mood, thinking, and behavior. The course will focus on basic concepts of neuroscience and how brain mechanisms mediate sensation, motivation, emotion, learning, and abnormal behavior. *For Fifth & Sixth Formers.*

WATER, ENERGY & CLIMATE (SPRING)
This course examines three major environmental issues facing our planet: freshwater quality, energy resources, and climate change. Ways of combating and improving these issues are addressed as well. Lecture presentations, interactive discussions, and multi-media materials are used to stimulate interest in the studies and to promote academic success. Two full-day trips give students actual hands-on experience. *For Fifth & Sixth Formers.*

SYRACUSE UNIVERSITY PROJECT ADVANCE: PRINCIPALS & CONTEMPORARY ISSUES IN SPORT MANAGEMENT (SPRING - 3 CREDITS)
This course introduces the student to sport management concepts and sectors through an examination of problems and issues faced by contemporary sport managements. Unique characteristics of sport and resulting social and ethical responsibilities of sport managers will be discussed. In addition to the use of traditional pedagogical teaching methods to deliver basic sport management concepts, students are required to complete a comprehensive, hands-on project that demonstrates their comprehension of the different sectors of the industry covered throughout the semester. *For Sixth Formers.*

ANIMAL ANATOMY (LAB) * (FALL OR SPRING)
Students in this course study the anatomy of a diverse selection of animal life. They learn the homologous and analogous structures and functions found in invertebrates and vertebrates. Students investigate structures at the cellular level through microscopes; the study of larger animals involves the dissection of preserved specimens. The course will also include how today's newer classification system reflects a more phylogenetic arrangement and more consistent evolutionary relationships.

Prerequisite: Biology. For Fourth and Fifth Formers.

ENGINEERING FUNDAMENTALS (FALL OR SPRING)
This course encourages students to pursue engineering questions and technological solutions that emphasize research and problem solving using mathematical and scientific concepts. Students achieve a more advanced level of skill in engineering design by learning how to conceptualize a problem, develop possible solutions, design and build prototypes or models, and make modifications if necessary. Students will explore engineering design, construction technologies, energy and power technologies including fluid systems, thermal systems, electrical systems, and communication and manufacturing technologies. *For Fifth and Sixth Formers.*

IMMUNOLOGY AND INFECTIOUS DISEASE (FALL OR SPRING)
This course invites you on a journey to explore the impact of disease on human communities throughout history and to anticipate how disease may shape the future. Focusing on one disease at a time, we will follow multiple learning threads: the biology of the disease, the human immune response, the history of the disease outbreaks, the social context for the disease, and the metamorphoses of the diseases through different time periods. Smallpox, syphilis, HIV/AIDS, influenza, bubonic plague, cholera, and malaria are just some of the influential diseases that we will cover. *For Fifth and Sixth Formers.*

Theology
Minor Courses

THEOLOGY III
This course introduces students to the concepts of morality and social conscience. Students will use Canterbury's Five Values as a framework to explore the aspects of the development of character and its influence on decision making as well as our relationship with God, self, and others. *For Third Formers.*

THEOLOGY IV
This course introduces students to various methods of reading sacred Scripture with a primary focus on the Holy Bible. The first semester is devoted to the Jewish Scriptures with a particular emphasis on the concepts of creation, call, and covenant. The second semester focuses on the Christian Scriptures and Jesus Christ. The year ends with an application of Biblical teachings to contemporary social justice issues. *For Fourth Formers.*

WORLD RELIGIONS (FALL OR SPRING)
This is an introductory study of past and present world religions. Looking through a chronological lens, students begin with the development of religion as a way to interpret and understand the primitive world. In the first semester, students will study the earliest indigenous traditions as well as Hinduism and Buddhism. In the second semester, students go beyond the eastern traditions and explore the monotheistic traditions of Judaism, Christianity, and Islam. Added to our historical and doctrinal study is a review of the ethical stance each religion takes on the contemporary issues of peace and justice. *For Fifth Formers.*

GRIEF AND LOSS (FALL OR SPRING)
Grief and Loss is an exploration into the different aspects of grief, death, and life. Students will explore common misinformation about grief, as well as the different types of loss other than death. Other topics covered are different cultural perspectives on death, the survivor's experience of grief, and different cultural and religious beliefs about life after death. We also explore near-death experience and conclude the course by reading the book *The Shack*. The goal of the course is to introduce students to loss in a way that is informative and give them tools to help navigate this experience in the future. *For Fifth Formers.*

INTRO TO PHILOSOPHY (FALL OR SPRING)
Ever wondered if God exists? If you have free will? If life has meaning? What makes an action intrinsically right or wrong? What does it mean to be happy? Should you fear death? What is Truth? This introductory course is an opportunity to study philosophy in order to develop your ability to understand and evaluate your own beliefs and values, as well as those of others, so that you can become an open-minded, respectful, thoughtful adult and responsible citizen. In this course, students learn how to inquire into complex problems and begin to formulate a personal philosophy. Students learn effective methods of inquiry, logic, analysis, and criticism while being introduced to philosophical problems. Finally, students learn how to approach these issues from a number of important philosophers, from the ancient Greeks to modern thinkers. *For Fifth Formers.*

SERVICE LEARNING: SOCIAL JUSTICE (FALL OR SPRING)
Students in this course will explore social justice issues, the foundational principles of Catholic social teaching, and apply their knowledge and faith to their experiential service work by engaging in an ongoing community service project. This course requires students to engage in learning about the organizations and communities they serve, the challenges they face, and issues of social justice on a local, national, and global level. While students engage in their service projects independently, they meet as a group to examine the theological foundations of social justice, discuss readings, current events, and to share reflections on their experiences. The coursework includes assigned readings, a reflection journal, and culminates with a final project presentation or research project. *For Fifth Formers.*

THEOLOGY VI
This full-year course combines the study of Scripture, tradition, and cultural issues. From exploring the books of the Old and New Testaments, to studying the works of the Apostolic Fathers and Apologists, the class examines the history of the Church and its mission. The course offers the opportunity to study the lives of the saints and an in depth study of the philosophy of Saint Thomas Aquinas in a context that relates to the students' experience. *For Sixth Formers.*