

Marlborough School

Course of Study

2018-2019

COURSE OF STUDY 2018-2019

Marlborough School is divided into two divisions, the Middle School (Grades 7, 8, and 9) and the Upper School (Grades 10, 11, and 12). The curriculum is centered on a required core of studies, believed to be fundamental for all students, and elective courses, designed to fit the interests of individual students. Classroom groups are small enough to permit individual attention, and students have the opportunity to take regular, honors, or Advanced Placement level courses.

In the Middle School, students are required to take a minimum of six courses each semester. In the Upper School, students are required to take a minimum of four academic courses each semester. Special Studies courses are taken in addition to the four required courses. Most Upper School students take five academic courses and elect other non-academic courses to complete their program of study..

ACADEMIC REQUIREMENTS

In the Middle School, Grades 7-9, full-year requirements are as follows:

- English
- History
- Mathematics
- Science
- World Languages

In the Middle School, Fine Arts requirements are as follows:

- Grade 7 and 8: five quarters of Fine Arts, includes one required Performing Arts course, and one quarter of Visual Arts.
- Grade 9: one year of Visual or Performing Arts. Semester courses must be taken in the same area, must be sequential classes, and cannot be taken in lieu of Physical Education.

In the Middle School, Physical Education requirements are as follows:

- Grade 7 and 8: six quarters total of Active Electives
 - Grade 7: required one quarter class of Health 7 and Swimming
 - Grade 8: required one quarter class of Health 8 and Fitness
- Grade 9: Health

In Grade 7 one quarter of Digital Citizenship is required.

GRADUATION REQUIREMENTS

The following are graduation requirements to be completed in Grades 9-12:

- English: each semester (American Studies may be substituted for English II).
- Mathematics: Algebra I, Geometry, Algebra II; three years of mathematics.
- History and Social Sciences: United States History (AP United States History or American Studies) and Modern History (Modern World History, Modern World Honors, or AP World History).
- Science: three year-long science courses (9th Grade Biology or 9th Grade Biology Honors required).
- World Languages: through level III of one language (at least two years).
- Physical Education: four semesters, including Health, and Emergency Preparedness and Water Safety. Dance may be taken to fulfill P.E. requirements.
- Fine Arts: one full year in Grade 9, and two additional semesters in Grades 10-12. Semester courses in Dance can be taken to fulfill either a Fine Arts or P.E. requirement. Art History or AP Art History fulfill only one semester of the requirement.

These are minimum requirements and many colleges to which Marlborough sends its graduates strongly recommend one year of mathematics beyond Algebra II (especially in the senior year); four or five years of one foreign language, or any combination of two years of one and three of another foreign language; two additional semesters of History and Social Sciences; two semesters in the Fine Arts; and electives in the Sciences. Choices depend on the student's interests, on the kind of record she wishes to present to the colleges, and on the breadth she desires in her education. All departments offer courses beyond the level of preparation for college.

ADVANCED PLACEMENT COURSES

A large number of Marlborough students take College Board Advanced Placement tests in May. Students who score a 3, 4, or 5 on the Advanced Placement examinations may receive college credit or advanced placement at the college level. Advanced Placement examinations are offered in Art History, Studio Art (4), Biology, Calculus (AB and BC), Chemistry, English Literature, Environmental Science, French Language, Latin Vergil, Physics (C), Spanish Language, Statistics, United States History, and World History.

SPECIAL STUDIES

An option available in all departments, Special Studies gives students an opportunity to study topics not in the standard curriculum. It is designed for students who have challenged themselves in all aspects of a department's course offerings and would like to continue their study within the department.

ENGLISH

Whether in reading, writing, or speaking, the ability to use language artfully and interpret it critically enhances our understanding of self, others, and the world in which we live. The English Department's goal is to develop these skills through the study of literature. Many different teaching styles are employed, but every English class seeks high levels of participation in student-centered discussions. We challenge students as writers by asking them to work with a variety of genres and styles, giving special emphasis—particularly in the upper grade levels—to the formal academic essay. We also believe that students' critical skills are best developed through challenging encounters with a variety of genres, styles, historical periods and cultures. In the midst of this diversity, our larger focus of instruction is consistent at every grade level—to strengthen the skills with which young women express themselves and to enhance their ability to analyze the world around them.

ENGLISH 7

English 7 introduces students from a wide representation of elementary schools to Marlborough's expectations. Students write frequently, learning to express themselves, both formally and informally, in expository and creative assignments. Personal experience and literature are springboards for writing assignments, oral presentations, and seminar-like discussions. In addition to short fiction, readings include *Habibi*, *To Kill a Mockingbird*, *A Midsummer Night's Dream*, and an extended unit on poetry.

Full Year
Grade 7

ENGLISH 8

This course builds upon the reading and writing skills from English 7. Students are asked to write with increasing precision and sophistication as they explore various literary genres and archetypes, familiarize themselves with poetic devices, and analyze modes of characterization. Major texts include *The Absolutely True Diary of a Part-Time Indian*, *American Born Chinese*, *House on Mango Street*, *Before We Were Free*, *Jane Eyre*, and *Romeo and Juliet*. More intensive grammar and vocabulary exercises support the enhanced demands placed on students' reading and writing.

Full Year
Grade 8

ENGLISH I

English I is first and foremost a writing course, designed to prepare students for the type of writing they will do in the Upper School and beyond. The texts in the first semester are organized around the theme of "Finding One's Voice." Students are introduced to traditional components of rhetoric in crafting written and oral arguments. The year is spent practicing vivid and insightful ways to use these skills in literary analysis. Major texts often include *Annie John*, *Twelve Angry Men*, *Persepolis*, *The Catcher in the Rye*, *Macbeth*, as well as a variety of short stories and poems.

Full Year
Grade 9

ENGLISH II

Issues in American culture and society are introduced in this course and studied through the lens of our nation's literary tradition. Students are challenged to develop their critical thinking skills, their capacity to read and interpret literature, and their ability to express that understanding in conversation and writing. The course focuses on topics such as identity, race, class, resistance to change and change itself, conflict, and American ideas about land. Major texts often include *The Scarlet Letter*, *The Awakening*, *The Great Gatsby*, *Thomas and Beulah*, *Streetcar Named Desire*, and an anthology compiled by the instructors.

Full Year
Grade 10

AMERICAN STUDIES

Students in this course begin and end the year grappling with basic questions about American culture: What is America? Who is an American? What is the American Dream? The course examines American society, past and present, through novels, short stories, poems, historical narratives, letters, political cartoons, film, art, photography, and music. Exploring the American experience thematically, rather than chronologically, the class focuses on such issues as class, race, identity, political protest, utopian visions, conflict, national unity, and American approaches to land and space. Most aspects of the course, including tests and papers, integrate both historical and literary themes and materials. Major texts often include *Narrative of the Life of Frederick Douglass*, *The Great Gatsby*, *The Woman Warrior*, and *A Raisin in the Sun*.
Two-period course fulfilling both History and English requirements.

Full Year
Grade 10

ENGLISH III

This survey of British literature examines some key texts from the Renaissance through the twenty-first century. Classes focus on understanding the literature and on helping students become more confident readers and writers. Students work closely with the teacher through each stage of the writing process. Essay assignments concentrate on making an argument, organizing paragraphs, and crafting sentences with grammatical proficiency. In lieu of a semester exam, students complete projects or presentations. Major texts often include, *Hamlet*, *The Importance of Being Earnest*, *A Room with a View*, *Wide Sargasso Sea*, and *Exit West*.

Full Year
Grade 11

ENGLISH III HONORS

This survey of British literature begins in the Renaissance and ends in the twenty-first century. Writing instruction focuses on various strategies of argumentation and interpretation in the analytical essay. Students are taught how to incorporate close

readings of a text into a formal analytic essay, and are introduced to the role literary criticism can play in interpretation. Major texts often include Shakespeare's *Sonnets*, *Hamlet*, *A Room with a View*, *Heart of Darkness*, and *Exit West*.

Full Year

Grade 11

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

This course follows the basic structure of English III Honors curriculum, but is significantly more rigorous. In addition to reading more widely and deeply within the British literary tradition, students also write longer essays and prepare for the Advanced Placement exam in English Literature and Composition. Additional readings may include *Beowulf*, *The Canterbury Tales*, *Mrs. Dalloway*, and *The Remains of the Day*.

Full Year

Grade 11

ENGLISH IV HONORS: SEMESTER ELECTIVES

Senior year affords students the opportunity to take two English electives, one per semester. These electives represent a wide range of literary study to appeal to students' various interests.

One Semester

Grade 12

AFRICAN-AMERICAN LITERATURE

In this course, you will be introduced to the literary works of writers of African descent and those writers most influential in the period known as "The Rebirth" or the Harlem Renaissance. The course explores the unique ways in which writers use memoir, poetry, and fiction to represent the diasporic experience. Moreover, the course will provide a sampling of writings from West Indian, African and African-American writers. Themes of particular interest are identity, freedom, family, salvation, and the power (and limits) of language. Possible texts include Ernest J. Gaines's *A Lesson Before Dying*, Alice Walker's *The Color Purple*, Toni Morrison's *Beloved*, James McBride's *The Color of Water*, and numerous works of shorter fiction.

ANNA KARENINA

In this course, you will spend the semester reading one incredible novel from the 19th century and learn why some regard Russian author Leo Tolstoy as one of the greatest novelists of all time. In addition to mastering *Anna Karenina*, a book that you'll quickly learn has the kind of beauty and complexity you've been yearning for as a reader, you will read widely in Russian history and philosophy. This course provides you with a rare opportunity to become a true expert on a classic novel, its author and cultural context in which he produced it.

ASIAN-AMERICAN LITERATURE

This course examines fundamental questions surrounding the varieties of Asian identity as it has evolved and been defined in the American milieu. You will be introduced to a range of narrative styles and will read novels such as *The Gangster We Are All Looking For* by Thi Diem Thuy Le, *Everything I Never Told You* by Celeste Ng, *Shortcomings* by

Adrian Tomine, and *Forgotten Country* by Catherine Chung, in addition to works of shorter fiction. This course includes opportunities to visit cultural sites in Los Angeles such as the Japanese American National Museum.

BIBLE AS LITERATURE

As a religious text, the Bible has inspired centuries of political and social development; it has also lent structure and content to centuries of literary history throughout the English speaking world. This seminar examines the Bible from multiple perspectives, approaching both the best-known and little-studied segments, in such a way that makes it accessible and vivid for a contemporary reader. You will examine the Bible as a work of literature and as a historical artifact and think deeply about its enduring political, social, and cultural significance today.

CALIFORNIA IN LITERATURE

Some of America's best literature is home grown. Take this course if you are interested in seeing your neighborhood, Los Angeles, and California in the books you read. You will begin by reading classic texts that reflect on the dreams inspired and destroyed by Los Angeles. Two foundational Los Angeles novels include John Fante's *Ask the Dust* and Nathanael West's *The Day of the Locust*. As the course progresses, you will consider how literature about California intersects with film from Hollywood's Golden Age and read novels by current authors, such as James Ellroy, Paul Beatty, and Karen Tei Yamashita.

GENDER AND SEXUALITY

The academic study of gender and sexuality has proliferated exponentially over the past few decades, and changes daily, across artistic genres and geographic regions. This seminar investigates the cultural meanings and manifestations of gender and sexuality norms, through the examination of journalism, political writing, popular music and film, feminist and queer theory, fiction, and drama. Our goal is not to understand what gender and sexuality might mean for all people, but to interrogate the ways in which we as readers interact with the social and historical systems adhering to gender and sexuality. Possible readings include Margaret Atwood, *The Handmaid's Tale*; Alison Bechdel, *Fun Home*; David Henry Hwang, *M. Butterfly*; and short stories by Charlotte Perkins Gilman, Octavia Butler, David Foster Wallace, and E. Annie Proulx among others.

JEWISH-AMERICAN LITERATURE

What makes Jewish-American literature Jewish? What makes it American? This course will address these questions about ethnic literature, culture, and identity through fiction, poetry, film, and other writings by Jews in America, from the 19th-century Yiddish immigrant experience of Anzia Yeziarska and Emma Lazarus to the 20th-century assimilationist perspective of Philip Roth, Allen Ginsberg, and Woody Allen. Major texts may include Yeziarska's *Bread Givers*, Roth's *Goodbye Columbus*, and Ginsberg's *Kaddish*. In addition, students will read short stories from authors such as Nathan Englander and Aimee Bender.

21ST CENTURY NOVEL

This course is designed to give you a fresh perspective on literature, in general, and on the novel, in particular, by introducing you to voices very much alive and active right now. *What is the 21st century novel?* This is an impossible question to answer precisely because authors today challenge our understanding of what a novel looks like and encourage us to consider the elasticity of this kind of art form – its ability to morph reality, reimagine history, transform conventions of plot, and remind us that there are many ways to arrange words on the page. But with the 21st century novel, you can still expect a uniquely familiar reading experience. You’re living in the 21st century, after all. The list of texts varies from year to year. Recent readings have included *The Brief Wondrous Life of Oscar Wao* by Junot Diaz, *A Visit from the Goon Squad* by Jennifer Egan, *The Underground Railroad* by Colson Whitehead, and *Amatka* by Karin Tidbeck.

HONORS ENGLISH SEMINAR

This course represents the highest level of literary study at Marlborough and is designed to introduce students to more rigorous theoretical approaches to literature than they have seen in their first five years. In the first semester of the course, students read widely in critical theory and philosophy. Some important voices include Jacques Derrida, Walter Benjamin, Michel Foucault, Sigmund Freud, Jacques Lacan, and Slavoj Zizek. In addition, students will learn how to apply critical theory to the fiction that they read.

Previous courses have examined short fiction by authors, such as David Foster Wallace, Don DeLillo, Kelly Link, and Angela Carter, and novels, such as *City of Glass* by Paul Auster. In the second semester, students take periodic breaks in their regular reading to work on an Honors Thesis and collaborate with their peers in a workshop-style setting. This is a year-long course, and students must complete a short paper in the spring of their junior year as a prerequisite for admission.

*Full Year
Grade 12*

ELECTIVE OFFERINGS

CREATIVE WRITING

This class challenges students to write short fiction in an original, unique voice. You will read a number of contemporary authors to gain a greater appreciation for the craft of storytelling. More importantly, you will write quite a bit of your own fiction and share your stories with your classmates in a workshop-style setting. This elective does not satisfy the English IV Honors requirement for seniors.

*One Semester
Grades 11-12*

YEARBOOK, ULTRAVIOLET, AND OTHER PUBLICATIONS

See Media Electives.

FINE ARTS: PERFORMING & VISUAL

The Performing and Visual Arts Departments at Marlborough believe that there is an interrelationship and interdependence among all disciplines in the arts. The programs are designed to enable students to form an appreciation for the creative process, develop the personal commitment needed to complete a piece of work, establish an appropriate level of technique and skill in their chosen disciplines, and to recognize artistic quality. Students are expected to communicate effectively in both verbal and written form about the art genre in which they are participating, develop confidence in their accomplishments, value cooperative interaction, and to cultivate a personal approach evolving from the aesthetics of a broad range of artistic styles and disciplines. The Performing Arts Department offers a full range of courses in dance, theater, and music. Dance Dimensions, Marlborough Chamber Choir, Marlborough Ensemble Theatre and Instrumental Ensemble are performing groups open only by audition. The Visual Arts Department offers a full range of courses in drawing, painting, photography, sculpture, ceramics, metals, filmmaking, and digital arts.

PERFORMING ARTS 9TH-12TH GRADE COURSES

DANCE I: BEGINNING DANCE

This is a semester-long course designed to introduce the beginning student to basic technique and vocabulary with a focus on ballet, Horton and contemporary. Students have the opportunity to work with guest artists from diverse backgrounds. Styles may include jazz, hip hop, Bollywood and African. Through lectures and film, students receive a historical perspective, and are introduced to the masters whose contributions to the art form were influenced by the political, artistic, and world climate of their time and place.

*Fall Semester
Grades 9-12*

DANCE II: BEGINNING/INTERMEDIATE DANCE

This course further develops the principles introduced in Dance I. Skill-building is emphasized with concentration on technique and movement retention. A selection of class work is staged and performed to give students experience in front of an audience as a form of creative expression and communication.

*Spring Semester
Grades 9-12*

DANCE III: INTERMEDIATE/ADVANCED

This course further develops the principles introduced in Dance II. The focus of the course is on dance technique, learning combinations and working with guest artists from diverse backgrounds. Guest artists may include jazz, hip hop, Bollywood, African and contemporary. Dance technique will apply somatic practices with the intent to develop the understanding of alignment and efficient movement. The course continues to build choreography skills through practical exercises explored during class.

Prerequisite: 9th Grade students may take this class only with the permission of the instructor.

*Fall Semester
Grades 9-12*

DANCE IV: INTERMEDIATE/ADVANCED

In this course students will assimilate the technical and creative material acquired through the dance program and present a choreography project at an All School Assembly.

Through contemporary technique, composition, improvisation, and exploration of performance qualities, students begin to develop their own distinct voices of expression. A unit of the course will focus on dance in film.

Prerequisite: 9th Grade students may take this class only with the permission of the instructor.

*Spring Semester
Grades 9-12*

BALLET

This course includes barre and center work with the focus on alignment, placement and musicality. Designed for the intermediate level student, the aim is to refine technique applicable to different stylistic schools of ballet. A selection of variations are staged and performed at the end of the semester.

*Spring Semester
Grades 9-12*

CONTEMPORARY DANCE PROJECT

In this course students will assimilate the technical and creative material acquired through the dance program and build a final performance project to be showcased. Through contemporary technique, composition, improvisation, and exploration into performance qualities, students will continue to develop their dance and choreographic abilities while further exploring dance as a means of expression. Students will use these tools to discover and develop their artistic, individual and collaborative voices. This course can also exist as an independent study in conjunction with DANCE IV.

Prerequisite: 9th Grade students may take this class only with the permission of the instructor.

*Spring Semester
Grades 9-12*

CONTEMPORARY SOMATIC EXPLORATION AND IMPROVISATION

This class uses improvisational structures as a means to find new ways to approach the choreography process and nourish the individual movement voice. It delves into a variety of somatic practices touching on Bartenieff Fundamentals and Ideokinesis for the development of efficient movement patterning and as a tool to reinforce lines of movement. We use all physical inquiry to tap into movement patterning and the creative process.

Prerequisite: 9th Grade students may take this class only with the permission of the instructor.

*Fall Semester
Grades 9-12*

DANCE DIMENSIONS

This course assembles dancers of an advanced level. Emphasis is placed on refining classical technique and focuses on student-led choreography. Through contemporary technique, composition, improvisation, and exploration of performance qualities, students develop their own distinct voices of expression. Performances are given throughout the year with special concentration on an annual dance concert.

Prerequisite: Audition for grades 10-12

Full Year

INTERDISCIPLINARY PERFORMANCE

Building on a vocabulary common to all Performing Art forms, students in this course will create original compositions using movement, sound, and theatrical elements. These compositions, as well as a final performance project, will be based on information culled from auditing a course outside of the Performing Arts Department, but will not necessarily be script-driven. The final performance project will be presented to the community during the Fourth Quarter. This is a team-taught course with instructors from each of the three Performing Arts disciplines.

*Spring Semester
Grades 10-12*

THEATRE I: PERFORMANCE FUNDAMENTALS

This course is intended for students with an interest in theatrical performance. It provides an opportunity for students to explore a range of physical and creative processes that serve as gateways to further training in theatre-based techniques and forms. We focus on body/mind awareness and the multiple ways that the body interacts with forms and practices leading to deeper discipline, integration, ease, joy and deep play. The development of individual presence and awareness of the dynamics of ensemble are emphasized throughout the semester. Students will be asked to keep and share a journal of their experience and will be assigned a variety of exercises to explore outside of class time. This course serves as prerequisite to further theatre coursework and is for students interested in embodied creative process and performance skills.

*Fall Semester
Grades 9-12*

THEATRE II: INTERMEDIATE PERFORMANCE TRAINING

Designed to continue the work of Theatre I, this course is based on practices that view the mind/body as an interdependent whole – practices that stoke a unified whole into experiencing ignited imagery, bold precise action, and deep somatically-derived emotion. The class is both physically and mentally rigorous and requires a deep commitment to the discipline of performance. The approach incorporates exercises attributed to Stephen Wangh’s *Physical Approach to Acting* (inspired by Jerzy Grotowski) and Ruth Zaporah’s *Action Theatre*. Other diverse influences will also be in play including: Patsy Rodenburg’s Circles of Awareness, the Viewpoints as developed by Mary Overlie and Anne Bogart, as well as Viola Spolin’s improvisational acting games. Students will experiment through exercises and will then have the opportunity to apply these exercises on scenes and/or monologues. Students will be asked to keep and share a journal of their experience and will be assigned a variety of exercises to explore outside of class time.

Prerequisite: Theatre I

*Spring Semester
Grades 9-12*

THEATER III: ADVANCED PERFORMANCE TRAINING

Designed to continue the work of Theater I and II, this class is based on practices that view the mind/body as an interdependent whole. These practices lead an actor through experiences of ignited imagery, bold precise action, and deep somatically-derived emotion. The class is both physically and mentally rigorous and requires a deep commitment to the discipline of performance. The approach incorporates exercises influenced by Steven Wangh’s *Physical Approach to Acting* (inspired by Jerzy Grotowski) and Ruth Zapora’s *Action Theater*. Other diverse influences will also be in play including: the actor training techniques of Tadashi Suzuki and the Viewpoints as developed by Mary Overlie and Anne Bogart. Students will experiment through exercises and will then have the opportunity to apply these exercises on monologues and scenes. Students will be asked to keep and share a learning journal of their experience and will be assigned a variety of readings and exercises to explore outside of class time.

Prerequisites: Theatre I and II or permission of instructor.

*Fall Semester
Grades 10-12*

THEATRE IV: SCENE STUDY

This course is designed to continue the work of Theatre III. Giving the student the opportunity to use the skills they have acquired in a streamlined approach, it will prepare the actor for effective professional rehearsal and audition practices. The training methods employed are inspired by the teachings of Konstantin Stanislavsky, Michael Chekhov and Uta Hagen, and combine a physical and psychological approach to acting. The class will focus on breaking down and understanding text, character-building, image work and recall. Students will work with various scenes and partners, and will present the material multiple times throughout the semester.

Prerequisite: Theatre III

*Spring Semester
Grades 10-12*

IMPROVISATIONAL TECHNIQUES

Students gain experiential understanding of improvisational acting techniques and develop a strong improvisational practice that can be applied not only to scripted theatrical works, but to confident communication and skillful collaboration in all walks of life. Through theatre games and improvising scenes, students will develop listening skills, a trust of their creative impulses, and a self-confidence earned through rigorous play.

*Fall Semester
Grades 10-12*

THE ACTOR'S VOICE: SHAKESPEARE

This course concentrates on the special skills required for performing heightened language and classical texts. Focusing on Shakespeare and the physicality of language, the class offers advanced training in vocal work, scansion, text analysis, interpretation, and character-building. Students may also work on a variety of other classical, heightened and/or poetic texts. Diverse influences at play in the class include vocal work inspired by Roy Hart, Kristin Linklater, Patsy Rodenburg, and Meredith Monk, the teachings of Stephen Wangh, as well as the Actor Training Method of Tadashi Suzuki. Students will be asked to read several of Shakespeare's plays, to keep and share a process journal, and will be assigned a variety of readings and exercises to explore outside of class time.

Prerequisite: Theatre I and II

*Spring Semester
Grades 10-12*

PERFORMANCE AND PRESENCE: ACTING

This class is for Upper School students who have not taken the Theatre I - IV track, but who are interested in pursuing their acting skills. For those who may identify more as singers or dancers, this class will help any performing artist cultivate their expressivity, confidence and stage presence. In this class, students will work with developing a warm-up practice, cultivating performance presence and learning acting techniques that complement and enrich existing performance skills.

Prerequisite: Dance I/II, Choral Concepts, Theatre I/II, past participation in one or more Performing Arts Department productions, or permission of the instructor.

*Spring Semester
Grades 10-12*

TECHNICAL THEATRE

This course focuses on the application of stage and performance principles to the design, construction, and operation of scenery, sound, lighting, properties, makeup, costumes, and stage management. Computer-aided design, use of power tools, and rigging techniques are examples of some of the skills that are included. Students are required either to join a tech crew for a current Marlborough production or to arrange time to work on special projects related to a production. This course may be repeated for credit.

*Spring Semester
Grades 10-12*

MARLBOROUGH ENSEMBLE THEATRE

This course, which assembles an ensemble of performers, technicians and designers, offers a series of acting and technical experiences that include public performances of at least one full-length play in the Spring semester. The dramatic literature chosen for production may include Classical Greek, Medieval, Commedia dell'Arte, Shakespeare, Moliere, Chekhov, or contemporary dramas and comedies. There is great emphasis on ensemble work, and all projects are chosen and conducted with the full group in mind. Students auditioning for the Ensemble must exhibit a seriousness of purpose, a willingness to commit to a rigorous schedule of rehearsals both inside and outside of class, and must show great eagerness to function as part of a team.

Prerequisites: Audition and completion of Theatre I - Theater III, or Theatre I and II and permission of instructor.

*Full Year
Grades 10-12*

VOCAL MUSIC I/II: CHORAL CONCEPTS

This course is designed for students who have a desire to learn and refine vocal techniques and gain a deeper understanding of the choral art. Specific attention is given to sectional blend, vowel unification and sight-singing skills. Literature covered is drawn from the standard repertoire of classic choral works for women's voices, with a focus on historical and stylistic diversity. Choral Concepts participates in the annual Winter Choral Concert during the Fall Semester and the Spring Choral Concert during the Spring Semester and has other performance opportunities during each semester. In the Spring Semester, Choral Concepts begins working with music for the solo voice and includes song interpretation. When taken as a year-long course, Choral Concepts fulfills the University of California Visual and Performing Arts requirement.

*Full Year
Grades 9-12*

VOCAL MUSIC: CONCERT CHOIR

With more difficult repertoire, Concert Choir builds on the skills learned in Choral Concepts. The course is designed for students who want to continue their choral experience and who have a desire to further refine their vocal technique and understanding of the choral art. Specific attention is given to sectional blend, vowel unification, and sight-singing skills. Literature covered is drawn from the standard repertoire of classic choral works for women's voices, with a focus on historical and stylistic diversity. Concert Choir participates in the annual Winter Choral Concert during the Fall Semester and the Spring Choral Concert during the Spring Semester and has other performance opportunities throughout the year..

Prerequisites: Choral Concepts

*One Semester or Full Year
Grades 10-12*

MARLBOROUGH CHAMBER CHOIR

Chamber Choir is designed for technically advanced and experienced choral singers. Literature covered includes motets, madrigals, and cantatas of the Renaissance, Baroque, and Classical periods, as well as fine choral repertoire drawn from the Romantic, Impressionistic, and Contemporary eras. A portion of the literature is taken from the popular and musical theater repertoire. Chamber Choir participates in the annual Winter Choral Concert during the Fall Semester and the Spring Choral Concert during the Spring Semester. This choir also performs in numerous festivals and masterwork collaborations in Los Angeles throughout the academic year. Chamber Choir travels regularly to New York and sings at Carnegie Hall on a three-year rotation. Students must be proficient in music theory and sight-reading with the use of solfege and hand-signs.

Prerequisites: Audition and completion of Choral Concepts or Concert Choir, or permission of instructor.

*Full Year
Grades 10-12*

INSTRUMENTAL ENSEMBLE

This is a course in which students participate in musical ensemble groups of varying sizes. Ensembles are formed in the beginning of the year according to instrumentation and level of expertise. Ensemble skills—including interpretation, balance, tone production, and performance skills—are emphasized. Students have the opportunity to participate in a public performance at the end of the Spring Semester.

Prerequisite: Audition.

*Full Year
Grades 7-12*

VISUAL ARTS 9TH-12TH GRADE COURSES

BEGINNING PHOTOGRAPHY

This course involves the study of basic elements of black-and white photography: camera, film, exposure, lighting, developing, and printing. Computer imaging is also a component. Students taking this course must provide a 35mm adjustable film camera.

*One Semester
Grades 9-12*

INTERMEDIATE PHOTOGRAPHY

This course extends the ideas and skills introduced in Beginning Photography. In addition, students explore photography graphics techniques: drop-out, tone line, and Sabattier effect. Projects are designed to further expand the students' understanding of photographic problem-solving and computer-enhanced images.

Prerequisite: Beginning Photography.

*One Semester
Grades 9-12*

ADVANCED PHOTOGRAPHY

This course introduces the aesthetics and techniques of applied color and color photography. Transparencies, color-toning, hand-coloring, emulsion transfer, and multimedia production are covered, and the study of digital imaging is continued.

Prerequisite: Intermediate Photography.

*One Semester
Grades 9-12*

SENIOR THESIS PHOTOGRAPHY

This course focuses on advanced photography techniques. Refined studio lighting, photojournalism, and handmade books are covered. Assignments are given in black and white, as well as in alternative processes, including infrared film. Students use 35mm and medium format camera equipment and digital imaging equipment. The course places emphasis on preparing work suitable for exhibition and building an advanced portfolio.

Prerequisite: Advanced Photography.

*One Semester
Grades 9-12*

FOUNDATIONS IN DRAWING AND PAINTING

This course focuses on developing fundamental skills in both drawing and painting. Emphasis is placed on the study of form, light and shadow, color, and composition through the exploration of techniques in wet and dry media. Students develop a basic design vocabulary while increasing their observational, analytical, technical, and expressive studio art skills.

*Full Year
Grades 9-12*

INTERMEDIATE DRAWING AND PAINTING

This course offers a continuation of material introduced in Foundations in Drawing and Painting. Emphasis is placed on breadth of subjects, materials, techniques, and approaches to artwork while working in both wet and dry media.

Prerequisite: Foundations in Drawing and Painting

*Fall Semester
Grades 10-12*

ADVANCED DRAWING AND PAINTING

This course provides the opportunity for more exploration with drawing and painting. Assignments involve the study of a variety of media, techniques, and themes, and students are encouraged to develop a personal, conceptual approach to their work.

Prerequisite: Intermediate Drawing and Painting.

*Spring Semester
Grades 10-12*

SENIOR THESIS DRAWING AND PAINTING

This course is for the advanced art student who desires in depth exploration in drawing and painting. Students are expected to be more self-directed and able to work at an advanced level. Work will follow individually-chosen themes and concentrations.

Prerequisite: Advanced Drawing and Painting.

*Fall Semester
Grades 11-12*

PORTFOLIO IN DRAWING AND PAINTING

This course is designed for the serious art student to assist in preparation of a portfolio for college or for AP Studio Art in Drawing or in 2D Design (to be taken the following year). Students need to be self-directed and able to work at an advanced level. Emphasis is placed on preparing work suitable for exhibition and on building an advanced portfolio.

Prerequisite: Senior Thesis Drawing and Painting.

*Spring Semester
Grades 11-12*

BEGINNING CERAMICS

This course explores different techniques of handbuilding with clay, several methods of applying surface design, and the application of a variety of glazes. Students work with slabs, coiling, and molds. Notebooks are required for glaze notation and the development of a vocabulary of design elements.

*One Semester
Grades 9-12*

INTERMEDIATE CERAMICS

This course is a continuation of Beginning Ceramics. Focus is placed on learning to use the potter's wheel. Assignments include basic forms—mugs, bowls, plates, and pitchers—as well as a variety of glazing and surface design techniques. Notebook sketching is required.

Prerequisite: Beginning Ceramics.

*One Semester
Grades 9-12*

ADVANCED CERAMICS

This course presents an opportunity for students to continue working in clay using the potter's wheel, handbuilding, and/or combined techniques building on previously learned skills. Functional and non-functional design are explored, and emphasis is placed on more complex and multi-element forms as dictated by the student's area of interest.

Prerequisite: Intermediate Ceramics.

*One Semester
Grades 9-12*

SENIOR THESIS CERAMICS

This course provides students the opportunity to work more independently, to initiate projects, and to self-direct their own body of work demonstrating depth of skill. Students are expected to work at an advanced level and must write a proposal describing the direction, techniques, and subject they have chosen to explore. Students are encouraged to conduct research on historical or contemporary ceramic work. Maintaining a sketchbook and record of glaze notation is required. Emphasis is placed on preparing work suitable for exhibition and on building an advanced portfolio.

Prerequisite: Advanced Ceramics.

*One Semester
Grades 9-12*

BEGINNING SCULPTURE

This course provides an exploration of art concepts essential to three-dimensional design. Sculpture projects will follow subtractive (carving) and additive methods of working including techniques of assemblage. Students will use a wide variety of materials, including but not limited to cardboard, metal, clay, plaster and stone. Students will learn how to use different hand and power tools and try lost-wax or cuttlefish casting. Sketching will be used to begin developing visual ideas.

*One Semester
Grades 9-12*

INTERMEDIATE SCULPTURE

This course further investigates the creative possibilities of three-dimensional form. The emphasis will be on the expressive use of media and the manipulation of spatial relationships. In addition to using what are thought of as traditional sculpture materials, students will explore silversmithing and/or fashion as a wearable art forms. In addition to using metal and fabric, students will use non-traditional materials including paper, plastic and found objects. A notebook with sketching to build a vocabulary of design elements is required.

Prerequisite: Beginning Sculpture.

*One Semester
Grades 9-12*

BEGINNING METALS

This course encourages an in-depth investigation of jewelry or small sculptural fabrication. Mixed metals, chain-making, granulation, textures created with a rolling mill, and multiple component pieces are just some of the topics that can be explored. Although work with particular techniques is assigned, all projects are student-directed. Maintaining a notebook that includes the development of design sketches is required.

*One Semester
Grades 10-12*

INTERMEDIATE METALS

This course provides students the opportunity to work more independently, to initiate projects, and to self-direct their own body of work demonstrating depth of skill. Students are expected to work at an advanced level and must write a proposal describing the direction, techniques, and subject they have chosen to explore. Students are encouraged to conduct research on historical or contemporary metal work. Maintaining a sketchbook is required. Emphasis is placed on preparing work suitable for exhibition and on building an advanced portfolio.

Prerequisite: Beginning Metals.

*One Semester
Grades 10-12*

3D DESIGN: INTERSECTION OF ART AND FASHION

As the boundaries between clothing and sculpture continue to dissolve, fashion is an increasingly powerful way to convey identity, politics, status, and personality. Students will be introduced to some the history of fashion, costumes, body, and performance art as well as several contemporary artists/designers. These ideas will serve as inspiration and a starting point for student projects. Using skills in the basic principles and elements of design students will design and make pieces which can be worn: garments and accessories. In addition to traditional materials such as fabric, students will also use non-traditional materials including paper, plastic and repurposed clothing. Construction techniques will range from sewing to glue sticks. Sewing experience is helpful but not required.

*Not offered 2018-19
Grades 10-12*

PHOTOGRAPHIC BOOKS

This collaborative class focuses on the process of creating handmade books from photographs and will be taught by two teachers. We will explore the conceptual considerations of a book, book design, visual narratives, imagery, and generating content. Paper bindings range from simple to complex and can be quite three-dimensional; you will make models of several different structures to investigate some of the styles and possibilities of book arts. Students will edit and sequence a series of their images, choosing book structures in which to present them. Time will be divided between creating photographic images using a cell phone, which will be photographed and processed through multiple apps, digital manipulation, printing on various papers, and construction of the books. No prerequisites or prior experience is necessary.

*Not offered 2018-19
Grades: 10-12*

2D MIXED MEDIA

In this course, students will have the creative freedom to explore processes that combine a variety of two-dimensional concepts, design techniques, and materials, with an emphasis on printmaking and mixed media collage. Students will learn to layer and weave personal meaning into individual art pieces based on memories, dreams, symbols, and personal experience to shape and guide their work. Projects could include: printmaking, collage, photography, drawing, painting, digital art/media, and/or found objects. Assignments will be determined by the instructor and will consider individual students' interests. No drawing skills are necessary for this course.

*One Semester
Grades 10-12*

ARCHITECTURE

This semester course offers the student the opportunity to study the interrelationship between form and space and the principles that guide their organization in our built environment. Students will learn about scale, floor plans, elevations, and assignments will allow for a broad range of visual problem-solving. Emphasis will be on original design through three-dimensional model building. Drawing skills are helpful but not necessary. This course may be taken more than once for an art credit.

Prerequisite: Two semesters of visual art beyond Grade 8.

*Fall Semester
Grades 10-12*

DIGITAL STORYTELLING

In this course, students will explore and create their own digital stories using images, animations, and video. Students will begin by drawing from life experiences and creating animated shorts. After working on personal shorts, the class will experiment with Adobe Animate CC to create more realistic characters and narrative vignettes. In the next project, students will enter into the world of fictional story creation. Students will discuss the world traditions of storytelling and develop their own unique animations or short film. Students will learn the principles of professional film editing, as well as the elements of a story that hold the viewer's attention and generate powerful emotional responses. There will be lectures and discussion time dedicated to exploring the creative process. After being introduced to creative tools such as *Adobe Photoshop*, *Adobe Premiere*, *Adobe Animate CC*, students will be fully prepared to give voice to imagination. Students will experience the thrill of crafting animations and films from scratch and enjoy the satisfaction of exhibiting work with classmates.

*Full Year
Grades 9-12*

BEGINNING FILMMAKING

This hands-on course will introduce the art, technology, and language of digital film. Students will explore basic cinematic techniques and structures, including use of the cinematic time and space, image, soundtrack and script. This class blends both theory and practice as students watch and emulate a range of film styles. Each student will produce a portfolio of camera techniques and a short narrative digital film.

*Fall Semester
Grades 10-12*

INTERMEDIATE FILMMAKING

Building on the skills developed in Beginning Filmmaking, this course will focus on more advanced techniques of digital film. Using professional camera equipment, students will engage in various filming exercises and projects. They will gain an increased proficiency in storyboarding, cinematography, lighting, sound recording, and the workflow required in HD format. Each student will produce a short narrative or documentary film working in collaboration with classmates.

Prerequisite: Beginning Filmmaking

*Spring Semester
Grades 10-12*

ADVANCED FILMMAKING

This course offers students the opportunity to continue developing the skills they acquired in Beginning and Intermediate Filmmaking. Using Adobe After Effects and Premiere CS5.5 software, you will create digital films from pre-production to post-production, while developing a thorough understanding of the filmmaking process. Special attention will be given to the use of compositing, cinematography and visual effects. Topics include: how to edit and manage a post-production cycle, how to implement and utilize optical effects treatments, and how to analyze a film.

Prerequisite: Intermediate Filmmaking

*Fall Semester
Grades 11-12*

SENIOR THESIS FILMMAKING

Students will work on productions as key creative team members and will be mentored by the instructor. Each student will participate in the full pre-production, production and post-production of a film. Throughout the process students will be required to plan and direct their individual thesis film. Students will arrange for and choose locations, music rights, actors and their film crew. By the end of the course, each student will have a completed a short film suitable for college submissions.

Prerequisite: Advanced Filmmaking

*Spring Semester
Grades 11-12*

MUSIC VIDEO: AN INTRODUCTION TO PRODUCTION

In this class, students will make music videos. A variety of special effects and video techniques, such as compositing and “green screening,” as well as sound editing and manipulation will be explored. Each student will learn video editing skills and begin to develop their own visual style. Using *Adobe Photoshop, Premiere, and After Effects CS4*, students will be exposed to cutting edge technical tools and the techniques of industry professionals. Students will learn the history of music video and how to make an effective storyboard. Through this class, students will begin the creative journey into the exciting world of multimedia video art and film.

*Spring Semester
Grades 10-12*

ADVANCED PLACEMENT STUDIO ART

This is a course intended to assist the serious art student in preparing portfolio work in one of the areas listed below. This course requires a considerable commitment of time and effort; students are expected to be self-directed and able to work at an advanced level. Students are responsible for creating original artwork and submitting that work in slide form according to the specific requirements of the portfolio chosen. The portfolio may include artwork from previous years; it is therefore recommended that work for this course be compiled over a two-year period with the assistance of the instructor. Before enrolling in this course, the student must submit a portfolio of artwork completed to date

to be reviewed by the Visual Arts Department. For a complete description of the AP Studio Art portfolios, go to: <http://apcentral.collegeboard.com>.

Prerequisites: Three semesters of studio coursework beyond 8th grade, portfolio review, and permission from the instructor.

ADVANCED PLACEMENT STUDIO ART—DRAWING

This course assists students in preparing a total of 24 art pieces required for the AP Studio Art Portfolio in Drawing. The portfolio for this course is designed to address a broad interpretation of drawing issues and media. Drawing, painting, printmaking, and mixed media, as well as abstract, observational, and inventive works may qualify for this portfolio if they display significant drawing skills. Photography, videotapes, and digital works may NOT be submitted for the Drawing portfolio.

*Full Year
Grades 11-12*

ADVANCED PLACEMENT STUDIO ART—2D DESIGN

This course assists serious art students in preparing a total of 24 art pieces required for the AP Studio Art Portfolio in 2D Design. The portfolio for this course is designed to address a broad interpretation of two-dimensional issues, specifically in, but not limited to, drawing, painting, and other 2D media. A variety of techniques and approaches to representation, abstraction, and expression may be used in different media, which could include graphic design, typography, collage, fabric design, weaving, illustration, painting, printmaking, or some photography and digital imaging. However, the pieces must include a purposeful use of the elements and principles of design.

*Full Year
Grades 11-12*

ADVANCED PLACEMENT STUDIO ART— 2D DESIGN (PHOTO EMPHASIS)

This course assists serious art students in preparing a total of 24 art pieces required for the AP Studio Art Portfolio in 2D Design, with the emphasis of the students' work primarily being in photography. The portfolio for this course is designed to address a broad interpretation of two dimensional issues, specifically in, but not limited to, photography and digital imaging. A variety of media, techniques, and approaches to representation, abstraction, and expression may be used; however, the pieces must include a purposeful use of the elements and principles of design.

*Full Year
Grades 11-12*

ADVANCED PLACEMENT STUDIO ART—3D DESIGN

This course assists serious art students in preparing the 24 art pieces required for the AP Studio Art Portfolio in 3D Design. The portfolio for this course is designed to address a broad interpretation of sculptural issues in depth and space. Materials may include traditional sculpture, ceramics, architectural models, apparel, three-dimensional fiber arts, or three-dimensional metal work. A variety of media, techniques, and approaches to representation, abstraction, and expression may be used within the artworks.

*Full Year
Grades 11-12*

ART & TECHNOLOGY

See STEM+ Electives

FILM STUDIES AND OTHER MEDIA-RELATED COURSES

See Media Electives

FINE ARTS REQUIREMENTS FOR THE UNIVERSITY OF CALIFORNIA:

To be eligible for admission to the University of California, students must take one year-long course in visual or performing arts. The following Marlborough courses fulfill the UC Fine Arts requirement:

** Indicates that the courses must be taken in the fall/spring of the same school year*

*Beginning/Intermediate Ceramics

*Beginning/Intermediate Sculpture

*Beginning/Intermediate Photography

Digital Storytelling

Foundations in Drawing and Painting

Art History

AP Art History (See History and Social Sciences section for course description)

AP Studio Art—Drawing

AP Studio Art 2D Design

AP Studio Art 3D Design

*Dance I/II

*Dance III/IV

Dance Dimensions

Drama I/II

Marlborough Ensemble Theater

Concert Choir

Marlborough Chamber Choir

HISTORY AND SOCIAL SCIENCES

The study of history and human societies is intrinsically fascinating and our classes capture that excitement. The Department's courses foster rigorous thought about continuity and change over time and interactions among societies. They also teach students to think about history by analyzing geography, politics, economics, demography, social and cultural systems, as well as arts and ideas.

Our Middle School courses introduce ancient societies and modern world cultures in ways that breathe life into both old and recent history for students. Students begin honing their skills as readers, writers, and analysts, and build a base for more advanced Upper School study of both American and World history. In addition, the Department offers courses in non-historical social sciences, especially in our elective offerings.

Understanding the present and grappling with the future demands a comprehension of the past. History's tales of human aspirations, strivings, accomplishments, and failings help our students become knowledgeable, engaged, effective citizens of their country and of the increasingly global society in which they live.

U.S. HISTORY: CIVICS AND CITIZENSHIP

This year-long course focuses on the development of the U.S. political system, and topics in American history, with an emphasis on investigating and defining American democracy and citizenship. The course highlights events and movements in the history of the United States, exploring the social, political, and economic experiences of the American people, as well as our own personal roles as responsible citizens. The course employs an interdisciplinary, thematic and comparative approach combining history, the other social sciences, humanities and contemporary affairs. The class also employs a variety of teaching strategies to encourage independent learning and the development of study skills necessary for success throughout the students' academic careers.

*Full Year
Grade 7*

GLOBAL CONNECTIONS: WORLDVIEWS, STATE BUILDING, DISCOVERY AND INTERACTION

This course further develops skills learned in Grade 7 while introducing students to key themes in world history before the modern era, connecting them to relevant global issues in the world today. Students continue to build their "historian's toolkit" by analyzing primary source documents, writing comparative essays, and engaging in simulations and research projects. Students also learn about past cultures through music, literature, art and architecture.

*Full Year
Grade 8*

GLOBAL CONNECTIONS: THE MODERN WORLD AND CONTEMPORARY ISSUES

This course is the culmination of the two-year Global Connections sequence, building upon themes from the prior year to explore the background of our world's current challenges and circumstances. Students will learn about the legacy of imperialism and the impact of new technologies, ideologies, and warfare on cultures around the world. The course employs an interdisciplinary approach designed to engage students and develop their critical reasoning, writing and verbal communication skills.

Enrollment in an Honors section of this course is available and will be determined by a combination of factors, including: current History grade, teacher recommendation based on skill-level, successful completion of a placement test, and permission from the Director of Middle School.

*Full Year
Grade 9*

UNITED STATES HISTORY REQUIREMENT:

Students must satisfy the United States History requirement in Grade 10 by taking one of the two following year-long survey courses or by enrolling in the interdepartmental American Studies program.

UNITED STATES HISTORY

This course surveys American political, social, economic, and intellectual developments from pre-Columbian America to the present. Reading, writing, historical geography, and analytical skills are emphasized throughout. Key events and issues of discussion and debate include immigration and settlement, America's changing race relations, origins of American culture and government, the development of American slavery and racism, the Civil War and Reconstruction, the growth of the federal government, and the rise of the United States to global prominence. This course is intended to parallel and thematically reinforce Marlborough's course in American literature.

*Full Year
Grade 10*

ADVANCED PLACEMENT UNITED STATES HISTORY

This course provides a year-long survey of the origins and history of the United States, with primary emphasis on the period from 1763 to the present. Outside readings in primary sources and historiography supplement the basic text, and special attention is given to historical geography. For each era, intellectual and cultural developments are carefully surveyed to complement the systematic analysis of social, political, and economic issues. Students develop writing skills through analytical essay assignments, and learn how to integrate primary source material into essays using Document Based Questions. This course is intended as preparation for the Advanced Placement exam in

United States History and for the SAT II Achievement Test in United States History.

Prerequisite: Determined by a combination of factors, including: current History grade, teacher recommendation based on skill-level, successful completion of a placement test, and permission from the Director of Upper School.

*Full Year
Grade 10*

HONORS AMERICAN STUDIES

Students in this class begin and end the year grappling with basic questions about American culture: What is America? Who is an American? What is the American Dream? The course examines American society, past and present, through novels, short stories, poems, historical narratives, letters, political cartoons, film, art, photography, and music. Most aspects of the course, including tests and papers, integrate both historical and literary themes and materials. The year culminates in a portfolio of revisions of earlier writings.

Prerequisite: Determined by a combination of factors, including: current History grade, teacher recommendation based on skill-level, successful completion of a placement test, and permission from the Director of Upper School. This is a two-period course fulfilling both History and English requirements.

*Full Year
Grade 10*

MODERN HISTORY REQUIREMENT:

Students may satisfy the Modern History requirement in Grade 11 or 12 by taking one of the three following year-long survey courses:

MODERN WORLD HISTORY

This survey course in world history introduces a global perspective to the study of the modern world. Tracking the shifting balances of global power since circa 1400 CE, the course pays particular attention to how societies around the world developed and interacted in the next six centuries. The course examines the waxing and waning of various systems of power and the influence of political, economic, social, and cultural innovations within societies. Strong emphases are placed on source interpretation and analytical skills.

*Full Year
Grades 11-12*

MODERN WORLD HISTORY HONORS

This Honors History course will be a challenging analysis of opposites: 20th-century democracies and dictatorships. Spanning the globe and weaving in and out of the major events of the 1900s, this course aims at an in-depth study of two democracies and two dictators. The first semester covers post-colonial India and post-apartheid South Africa and the key features of democracies such as employment, gender, education, health, and social welfare will be analyzed and compared between each of these two case studies to

gain a deeper understanding about the challenges to modern-day democracies. The second semester underscores the breakdown of democracy with the arrival of authoritarian regimes, two of which will be analyzed: Hitler and Mao. Students will continue to develop strong historical habits of mind as they evaluate primary documents, craft arguments based on various historical sources, and read various interpretations of the same event or individual and come to their own conclusions by thinking historically. *Prerequisite: Determined by a combination of factors, including: current History grade, teacher recommendation based on skill-level, successful completion of a placement test, and permission from the Director of Upper School.*

*Full Year
Grade 11-12*

ADVANCED PLACEMENT WORLD HISTORY

This course surveys the entirety of world history, from prehistory and the first civilizations to the present era. Aiming to foster a global perspective on historical trends, the course addresses how regions, civilizations, and countries have interacted and influenced one another. Five major themes shape the curriculum: interaction between humans and the environment; developments and interactions of cultures; state-building, expansion, and conflict; creation, expansion, and interactions of economies; and the development and transformation of social structures. The course is designed as preparation for the Advanced Placement exam in World History and, with additional preparation, for the SAT II test in World History.

Prerequisite: Determined by a combination of factors, including: current History grade, teacher recommendation based on skill-level, successful completion of a placement test, and permission from the Director of Upper School.

*Full Year
Grades 11-12*

ADVANCED PLACEMENT ART HISTORY

The AP Art History course explores such topics as the nature of art, its uses, its meanings, art making, and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, constructing understanding of individual works and interconnections of art-making processes and products throughout history. *This course does not satisfy the Modern History requirement. Prerequisite: Permission from the instructor. Juniors also need permission from the Director of Upper School.*

*Full Year
Grade 12*

UPPER SCHOOL SEMESTER ELECTIVES

The Department's offering of electives aims to provide opportunities to pursue further study in history and social sciences. Electives offered in past years have included: Twentieth Century American Popular Culture, Politics, Globalization and International Economic Development, Economics, The Modern Middle East and South Asia, American Political Thought, The Sixties, History of Imperialism, Africa and the Atlantic World, Globalization in Latin America, The Supernatural in Latin American Culture, and America in the Cold War.

SINCE YOU WERE BORN: AMERICA AND THE WORLD SINCE 2001

If you're interested in studying recent events and developments over the last twenty years or so, this course is for you. If you've been frustrated with history classes that don't seem to reach those topics that you really interest you (e.g., the 9/11 attacks, the Iraq War, emergence of social media, etc.), this course is definitely for you. While the course will use the United States as its central focus, we will also examine trends and turning points in other parts of the world. Ongoing activities of the course will include working with maps and engaging with newspapers and magazines (mostly online).

*Fall Semester
Grade 12*

HONORS HISTORY SEMINAR: TERRORISM

The Terrorism Seminar will examine the historical roots and development of terrorism, as well as its contemporary significance, studying major conflicts around the world in which terrorism plays a significant role. Is terrorism a modern phenomenon? How has the practice of terrorism changed? What are the cultural, economic, political and other factors affecting the willingness to use terror? How has terrorism shaped our popular discourse? Students will read theoretical and policy essays, along with excerpts from historical monographs. Students will prepare research papers along with shorter policy briefings. The course is designed to prepare students for the types of rigorous social science analysis they will encounter in university seminars.

Prerequisites: Completion of AP World History, Modern World History Honors, or permission from the Head of the Department.

*Fall Semester
Grade 12*

HONORS HUMANITIES SEMINAR: MORAL PHILOSOPHY

What is the "good life"? What is a "good society"? Do both of them require a specific kind of government? This course will examine how much freedom individuals can and should have within the societies and organized states they inhabit. As individuals, as members of communities, as citizens of a state, we will discuss the question: "What's the right thing to do?" That's the question Michael Sandel asks in the subtitle of *Justice*, the principal text for this course. It's a question that's asked (and answered) all the time, all over the world, and not just in philosophy classrooms. It can apply to the most individual of situations ("What should I do if I meet an ailing stranger?") and the largest of social

and political questions (“Are taxes the equivalent of theft?”). In this course, we will continually grapple with the question of “the right thing to do” when considering a variety of issues and contexts. Sometimes it will be difficult—intellectually, morally, or both. We will discuss the ideas of renowned philosophers (Kant, Bentham, Mill, Rawls, Aristotle, and others). We will also examine, in-depth, the nature and consequences of America’s commitment to meritocracy, consumerism, and counter culturalism. In discussions and in their writing, students will practice applying philosophical principles to real-life scenarios.

Prerequisites: Completion of AP World History, Modern World History Honors or permission from the Head of the Department.

*Spring Semester
Grade 12*

HONORS HUMANITIES SEMINAR: COMPARATIVE RELIGIONS

Why is defining the word “religion” deceptively simple? Why do some humans believe that invisible forces from spirits to gods control their lives and events in the world? Why do others think that belief in unseen powers amounts to little more than superstition? This is *not* a conventional world religions course that simply covers basic facts about major world religions. This course aims to prepare students to responsibly participate in civic life and enhance their international and inter-religious understanding by going beyond the “dates and doctrines” approach typically associated with world religions. Students will learn about the academic study of religion as it is currently practiced. They will explore the history, sociology, psychology, and critical theory that radically alters our understanding of religion. This challenging course is for students who are eager to develop an analytical and empathetic approach to world religions and for those who have a desire to engage with a wide range of religious texts. Extensive readings and intensive class discussions are required. No prior background in or knowledge of world religion is necessary.

Prerequisites: Completion of AP World History, Modern World History Honors or permission from the Head of the Department.

*Spring Semester
Grade 12*

DECODING FOOD

This interdisciplinary course will examine the political, social, cultural and economic dimensions of food and eating in diverse locations and contexts. Drawing on literature, history, anthropology, economics, chemistry and environmental science, students will learn what their food choices and consumption practices reveal about themselves and their fellow humans around the world. This semester will focus on the language and culture of food and eating; the historical relationship between food and globalization; the psychology of food and eating; and food systems, health and sustainability. Students will take field trips and participate in hands-on activities to enrich their understanding.

*Spring Semester
Grades 11-12*

MATHEMATICS and COMPUTER SCIENCE

The curriculum for the Mathematics and Computer Science Department stresses the development of problem-solving techniques, logical reasoning, and data analysis.

The Mathematics Department prepares students for college-level mathematics, teaches students to become independent problem solvers, and strives to motivate students to appreciate the elegance and wonder of mathematics. The Department is aware of developmental issues unique to young women in math; to that end, our courses can be viewed as an ongoing open dialogue among teacher and students. The Department emphasizes the integration of technology in its courses. Calculators and computer software help the students apply what they learn to real world applications and also to visualize more challenging mathematical concepts. The Department uses many teaching strategies including lecture, partner work, collaborative groups, and projects in the pursuit of its goal of providing young women with the best possible mathematics education.

The Department requires the use of a TI-Nspire CX graphing calculator in all courses beginning with Geometry or Geometry Honors. In order to develop students' number sense, calculators are used infrequently in Pre-Algebra and Algebra I.

PRE-ALGEBRA

This course is designed to emphasize the acquisition of computational skills and mathematical concepts in preparation for Algebra I. During the first semester, students practice using order of operations, evaluating and simplifying expressions, operations with integers, and solving equations. In the second semester, students explore number theory, operations with rational numbers, percents and proportions, linear equations and inequalities, and end the year with an introduction to polynomials. Activities and projects are based on real-life applications. Students are also taught logical thinking skills in preparation for more advanced word problems.

*Full Year
Grade 7*

ALGEBRA I

This course focuses on linear and quadratic equations. The linear portion of the course emphasizes solving linear equations, including equations in one variable and systems of equations with two variables, and investigating the relationship of slope to its visual representation and equation. The quadratic portion of the course includes solving quadratic equations by factoring and the quadratic formula, manipulating polynomial terms, and solving word and graphing problems. The course includes the laws of exponents and the simplifying of radicals. Interpreting and solving word problems is emphasized throughout the year.

Prerequisite: Pre-Algebra or placement by Department Head.

Full Year

GEOMETRY

The Geometry course focuses on logic and mathematical reasoning. Students learn the effective use of theorems, postulates, and counterexamples. Within the course of learning geometric ideas there is also a natural incorporation of algebraic concepts and methods, synthesizing these ways of mathematical problem solving. The course includes an examination of geometric shapes, congruency, similarity, right triangles, right triangle trigonometry, area, and volume. The course includes an introduction to probability. A TI-Nspire CX graphing calculator is required for this course.

Prerequisite: Algebra I.

Full Year

GEOMETRY HONORS

The Geometry Honors course is highly theoretical and emphasizes proofs. The deductive reasoning process and mathematical structure are incorporated throughout the course, which covers the concepts of geometry in more depth. Mastery of basic algebraic topics is required before considering this honors course. A TI-Nspire CX graphing calculator is required for this course.

Prerequisites: Algebra I and recommendation of Algebra I teacher or Department Head.

Full Year

ALGEBRA II WITH TRIGONOMETRY

This course emphasizes the development of algebraic skills and expands upon the trigonometry introduced in geometry. Students solve linear, quadratic, exponential, logarithmic, and rational equations, learn about the complex number system, graph a wide variety of functions, solve problems involving proportions, solve right triangles, and graph trigonometric functions. Conceptually, the course emphasizes functions and their representations as algebraic equations, graphs, and tables of data. A TI-Nspire CX graphing calculator is required for this course.

Prerequisite: Geometry or Geometry Honors.

Full Year

ALGEBRA II WITH TRIGONOMETRY HONORS

This course covers the topics from Algebra II with Trigonometry in more depth. It includes additional topics, such as vectors, matrices, and determinants, and places a greater emphasis on word problems and inductive reasoning. Students should have a strong mastery of Algebra I topics before considering this fast-paced honors course. A TI-Nspire CX graphing calculator is required for this course.

Prerequisites: Geometry or Geometry Honors and permission from current teacher or Department Head.

Full Year

STATISTICS AND PROBABILITY WITH APPLICATIONS

Students are introduced to the concepts and methods of statistics, including variability, randomness, and probability. A statistical software program and the TI-Nspire CX are used to facilitate the analysis of data sets and the understanding of statistical concepts, and to carry out simulation of experiments. Many jobs or professions require that objective decisions be made based on statistical data; students are taught how to collect, analyze, and interpret data correctly. Students are also shown how to present data clearly and accurately to others. This course is a good preparation for college courses in life sciences or social sciences, as well as the probability and statistics problems that appear on the SAT and ACT. A TI-Nspire CX graphing calculator is required for this course.
Prerequisite: Algebra II with Trigonometry or Algebra II with Trigonometry Honors.

*Full Year***PRECALCULUS**

This course has two principal functions: to review the concepts from Algebra II with Trigonometry that are central to calculus, and to cover miscellaneous mathematics topics needed for calculus. The material central to calculus includes topics focusing on the concept of functions, including polynomial, trigonometric, logarithmic, and exponential. Other topics covered include sequences and series, permutations and combinations, introductory probability and statistics, vectors, matrices, the Binomial Theorem, and conic sections. Throughout the course, students are introduced to the basic facts and techniques of each of these topics, and shown how to use the graphing calculator to solve problems. A TI-Nspire CX graphing calculator is required for this course.
Prerequisite: Algebra II with Trigonometry or Algebra II with Trigonometry Honors.

*Full Year***PRECALCULUS HONORS**

This course covers the topics from Precalculus in more depth along with the additional topics of polar coordinates and parametric equations. Students are expected to stretch what they know by solving problems requiring advanced conceptual understanding. A theoretical approach is utilized to prepare students for the rigors of Advanced Placement Calculus AB. A TI-Nspire CX graphing calculator is required for this course.
Prerequisites: Algebra II with Trigonometry or Algebra II with Trigonometry Honors, and permission from current teacher or Department Head.

*Full Year***PRECALCULUS HONORS ACCELERATED**

This course is designed for highly motivated mathematics students with an exceptional grasp of the material from Algebra II with Trigonometry Honors. The topics from Precalculus Honors are covered at an accelerated pace. Minimal time is spent reviewing concepts and going over homework problems in class. The study of Calculus begins during the second semester and students who complete the course are eligible for

consideration for admission into Advanced Placement Calculus BC. A TI-Nspire CX graphing calculator is required for this course.

Prerequisites: Algebra II with Trigonometry Honors and permission from current teacher or Department Head.

Full Year

CALCULUS

This course focuses on strengthening mathematical skills and abilities, as well as developing techniques for applying limits, the derivative, and integration to a variety of problems. Each topic focuses on mastering a specific skill and applying it to new situations. This course is presented in a less theoretical approach than an Advanced Placement course and is a good introduction to college calculus. A TI-Nspire CX is required for this course.

Prerequisite: Precalculus or Precalculus Honors.

Full Year

ADVANCED PLACEMENT CALCULUS AB

Intended for students who excel in mathematics, this course emphasizes both the theoretical and practical applications of calculus. Topics covered include properties of functions, limits, derivatives, antiderivatives, definite integrals, separable differential equations, and slope fields. The course is demanding and emphasizes conceptual understanding of the different parts of Calculus. This course prepares students for the Advanced Placement exam given by the College Board. A TI-Nspire CX is required for this course.

Prerequisites: Precalculus Honors and permission from current teacher or Department Head.

Full Year

ADVANCED PLACEMENT CALCULUS BC

This course covers the topics from Advanced Placement Calculus AB along with additional topics such as differential equations, infinite series, and the calculus of polar and parametric equations. The course prepares the students for the Advanced Placement exam. A TI-Nspire CX is required for this course.

Prerequisites: Precalculus Honors Accelerated or Advanced Placement Calculus AB, and permission from current teacher or Department Head.

Full Year

ADVANCED PLACEMENT STATISTICS

The AP Statistics course is built around four main topics: exploring data, planning a study, probability as a foundation for the procedures of statistics, and inferential reasoning. These four broad conceptual themes are studied in depth to prepare students for the Advanced Placement Exam given by the College Board. Students use the computer and a TI-Nspire CX graphing calculator to examine distributions, to plan studies, to make conjectures, to study random behaviors, and to analyze and draw

conclusions from data.

Prerequisites: Algebra II with Trigonometry Honors, Precalculus Honors, or Precalculus Honors Accelerated, or a grade of “A” in semester one of Algebra II with Trigonometry or Precalculus

Note: This class can be taken concurrently with any level of Precalculus or Calculus.

Full Year

MULTIVARIABLE CALCULUS AND DIFFERENTIAL EQUATIONS

This course in advanced mathematics includes core components of multivariable calculus and differential equations. Topics covered include three-dimensional coordinate systems, vectors, partial derivatives, multiple integrals, vector calculus, analytic methods for evaluating first order differential equations, and numerical methods for solving first and higher order differential equations. Students enrolled in this course receive honors credit.

A TI-89 graphing calculator is required for this course.

Prerequisites: Advanced Placement Calculus BC and permission from current teacher or Department Head.

Full Year

HONORS MATHEMATICS SEMINAR

This course will cover advanced topics in mathematics that may change based on student and instructor’s passions and preferences. Topics for the 2014-2015 school year include linear algebra, matrix algebra, vector spaces, determinants, number theory, prime and modular arithmetic, and abstract algebra. This course cannot be taken in lieu of Multivariable Calculus but may be taken concurrently with Multivariable Calculus.

Prerequisites: Multivariable Calculus

Full Year

COMPUTER SCIENCE CURRICULUM

The field of Computer Science encompasses a broad range of skills that will be essential to the next generation of leaders: problem solving and computational thinking, translating ideas into code, design and engineering, and combining technical ability with creativity. The core ideas of computer science can be applied to many different areas: business, security, entertainment, art, engineering, and science.

The Computer Science curriculum has been designed with two general goals in mind: 1) to give students a first introduction to creating with code, and 2) to provide a solid foundation for students who would like to continue to study computer science in college and beyond. The curriculum emphasizes fundamental ideas in computer science theory, and also gives a broad view of the varied applications of computer science. In our classes we rely on open technologies, avoiding dependence on specific vendors or software ecosystems. However, we also encourage students to embrace new technology and to explore the creative potential of cutting-edge hardware and software.

COMPUTER PROGRAMMING I

This is an introductory programming course intended to give students a first exposure to writing code. The course uses the Processing programming language, which is based on Java. The course will cover standard programming concepts such as variables, functions, conditional logic, loops, and a first look at object-oriented programming. The course emphasizes writing programs to produce interactive computer graphics animations and video games. The class is primarily project-based, with minimal homework.

*Fall Semester
Grades 8 -12*

COMPUTER PROGRAMMING II

This course is a continuation of Introduction to Computer Programming I, but may also be taken by students who did not enroll in the first semester. Students continuing from the first semester will refine their coding skills and learn more advanced programming concepts and techniques. Students new to coding will first learn the basics before moving on to their own projects. The course may also include various topics in web development (HTML/CSS/Javascript), mini-computers (Raspberry Pi), and micro-controllers (Arduino), depending on the interest of the students.

*Spring Semester
Grades 8 -12*

COMPUTER SCIENCE PROJECTS

This course is for students who have taken at least two semesters of Computer Programming (MS/I/II) and would like to continue working on coding / technology projects as an alternative to AP Computer Science A. The class provides a workshop / lab environment for students to work independently on individual or group projects, to improve their coding skills, and to explore and tinker with new technologies. Students have freedom to pick their own projects, and are encouraged to try things they have never done before. They may choose any area of computer science, including but not limited to: computer graphics, video games, mini-computers / microcontrollers (e.g. Raspberry Pi, Arduino), physical / wearable computing, interactive art, simulation, data analysis, scientific applications, programming languages, web development, mobile development. Students may enroll in this class multiple times for credit.

Prerequisites: At least 2 semesters of Computer Programming (MS/I/II), or one semester with permission from current teacher.

*Full Year
Grades 9-12*

AP COMPUTER SCIENCE A

This course is for students who are interested in a deeper study of computer science and object-oriented programming with the Java programming language. Students will be given regular assignments, assessments, and a computer graphics project. Students who successfully complete AP Computer Science will have the subsequent option to enroll in Computer Science Projects with an Honors designation.

Prerequisites: At least 2 semesters of Computer Programming (MS/I/II), or one semester with permission from current teacher.

*Full Year
Grades 9-12*

COMPUTER SCIENCE PROJECTS HONORS

This course is for students who would like to continue their study of computer science beyond AP Computer Science A, and to apply the skills they learned in that course. The class provides a workshop / lab environment for students to work independently on individual or group projects, to improve their coding skills, and to explore and tinker with new technologies. Students have freedom to pick their own projects, and are encouraged to try things they have never done before. They may choose any area of computer science, including but not limited to: computer graphics, video games, virtual reality, mini-computers / microcontrollers (e.g. Raspberry Pi, Arduino), physical / wearable computing, interactive art, simulation, data analysis, scientific applications, programming languages, web development, mobile development. Students may enroll in this class multiple times for credit.

Prerequisites: AP Computer Science A

*Full Year
Grades 10-12*

PHYSICAL EDUCATION

Promoting the physical well-being of the members of the Marlborough School community is part of the mission of the School. The Physical Education Department serves as the leader and main constituent in attaining this goal. The Department recognizes the individual needs of the students and strives to help each student develop her personal capabilities to her fullest potential. Through participation in a variety of physical activities the Department helps students develop an appreciation for the importance of regular exercise and behavior patterns that will lead to a healthy lifestyle, reduced stress, illness prevention, proper nutrition, and overall fitness. In addition to teaching the particular skills and strategies for specific sports, the Department helps students develop socialization and leadership skills through activities that foster cooperation, team building, and sportsmanship. Various modes of technology are utilized to enhance the students' understanding of fitness and the sports included in our curriculum. Each student is nurtured to develop a positive self-image as a "physically-educated" individual, able to implement the knowledge and skills she learns in class into her life. This goal is explicitly expressed in our Department philosophy of "Fit for Life."

In Grades 7-8 students are exposed to a variety of activities to expand their experiences and develop into well-rounded young women. By exploring new activities in the various units, some students may choose to pursue their interests in a more competitive direction by joining an athletic team.

In Grades 9-12 students enroll in four semester electives. The focus in Grades 9-12 is on life-long skills, personal fitness, stress management, and more in-depth instruction in activities of special interest to the students. Dance electives can fulfill the Physical Education requirement.

9TH – 12TH GRADE ELECTIVES

The requirement for grades 9 - 12 will be 4 semester credits which may be fulfilled in the following ways:

1. Health in 9th grade
2. Emergency Preparedness/Water Safety in grades 9th - 12th
3. Completion of Athletes' Conditioning and the appropriate season of that sport
4. Semester electives

HEALTH

Required for all 9th graders, this course teaches students how to promote and maintain their physical, mental, and social well-being. Emphasis is placed on values clarification and decision-making to help students develop self-esteem, communication skills, and

positive outlets. Through lectures, discussions, audio-visual aids, and guest speakers, students explore the following topics: mental health, substance abuse, human sexuality, and nutrition.

One Semester

Grade 9

EMERGENCY PREPAREDNESS AND WATER SAFETY

This required course fulfills one of the Marlborough School graduation requirements. Through this course, students learn to care for others in emergency situation while learning about their personal safety in diverse emergency medical situations. The main components of the course include: First Aid, CPR, and Water Safety. Students will participate in scenarios, practical skill testing and simulated rescue drills, so that they are well equipped to handle unexpected emergency events, while developing team leadership by using strong collaborative and communication skills during class exercises.

One Semester

Grades 9-12

KICKBOXING

A combination of cardio and muscle work, this class is the best of both worlds. Alternating between 4 minutes of cardio based moves and 4 minutes of upper/lower body strength training exercises, the results will be a perfectly balanced workout session. Cardio segments include hi/lo, step, and kickboxing, while strength segments will include basic punches as well as the utilization of hand-held weights. This course is designed to help students develop an awareness and respect for an active lifestyle. It will equip them with multiple workouts and knowledge to stay fit with moderate intensity, continuous movement, and equal parts of cardio and strength.

One Semester

Grades 9-12

PERSONAL FITNESS

This course will help students develop an appreciation of the importance of the components of fitness as well as the world of strength training and overall conditioning. Throughout the semester, students will explore a wide variety of exercise modalities that they will incorporate into individualized exercise plans as well as become informed about proper exercise techniques that they can utilize throughout their lives. Activities and topics of discussion will include: an introduction to all the state-of-the-art equipment for cardio and strength training, pre and post fitness assessments, cardio conditioning through walking and jogging, circuit training, crossfit training, and proper nutrition.

Field trips to nearby facilities and guest instructors with particular expertise will be included in the class to enhance the student's experience. There will be flexibility in the curriculum to accommodate the interests and personal goals of the students enrolled in the class.

One Semester

Grades 9-12

SELF-DEFENSE FOR WOMEN

This course teaches students that walking away from danger is a success, and students are given tools to do just that. We don't want students to fight, but to be empowered to live safer lives through better awareness, boundary setting, and communication skills. Students will learn how to recognize impending danger and get away before it can escalate; how to talk their way out of an uncomfortable situation; and how to set a boundary with an individual exhibiting inappropriate behavior. If all else fails, young people must know how to fight for their lives. The course utilizes a padded assailant to add the final element of full-force adrenaline-based fighting to the curriculum. In addition to increasing their personal safety, students benefit from raised self-esteem. Practicing setting boundaries that work for them and vocalizing those boundaries to others provides a great mix of tools that can save a student's life in a serious situation, and provide her with skills that will help her be safer on a day to day basis.

*One Semester
Grades 9-12*

HATHA YOGA

Through the practice of active and restorative asana (poses), meditation, breath-work and philosophical context, class aims to nurture a sense of self-acceptance while developing a healthier body and mind. Covering all the basics of yoga and building upon them, we will explore yoga together. The goals are to achieve greater physical health, and to encourage the student to develop a set of life skills that can be taken "off the mat" and applied to all situations and circumstances of life. She may then employ the tools of yoga to manage her emotions and life more gracefully.

*One Semester
Grades 9-12*

INTRODUCTION TO SPORTS MEDICINE

This course is designed to help students develop a general awareness of health careers and specific preparation for physical therapy and sports medicine occupations. Classroom instruction includes such topics as: medical terminology; human anatomy; emergency procedures; soft tissue and bone injuries; causes, symptoms and management of injuries; nutrition; physical fitness; and career opportunities. In addition to the classroom instruction, students will rotate through on-the-job training experiences in the athletic training room. Throughout this course, the students' core academic skills and ability to deal with people will be stressed.

By the end of the course, students will demonstrate the ability to: identify anatomy; understand how the body moves; understand how exercise affects the body; explain different types of job fields within the sports medicine umbrella; recognize a minor injury and recommend proper treatment; contrast soft tissue injuries vs. bone injuries; properly fit equipment; identify and apply training room management skills; recognize and describe basic elements of therapy for the ankle/foot/lower leg, knee, thigh, hip, shoulder/upper arm, wrist/hand/elbow/forearm; understand and assist in application of

treatment for heat and cold therapy; understand when to use and assist in manual therapy; and identify what muscle groups are being exercised by various activities.

This course does not count as a Physical Education semester credit.

*One Semester
Grades 9-12*

ATHLETES' CONDITIONING

The Marlborough Physical Education and Athletics Departments understand that competitive athletics is an important and integral part of the Marlborough community. Preparation for a season of sport is critical to performance, injury prevention, confidence, and team cohesion, providing the cornerstone to understanding the values and life lessons of leadership and commitment.

Athletes' Conditioning, which meets regularly after school and at times before school, is subdivided by grade level and by sports. Twice a week, athletes across all sports will meet with grade-level peers for strength and conditioning under the supervision of the Head of the Strength and Conditioning Program. In addition, each specific sport unit will meet for at least one hour a week with their primary sport coach. In total, the minimum weekly time commitment is three (3) hours. This class is considered an expectation for the Marlborough athlete in Grades 9–12, whether she is planning on competing at the frosh/soph, junior varsity, or varsity level. Students should consult the head coach in each sport for further course details.

In order for an athlete to receive a semester credit for participation in a sport, she must enroll and meet the attendance requirements in the complimentary Athletes' Conditioning Class **AND** complete the season of that sport. Athletes who do not meet the 90% attendance standard or who do not enroll in Athletes' Conditioning for their respective sport, will not receive a semester credit for competing on team.

While participating in Athletes' Conditioning is strongly encouraged, enrollment in the class does not guarantee team selection when tryouts are conducted. A student who does not make the team may have the opportunity to stay involved with the team as a manager, and would therefore be eligible to complete the class and receive a semester credit. An additional option for students who do not make a team is to enroll in Personal Fitness for the remainder of the semester.

Students who participate in a fall sport (Cross-Country, Golf, Tennis, and Volleyball) will be completing the Athletes' Conditioning requirements during the summer. In order to allow for proper summer break, many of these programs will meet in a condensed schedule with a minimum completion of twenty hours.

Athletes who compete in consecutive seasons need only enroll and meet the attendance requirements in Athletes Conditioning for their first sport of that school year. If a student completes Athletes' Conditioning for a sport, participates in the corresponding season,

and then competes the next season in another sport, she will earn two semester credits. If a student is a three-sport athlete and she enrolls in and meets the attendance requirements in Athletes' Conditioning for the fall season of the school year and participates on three sports teams during that school year, she will earn three semester credits towards her Physical Education requirement.

Prerequisite: Permission from the Athletic Director

Grades 9-12

Athlete Conditioning Schedule

Summer (*Before the regular Fall season; not required to earn a PE credit*)

Cross Country

Golf

Tennis

Volleyball

Semester I

Basketball Conditioning

Soccer Conditioning

Water Polo

Semester II

Lacrosse

Softball

Swimming

Track & Field

* There is no Athletes' Conditioning Class for the Equestrian Team.

ATHLETIC TEAMS

INTERSCHOLASTIC ATHLETICS

Participation in CIF interscholastic athletics—including basketball, cross country, golf, lacrosse, soccer, softball, swimming & diving, tennis, track & field volleyball, and water polo—is determined by tryouts at the beginning of each season. In addition, there is an opportunity to participate in equestrian competitions sponsored by the Interscholastic Equestrian League. During the season of their sports, athletes are excused from elective Physical Education classes, except Health, Emergency Preparedness and Water Safety, Self-Defense for Women, Yoga, and Dance classes taken to fulfill the Physical Education requirement. Students who participate on the Marlborough Equestrian Team may choose one quarter during the year to be excused from their Physical Education class. In addition, students who are involved in club sports or elite-level programs, in sports not offered at Marlborough, may petition for exemption from Physical Education classes other than Health and Emergency Preparedness and Water Safety. Forms may be obtained in the Physical Education Department.

Students in Grades 7-8 may participate in a program of competitive interscholastic athletics that includes basketball, cross country, golf, lacrosse, soccer, softball, swimming, tennis, track, volleyball, and water polo. These teams are chosen after the start of the first semester. In addition, there is an opportunity to compete in equestrian competitions sponsored by the Interscholastic Equestrian League.

The following athletic teams are offered at Marlborough. Tryouts for each team are held at the beginning of the respective season.

Fall Season

Cross Country	(7-8, JV, & V)
Golf	(JV & V)
Swimming	(7-8)
Tennis	(7-8, JV, & V)
Volleyball	(7, 8, Fr-So, JV, & V)

Winter Season

Basketball	(7-8, JV, & V)
Soccer	(7-8, JV, & V)
Water Polo	(7-8, JV, & V)

Spring Season

Golf	(7-8)
Lacrosse	(V)
Softball	(7-8, V)
Swimming	(JV & V)
Track	(7-8, JV & V)

Year-Round

Equestrian	(7-12)
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SCIENCE

The goals of the Science Department at Marlborough School are as follows: to help students develop an understanding of science concepts and skills that enable them to develop a love of science and an appreciation for the role of science and technology in everyday life; to provide students with the fullest possible preparation for success in college science programs; to nurture self-confidence and a sense of worth in young women, intellectually, emotionally, and socially at all levels of scientific endeavor; to promote the concept of working in cooperative groups; and to demonstrate the interrelatedness of scientific disciplines through the use of innovative curricula and a variety of teaching methods.

The curriculum is structured so that students have an opportunity to discover, explore, manipulate, contemplate, and experience real science. Laboratory and classroom experiences foster critical-thinking and problem-solving skills that enable students to take charge of their life-long learning process. The laboratory, in particular, is a place for students to test their ability to think critically and creatively while working cooperatively with their peers. Students are also provided with opportunities to develop their skills in using computers for data collection and analysis in the laboratory, and to research and study via the Internet.

EXPLORING SCIENCE I

The first year of the integrated science sequence in the Middle School includes one semester of Biological Science followed by a semester of Earth Science. Students are challenged to answer Essential Questions through hands-on activities, exciting laboratory investigations, research, cooperative work, and collaborative study. Students are given the tools to build and apply scientific skills (including precise descriptions, graphing and measurement) which will be foundational to future work in science courses at Marlborough. Examples and research help students appreciate the relevance of scientific principles in everyday life.

*Full Year
Grade 7*

EXPLORING SCIENCE II

The second year of the science sequence in the Middle School is unified by the central theme of “Energy and Change.” Students learn the concept of energy and how it is measured, stored, transferred, and transformed. Topics explored include heat, electricity, magnetism, mechanical energy and the electromagnetic spectrum. Students investigate how changes in energy affect the world around and beneath them. Emphasis is placed on cooperative, hands-on work and analysis of real data. Daily assignments and activities develop the ability to manipulate equations, graph and analyze data, exercise critical-thinking skills, and create and perform laboratory procedures.

*Full Year
Grade 8*

BIOLOGY

This lab-based course is designed to give students an understanding of and appreciation for the diversity of living organisms. The course is designed to continue the hands-on and inquiry-based model utilized in 7th and 8th grade science, while providing students with the skills and knowledge needed to be successful in upper school science courses.

Students will be asked to apply the scientific method to experiments and to understand evolutionary trends within and among groups of living organisms. Lab work will include experience with microscopy, graphing and data analysis. Students will develop analytical and critical thinking skills necessary to become scientifically literate citizens.

*Full Year
Grade 9*

HONORS BIOLOGY

This course covers similar topics to those taught in biology, however, it is designed specifically for those students who have demonstrated high achievement and personal interest in science. In Honors Biology, a greater emphasis will be placed on higher level thinking skills including synthesis, analysis and application of students' understanding of biological concepts to new situations. Students considering the course should possess the ability to work independently, and well-developed study and time management skills.

These attributes will allow time in class for a deeper investigation of topics and a more comprehensive understanding of biological systems.

*Full Year
Grade 9*

ADVANCED PLACEMENT BIOLOGY

This course is an advanced study of organisms and covers a syllabus similar to that of Biology but with additional topics, greater depth of study, and college-level sophistication and analysis. Emphasis is placed on molecular biology and modern molecular models that describe biological systems, as well as major themes that run throughout the course and connect concepts across units. Topics include the chemistry of biological molecules, cell structure and function, metabolic pathways, Mendelian and molecular genetics, evolution through natural selection, biological diversity, ecology, plant biology, animal anatomy and physiology, and plant and animal development. The course involves extensive laboratory work that explores the concepts covered in class. Advanced Placement Biology prepares students for the SAT Subject Test in Biology and for the Advanced Placement Biology exam. There is a required summer reading assignment.

Prerequisites: Chemistry, or Chemistry Honors, and permission from the Head of the Department.

*Full Year
Grades 11-12*

CHEMISTRY

This course uses a guided-inquiry approach to examine the nature of matter and the changes that it may undergo. Students ask questions, collect evidence, and think critically about real-world scenarios that they encounter. Students will develop an understanding of how macroscopic events are the result of changes at the atomic level. They will be challenged to describe with precision their observations in qualitative and quantitative terms. Students will develop critical-thinking and problem-solving skills as well as an appreciation for chemistry in their everyday lives.

*Full Year
Grades 10-12*

CHEMISTRY HONORS

This course, for students with a strong background and interest in science and mathematics, covers the concepts and fundamentals discussed in Chemistry, but in greater depth and in more mathematical detail. Additional topics, such as redox reactions, resonance, formal charge, intermolecular forces, colligative properties, rate laws, and equilibrium are included. The laboratory program emphasizes techniques critical to chemistry, such as titration, gravimetric analysis, and spectrophotometry, and includes traditional, microscale, and technology-based activities. Students are asked to collect, analyze, and interpret scientific data. The course aims to develop students' critical thinking and problem-solving skills, to help them appreciate the importance of understanding chemistry, and to help them prepare for the SAT II test in Chemistry.

Prerequisites: Geometry and permission from the Head of the Department.

*Full Year
Grades 10-12*

ADVANCED PLACEMENT CHEMISTRY

This course is designed for students who desire further study in chemistry with college-level sophistication and analysis. Topics similar to those in Chemistry Honors are explored in greater depth, including chemical reactions, stoichiometry, the behavior of gases, atomic structure, periodicity, bonding, states of matter, equilibrium, acids and bases, thermodynamics, and kinetics. In addition, this course includes units on hybridization, molecular orbitals, solubility and complex ion equilibria and electrochemistry. The laboratory program, consisting of college-level experiments, is an integral part of the course. Great emphasis is placed on the analysis and interpretation of experimental results. Students are expected to critically assess the validity of their conclusions. This course prepares students for the Advanced Placement Chemistry exam. There is a required summer reading assignment and problem set.

This course is offered every other year and will next be offered in 2019-20.

Prerequisite: Chemistry or Chemistry Honors, and permission from the Head of the Department.

*Full Year
Grades 11-12*

PHYSICS

This course explores the basic concepts laws and principles of mechanics, waves, sound, optics, and electromagnetism from a conceptual perspective. Although basic algebra and trigonometry are often used, the goal of this course is to help students develop an appreciation for and understanding of both the theory and application of physical principles. Students utilize both hands-on and computer-based laboratory experiments to aid their understanding of these concepts. The class is designed to help students develop critical-thinking and problem-solving skills in order to apply these concepts to their everyday lives.

*Full Year
Grades 10-12*

HONORS PHYSICS

This rigorous course is intended for students who have both an interest in the physical sciences and a strong algebra background. A wide range of topics will be covered including mechanics, waves, thermodynamics, circuits, electricity and magnetism, and modern physics. Students will be exposed to several of these topics in greater depth. Students will learn how to apply their knowledge and skills to new situations. This class prepares students for the SAT II test in Physics.

Prerequisite: Permission from the Head of the Department.

*Full Year
Grades 10-12*

ADVANCED PLACEMENT PHYSICS C

This calculus-based physics course treats the topics of physics in depth and at the college level. The first semester is dedicated to classical mechanics while the second semester focuses on electricity and magnetism. Topics are explored primarily through problem solving, where students are exposed to a variety of complex scenarios. Laboratory experiments are incorporated into the course to provide students with the opportunity to collect and analyze data, and see how physics is present in the world around them. This course is designed to prepare students to take the two Advanced Placement Physics C Exams: Part I: Mechanics and Part II: Electricity and Magnetism.

Prerequisites: Physics or Honors Physics, concurrent enrollment in Calculus AB or higher, permission from the Head of the Department

*Full Year
Grades 10-12*

HUMAN ANATOMY AND PHYSIOLOGY

In this laboratory science course, students study the structure and function of the human body. Following introductory material and a unit on histology, students study the body in depth, one system at a time. Systems studied will include, but are not limited to, the muscular system, the skeletal system, the digestive system, and the circulatory system. A focus is placed on wellness and what happens in a variety of common disease states. Lab work will include dissection of a fetal pig.

Prerequisites: Biology or Honors Biology, and Chemistry or Honors Chemistry

*Full Year
Grades 11-12*

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

This course presents an advanced, interdisciplinary curriculum that investigates the interplay of biology, chemistry, and the social sciences as they relate to the natural world. Themes explored include the history of environmentalism in the U. S., renewable and non-renewable energy sources, poverty and human population growth, global resources, the impact of humans on natural systems, and the cultural and social context in which all environmental problems exist. Extensive laboratory work involves collection and analysis of data by statistical, chemical, and observational means. Laboratory work is completed on topics such as human population demographics, water, soil, air quality, and toxicology. This course prepares students to take the AP Environmental Science exam. There is a required summer assignment.

Prerequisites: Biology or Honors Biology, Chemistry or Chemistry Honors, and permission from the Head of the Department.

*Full Year
Grades 11-12*

ELECTIVES

Electives in Science may be offered yearly, rotate from year to year, or may not be offered in subsequent school years. When possible, this is noted in the course description.

ASTRONOMY

This course provides an introduction to the study of the universe and theories of its origin and development. Topics include the history of astronomy, lunar and planetary astronomy, stellar and intergalactic astronomy, simple relativity, space exploration, and the possibility of extraterrestrial life. The approach of this course is predominantly conceptual; however, some facility with algebra and geometry is necessary. Students have the opportunity to observe the sun and moon, planets, stars, and nebulas using the School's telescopes. After 2018 - 2019, this course will next be offered in 2020 - 2021.

Prerequisite: Algebra or permission of instructor

*One Semester
Grades 10-12*

ENGINEER YOUR WORLD: Engineering Design & Analysis

This course engages students in authentic engineering practices and inspires them to embrace an engineer's habits of mind. Through collaborative projects, students go through the engineering design process to develop creative solutions to engineering problems and make data-driven decisions. Throughout the year, students will learn how to design based on customer needs, collect and analyze data, reverse engineer products, and use basic programming. The year will conclude with a systems engineering project, in which students will apply the knowledge and skills gained throughout the course of the year. The course allows students to register for dual enrollment with the University of Texas at Austin.

*Full Year
Grades 10-12*

ROBOTICS

Students in this class will compete as a team in the FIRST Tech Challenge national robotics competition. Students will follow an engineering process to design, build, program and operate a robot to compete head-to-head with other teams in Los Angeles and beyond. This project-based class provides an opportunity for learning and applying a variety of skills, including 3D computer-aided design, 3D printing, cutting and drilling of metal, wiring electronics, and programming. The class will work as a team to document their process in an engineering notebook. This collaborative course provides a number of leadership opportunities as students pursue sponsorships, market their team's "brand," and participate in community outreach. As a team, students will showcase their work and compete in five weekend tournaments between December and February.

*Full Year
Grades 7-12*

BIOLOGICAL PSYCHOLOGY

This class will be a survey in the biological issues related to the science of psychology. Students will gain an in-depth perspective on the issues in psychological science related to biology. We will address questions of how the human brain and nervous system produce our range of behaviors—sensation, emotions, sleep and dreams, reproductive behavior, language and memory—and explore these brain-behavior relationships with an emphasis on clinical examples through a lifespan lens. Clinical examples include depression, schizophrenia, eating disorders, sleep disorders, aggression, post-traumatic stress disorder, visual agnosia, dyslexia and amnesias. By using case studies, real research, and in class experimentation to guide our discussions, students will be able to gain a greater understanding about the biological aspects of the human mind and brain. *This class may be taken as the first in the Psychology sequence, or alone.*

*Fall Semester
Grades 10-12*

SOCIAL PSYCHOLOGY

This class will be a survey in the social issues related to the science of psychology. Students will gain an in-depth perspective on the social aspects of psychology. We will address questions of how the human mind is shaped on a micro and macro level by social constructs. We will examine a wide range of social ideas—personality, sexual orientation, gender identification, social status, race/ethnicity, emotional state, and relationship status—and explore these social-behavior relationships through a lifespan lens. By using case studies, real research, and in class experimentation to guide our discussions, students will be able to gain a greater understanding about the social aspects of the human mind and brain. *This class may be taken as the second in the Psychology sequence, or alone.*

*Spring Semester
Grades 10-12*

SCIENCE OF FOOD

In this course students will learn about the science hidden in our food. Students will develop hands-on experience with edible labs and project-based assessment. Topics of study include the science of taste, the microbiology of food safety and the connections between cooking techniques and physics, biology, chemistry and engineering. The science behind haute cuisine techniques such as sous vide and molecular gastronomy will also be explored. This course will not be offered in 2019 - 2020.

*One Semester
Grades 10-12*

INTRODUCTION TO SPORTS MEDICINE

See Department of Physical Education for course description.

HONORS RESEARCH IN SCIENCE

See Additional Programs for course description.

THE SCIENCE OF ART

See Additional Programs: STEM+ for course description.

WORLD LANGUAGES

In the modern languages, French, Mandarin Chinese, and Spanish, the sequence of courses develops the four language skills of listening, speaking, reading, and writing, and includes appropriate cultural, historical, and literary materials at all levels. The goal of the Department is to enable students to attain increasingly higher levels of proficiency as measured by the national standards set forth by the American Council of Teachers of Foreign Languages ([ACTFL](#)). The Department uses the [AAPPL \(ACTFL Assessment of Progress Toward Proficiency in Languages\) assessment](#) in the spring to determine whether a student has attained the proficiency necessary to advance to the next level. In addition, the Department seeks to instill an appreciation of Chinese, Francophone, and Hispanic cultures. *To better facilitate these goals, students should expect to use little or no English in class.* In the Latin courses, speaking and listening are less emphasized, and special attention is given to the structure of the language, as well as cultural, historical, and literary aspects of Latin, and its profound influence on the English language. Students are encouraged to go beyond Level III in World Languages either by taking more advanced courses in their current language, or by starting another language.

FRENCH

FRENCH IA

This course introduces students to the skills (reading, writing, speaking, and listening) required to build language proficiency. Students learn to discuss likes and dislikes, describe everyday objects, places, and people, and use the past, present, and future. Ninety percent of the class time is spent in the target language, with clarification in English only when necessary. Basic cultural concepts are integral to each unit (family, school, the francophone world). Students who successfully complete this course should be able to demonstrate Novice Mid (N-2) proficiency in at least 3 of the 4 standards on the AAPPL exam.

Full Year

FRENCH IB

Students further develop basic proficiency in reading, writing, listening, and speaking. Ninety percent of the course time is spent in the target language. Students can control a wider vocabulary; narration and description are core skills and are assessed through short writing and reading comprehension work, as well as class discussions. Cultural topics (housing, family life, health and well-being, French history) are presented in greater depth using authentic materials rather than a textbook. Students who successfully complete this course should demonstrate Novice Mid (N-3) proficiency in at least 3 of the 4 standards on the AAPPL exam. *Prerequisite: French IA and score of Novice Mid (N-2) or higher in 3 of 4 standards on the AAPPL exam*

Full Year

FRENCH II

This course continues the development of the four language skills. At this level, students expand their ability to express themselves and to understand spoken and written communication. Students learn to use more complex patterns of speech and writing to be able to give advice and narrate with greater confidence in the past, present, and future, and to read longer texts. Units repeat some of the themes from French 1A and 1B in more depth so students can apply new structures to familiar topics. This course is conducted almost entirely in the target language. Written assignments encourage more freedom of expression. Students gain further acquaintance with the culture and history of the francophone world. Students who successfully complete this course should demonstrate Intermediate Low (I-1) proficiency in at least 3 of the 4 standards on the AAPPL exam. Students who demonstrate Intermediate Mid (I-2) proficiency in 3 of the 4 standards on the AAPPL exam may enroll in French III Honors.

Prerequisite: French IB, Novice High (N-3) proficiency in 3 of 4 standards on the AAPPL exam

Full Year

FRENCH III

This course consolidates previously-learned materials and adds further depth to students' control of the four skills. More complex grammatical structures are introduced and composition work is expanded in scope and variety. Readings include literary works as well as other types of materials. The course is conducted almost entirely in the target language; regular participation is required. Further acquaintance with the history and culture of French speaking peoples is developed through readings, films, and projects. Students who successfully complete this course should demonstrate Intermediate Mid (I-2) proficiency in at least 2 of the 4 ACTFL standards.

Prerequisite: French II. Score of Intermediate Low (I-1) proficiency in 3 of 4 standards on the AAPPL exam

Full Year

FRENCH III HONORS: Preparing for AP French

This course is preparation for Advanced Placement French Language, and stresses proficiency in the four language skills oriented around the [AP French Language and Culture themes](#). Materials are presented in unabridged and unedited forms: news reports and videos, essays, and literature. Listening and speaking skills are central to the course in the form of informational and personal presentations (without notes). In the second semester, students practice with timed essays and simulated, recorded conversations. The course is conducted almost entirely in the target language; regular participation is required. Giving advice, making hypothesis, and narrating with confidence between past, present, and future are the three core techniques students work on. There are 2-page essays assigned at least once per month. Students who successfully complete this course should demonstrate Intermediate High proficiency (I-4) in at least 3 of the 4 standards on the AAPPL exam.

Prerequisites: French 2 and Intermediate-Mid (I-2) proficiency in 3 of the 4 standards on the AAPPL exam

Full Year

FRENCH IV: INTENSIVE GRAMMAR AND COMPOSITION

This course is designed for students who have completed their French requirement and wish to continue their study of the language, but who are not yet prepared for Advanced Placement or other higher level content courses. French Grammar and Composition is an intensive review of those grammatical concepts which are typically the most difficult for intermediate-level students, such as the *passé composé* / *imparfait* distinction, the subjunctive and conditional moods, and pronoun usage. Students will revisit these and other challenging elements of the language, practicing them through a variety of exercises designed to improve mastery of narration, description, and giving advice. While the course will engage all four linguistic domains--listening, speaking, reading, writing--students should expect regular one to two page composition assignments as the principal means of practicing and assessing their improvement. Students who successfully complete this course should demonstrate Intermediate High (I-4) proficiency in at least 3 of the 4 ACTFL standards.

Prerequisite: French III or III Honors and Intermediate Mid (I-2) proficiency in 2 of 4 standards on the AAPPL exam

Fall Semester

FRENCH IV: AREA STUDIES

This course is designed for students with intermediate-high to advanced proficiency in French who wish to expand their competence in the language and deepen their knowledge of French culture by focusing on one part of the French-speaking world (Québec, the Caribbean, Africa, Europe). For 2018-2019, the focus will be on France. Students will understand why and how France became associated with specific cultural attributes and attitudes, its pursuit of colonial power, and examine the repercussions of this identity in contemporary France. Students will use authentic texts, architecture, painting, literature, film, and food to analyze these aspects of French identity. The course will be conducted in French. *Prerequisite: AP French, French Grammar and Composition, or an overall score of Intermediate High (I-4) in 3 of the 4 areas or better on the AAPPL.*

Spring Semester

AP FRENCH LANGUAGE AND CULTURE

This course is intended as preparation for the Advanced Placement exam in French Language and Culture. It emphasizes the use of language for active communication in formal and informal situations within a variety of contexts that explore six different cultural themes. The course is conducted entirely in the target language; regular participation is required. These themes are designed to involve students in real-life situations through authentic materials of all kinds (including newspaper articles, literature, audios, and films) and to encourage them to make connections to other disciplines and compare aspects of the target culture with their own. Students who successfully complete this course should demonstrate Advanced Low (I-5) proficiency in at least 3 of the 4 ACTFL standards.

Prerequisites: Score of Intermediate High (I-4) or better on 3 out of the 4 standards on the AAPPL exam

Full Year

HONORS FRENCH LITERATURE AND CINEMA

This course emphasizes oral and written expression based on selected works of French fiction and film. Critical thinking in French, rather than grammar, is the goal, although grammar refinements will be made as necessary through essay correction and in-class conversation practice. Students will learn about important historical, literary, and cultural movements as they study works of poetry, prose, and film organized around themes (self and society; resistance; the other) and historical periods (Revolution, Occupation/Resistance, Decolonization).

Prerequisites: AP French Language, French IV, or Intermediate High (I-4) proficiency in at least 3 of the 4 standards on the AAPPL exam.

One Semester

LATIN

LATIN IA

This course comprises the first half of Level I materials and is designed for beginning students. Students will learn to pronounce, read, form, and translate simple sentences and paragraphs with known vocabulary through an understanding of noun declensions, verb tenses, and sentence structure. They will gain an understanding of aspects of Ancient Rome such as religion, geography, and daily life. They will be able to figure out the meanings of some English words and phrases with roots in Latin. Students who gain aptitude quickly may be moved up to Latin 1B at the discretion of the instructor.

Full year

LATIN IB

This course completes Level I materials. Students will be able to read, form, and translate more complex sentences. They will be able to conjugate and appropriately use verbs in all six tenses, active and passive. They will be able to recognize more applications for the cases of nouns in the first three conjugations and translate them correctly. They will learn about the geography of the city of Rome and its buildings, and be able to discuss some important figures and events in Roman history, and will understand major connections between Latin and English.

Prerequisites: Latin IA

Full Year

LATIN II

This course covers more complex Latin grammar and forms, including various types of pronouns, deponents, and infinitives. Students will be able to read and comprehend short adapted passages of Latin with assistance, and will sometimes be able to produce original Latin sentences with correct noun and verb forms. They will learn more about Roman culture, including notable Roman women and the Roman calendar. *Prerequisite: Latin IB*

Full Year

LATIN III HONORS

This course focuses on Latin literature as well as grammar, vocabulary, and the use of rhetorical figures of speech. Students will learn and comprehend the use of participles and the subjunctive, and will be able to produce short original paragraphs in Latin with reasonably correct grammar. In the second half of the course, they will begin to read, analyze, interpret, and study literary technique, while gaining background in the social and political conditions of the time. They will become familiar with several different Roman authors and their literary styles.

Prerequisite: Latin II

Full year

LATIN IV HONORS: READING-INTENSIVE SURVEY OF LATIN POETRY

This course trains students to master the fundamental skills for reading and interpreting unadapted Latin poetry through the lens of ancient Roman culture, with the ultimate goal of preparing students for the reading-intensive curricula of AP Latin and/or Honors Latin Literature. Through daily reading assignments, students will gain mastery in the following core proficiencies: translating a Latin text into idiomatic English, identifying the essential grammatical properties of a given word, and explaining the syntactic function of a word or phrase in a sentence. As a "survey" course in Latin literature, readings will be drawn from a wide variety of authors, including (but not limited to) Ovid, Tibullus, Sulpicia, Catullus, Vergil, and Horace.

Prerequisite: Latin III or Latin III Honors.

Full Year

ADVANCED PLACEMENT LATIN

This course, which is designed to prepare students for the AP Latin exam, focuses on acquiring the advanced skills necessary for reading and interpreting unadapted Latin literature at a college level. The course readings, following the AP Latin reading list, are divided into two parts: one semester each will be devoted to Vergil's *Aeneid* and Caesar's *Commentaries on the Gallic Wars*. Through daily reading assignments and class discussions, students will analyze these works and their cultural, historical, and political salience in the context of Augustan Rome.

Prerequisites: Latin IV Honors, and permission from the instructor.

Full Year

HONORS LATIN LITERATURE

This course, like AP Latin, trains students to master the advanced skills necessary for reading and interpreting Latin literature at a college level. It is designed as an alternative to AP Latin, or as a way for students who have already completed AP Latin to continue their Latin education. Readings will be selected from a variety of Roman authors and will be tailored to student interest.

Prerequisites: AP Latin or Latin IV Honors, and permission from the instructor.

Full Year

MANDARIN CHINESE

MANDARIN CHINESE IA

This course comprises the first half of the Level I sequence and is the first step in the process of acquiring language proficiency. The class begins with the Chinese pronunciation system (Pinyin) and Chinese character writing (including practicing calligraphy with brushes and ink). Simple vocabulary, grammatical structures, reading, and writing skills are introduced. Students will learn how to use a Chinese dictionary and Chinese computer software as learning tools. The focus of this beginning course is on listening and speaking. Basic cultural concepts are presented. Students who successfully complete this course should attain Novice Mid (N-2) proficiency in at least 3 of the 4 AAPPL standards.

Full Year

MANDARIN CHINESE IB

Students further develop basic proficiency in reading, writing, speaking, and listening. Everyday grammar and vocabulary expressions are emphasized. Students begin to write short paragraphs and watch film clips in the target language. Students continue to develop their ability to use print and software reference materials. Cultural concepts are presented in greater depth. Students who successfully complete this course should attain Novice-Mid (N-3) proficiency in at least 3 of the 4 AAPPL standards.

Prerequisite: Chinese IA and Novice-Mid (N-2) scores or better in 3 of the 4 AAPPL proficiency standards.

Full Year

MANDARIN CHINESE II

This course continues the development of the four language skills. At this level, students learn more complex grammar patterns and expand their vocabulary. They read longer texts, write longer paragraphs, watch more complex film clips, and receive more intensive training in expressing ideas through oral presentations. They will also become further acquainted with Chinese culture and history. Students who successfully complete this course should earn scores of Novice High (N-4) proficiency in at least 3 of the 4 AAPPL exam standards.

Prerequisite: Chinese IB and a Novice High (N-4) proficiency or better in 3 of the 4 proficiency standards. Students considering the Honors/AP track should have scores of N-4 or better in all 4 of the standards.

Full Year

MANDARIN CHINESE III

This course consolidates previously-learned materials and adds further depth to students' mastery of the four basic language skills. Vocabulary and grammatical structures are reviewed, and practice is given in using these structures. Chinese idioms are introduced. Readings include literary works as well as other types of materials. Further acquaintance

with the history and culture of Chinese-speaking people is developed through readings, interviews, and films. Students who successfully complete this course should demonstrate Intermediate-Low (I-1) proficiency in at least 3 of the 4 AAPPL standards.

Prerequisite: Chinese II and a Novice High (N-4) or higher in at least 3 of the 4 AAPPL standards.

Full Year

MANDARIN CHINESE III HONORS

The class is conducted principally in Chinese. More complex grammatical structures and difficult vocabulary (including Chinese idioms) are introduced. Composition practice is expanded in scope and variety. Readings include various types of Chinese materials that preview material covered in IV Honors and AP, ranging from newspaper articles to contemporary literature. Comparisons between U.S. and Chinese history and culture are developed through readings, films, and projects. Students who successfully complete this course should attain Intermediate-Low (I-2) score or higher in 3 of the 4 parts of the AAPPL exam. *Prerequisite: Chinese II and a Novice-High (N-4) score or higher in all four parts of the AAPPL exam.*

Full Year

MANDARIN CHINESE IV HONORS: AP Preparation

This course prepares students to enroll in AP Chinese. It develops students' overall language proficiency through extensive training in reading, writing, speaking, and listening with authentic materials. Grammar review and vocabulary expansion are emphasized. Students give oral presentations in the target language on a regular basis. With a variety of print and visual media, students will be exposed to various aspects of Chinese history, culture and society. Different literary genres will also be introduced. Students who successfully complete this course should attain Intermediate-Mid (I-3) proficiency in at least 3 of the 4 parts of the AAPPL exam.

Prerequisite: Chinese III Honors and a score of Intermediate-Mid (I-2) or higher in 3 of the 4 parts of the AAPPL exam.

Full Year

AP CHINESE LANGUAGE AND CULTURE

This course is intended to prepare students for the [Advanced Placement](#) exam in Chinese Language and Culture by helping them master the requisite linguistic skills: narrating a story, replying to an email, carrying on a simulated conversation, making a cultural comparison, as well as answering listening and reading multiple-choice questions. Students will accomplish this goal through the use of authentic Chinese media—such as contemporary literature, audio, and film—and regular language practice. In addition, students will develop their vocabulary and written skills, giving them the tools and confidence needed to apply Chinese language in the real world. Students who successfully complete this course should attain Intermediate-Mid (I-4) proficiency in at least 3 of the 4 ACTFL standards. *Prerequisites: Mandarin Chinese III Honors, Mandarin Chinese IV Honors, Intermediate-Low (I-3) score or better in at least 3 of the 4 sections of the AAPPL exam*

Full Year

SPANISH

SPANISH IA

This course comprises the first half of the Level I sequence and is the first step in the process of acquiring language proficiency. Vocabulary, grammatical structures, and reading and writing skills are introduced in order to facilitate correct expression. Listening comprehension and oral participation are strongly emphasized. Basic cultural concepts are presented. Students who successfully complete this course should demonstrate Novice Mid (N-2) proficiency in at least 3 of the 4 standards on the AAPPL exam.

Full Year

SPANISH IB

This course completes the Level I sequence. Students further develop basic proficiency in reading, writing, speaking, and listening. Control of a wider active vocabulary and basic grammatical structure are emphasized. Cultural topics are presented in more depth. Students who successfully complete this course should demonstrate Novice Mid (N-3) proficiency in at least 3 of the 4 standards on the AAPPL exam.

Prerequisite: Spanish IA and N-2 proficiency in at least 3 of the 4 standards on the AAPPL exam

Full Year

SPANISH II

This course continues the development of the four language skills. At this level, students expand their ability to express themselves and to understand spoken and written communication. Special emphasis is placed on acquiring the ability to use more complex patterns of speech and writing. Short passages of literary quality are presented, and written assignments encourage more freedom of expression. Emphasis is also given to adding depth and range to vocabulary. Further acquaintance with the culture and history of Spanish-speaking peoples is included. Students who successfully complete this course should demonstrate Intermediate Low (I-1) proficiency in at least 3 of the 4 ACTFL standards. Students who want to enroll in Spanish III Honors must attain I-2 proficiency in 3 of the 4 ACTFL standards.

Prerequisite: Spanish IB and N-3 proficiency in 3 of the 4 standards on the AAPPL exam

Full Year

SPANISH III

This course consolidates previously-learned materials and adds further depth to students' control of the four core linguistic skills. Grammatical structures are reviewed, and practice is given in using these structures. Readings include literary works as well as other types of texts. Further acquaintance with the history and culture of Spanish-speaking peoples is developed through readings and films. Students who successfully complete this course should attain Intermediate Mid (I-2) proficiency in at least 3 of the 4 standards on the AAPPL exam.

Prerequisite: Spanish II and Intermediate Low (I-1) proficiency in 2 of 4 ACTFL standards

Full Year

SPANISH III HONORS

This course for the capable and motivated student stresses proficiency in the four language skills. Reading materials in unabridged and unedited forms include newspaper articles and literary works. Grammar is studied intensively throughout the year, and compositions are assigned frequently. This course is recommended as preparation for the Advanced Placement Spanish Language course. Students who successfully complete this course should demonstrate Intermediate High (I-4) proficiency in at least 3 of the 4 standards on the AAPPL exam.

Prerequisites: Spanish II and Intermediate-Mid (I-2) proficiency in 3 of the 4 parts of the AAPPL exam

Full Year

SPANISH IV: INTENSIVE GRAMMAR AND COMPOSITION

This course is designed for students who have completed their Spanish requirement and wish to continue their study of the language, but who are not yet prepared for Advanced Placement or other higher level content courses. Spanish Grammar and Composition is an intensive review of those grammatical concepts which are typically the most difficult for intermediate-level students, such as the preterite/imperfect past distinction, the subjunctive mood, and pronoun usage. Students will revisit these and other challenging elements of the language, practicing them through a variety of exercises designed to improve grammatical mastery. While the course will engage all four linguistic domains--listening, speaking, reading, writing--students should expect regular short to intermediate length composition assignments as the principal means of practicing and assessing their improvement. Students who successfully complete this course should demonstrate Intermediate High (I-4) proficiency in at least 3 of the 4 ACTFL standards.

Prerequisite: Spanish III, Spanish III Honors and Intermediate Mid (I-2) proficiency in two of the four parts of the AAPPL exam

Fall Semester

SPANISH IV: SPANISH AREA STUDIES

This course is designed for students with intermediate-high to advanced proficiency in Spanish who wish to expand their competence in the language and deepen their knowledge of Hispanic culture at its point of origin: Spain. A European country with profound non-European influences, Spain has influenced the way people around the world think and live like few other countries on Earth. It was the first truly global superpower, literally encircling the planet with its culture and its language--one that is spoken today by more than half a billion people. In this course, students will begin by exploring Spain's rich cultural and political history, coming to understand the forces that shaped the country. Turning to modern Spain, the students will examine the country's long national struggle with an authoritarian past, focusing on the Spanish Civil War, the Franco dictatorship, and the ultimate emergence of a free, modern, and prosperous constitutional state. The final part of the course will look at Spain today: from its status as one of the world's largest economies and most socially progressive societies, to the political, social, financial, and environmental challenges it faces in the future. Along the

way, students will also have numerous opportunities to explore Spain's rich culture, including its architecture, painting, literature, film, and food. The course will be conducted in Spanish.

Prerequisite: AP Spanish, Spanish Grammar and Composition, or an overall score of Intermediate High (I-4) in 3 of the 4 areas or better on the AAPPL.

Spring Semester

ADVANCED PLACEMENT SPANISH LANGUAGE

This course is intended as preparation for the Advanced Placement exam in Spanish Language. It emphasizes the use of language for active communication in formal and conversational situations, development of vocabulary, study of contemporary literature, and accurate written composition. Students who successfully complete this course should demonstrate Advanced Low (I-5) proficiency in at least 3 of the 4 areas on the AAPPL.

Prerequisites: Spanish III Honors, Spanish IV, and a score of I-4 or higher in 3 of the 4 areas on the AAPPL

Full Year

HONORS HISPANIC LITERATURE AND FILM

This course emphasizes oral and written expression based on selected works of Hispanic fiction and film. Critical thinking in Spanish, rather than grammar, is the goal, although grammar refinements will be made as necessary through essay correction and in-class conversation practice. Students will learn about important historical, literary, and cultural movements in the Spanish-speaking world as they study works of poetry, prose, and film.

Prerequisites: AP Spanish or Spanish IV, and a score of I-4 or higher in 3 of the 4 areas on the AAPPL exam

One Semester

ADDITIONAL COURSES

CAPSTONE PROGRAM

Capstone Projects allow highly-motivated seniors to pursue a passion outside of the School's core curriculum. In these year-long projects, typically taken *in lieu of* a fifth academic course, students choose a field of interest largely unrelated to their scholastic work, deepen their knowledge of that field through a combination of research and hands-on experience, identify a specific problem or question within the field, propose a solution, and attempt to implement that solution in the form of a project or practicum. Students are encouraged to drop one core academic class in the Senior year to accommodate the considerable time commitment. Students may pursue a Capstone Project or Honors Research, but not both. Students seeking further information should contact the Dean of Studies.

CAPSTONE PROGRAM IN SOCIAL JUSTICE

Social justice is a concept of fair and just relations between the individual and society. This is measured by the explicit and tacit terms for the distribution of wealth, opportunities for personal activity and social privileges. The Social Justice and Community Partnerships Department provides 12th grade students with a service-learning course that integrates research and participatory action research. This course is for students interested in social justice and hands-on action research on a variety of disparities/inequities and the challenges that exist in our immediate communities. Students will gain insight into policy and social justice by working directly with a local, nonprofit organization. This year-long honors program requires a demonstrated commitment to volunteer work prior to commencing the course in the Fall with a nonprofit organization aligned with the area of focus they plan to research. During the first semester students will complement their volunteer work identifying a specific need related to the organization's mission. Students will formulate an action plan to meet this need based on their volunteer work and their research by the end of Semester One. Semester Two is dedicated to the implementation and execution of the action plan. The course ends with a reflection of successes, failures and findings.

Prerequisites: A demonstrated interest in an area outside of the core curriculum, support of a Marlborough adult mentor, and permission of the Dean of Social Justice and Dean of Studies. Extensive work during the summer before the senior year is expected.

*Full Year
Grade 12*

HONORS RESEARCH PROGRAM

Research advances human knowledge and deepens understanding. Asking questions and creating hypotheses are essential to any research project in any discipline. Research also entails designing methods and models to evaluate the validity of the researcher's hypothesis, as well as conducting searches and reviews of the scholarly literature to situate the researcher's ideas within the broader body of existing knowledge. There are two types of academic research. Pure or basic research aims to increase knowledge without a direct and intentional application, while applied research extends knowledge for specific practical purposes. The following classes are offered for students interested in learning more about the research process and pursuing an independent research project:

INTRODUCTION TO RESEARCH

This course is a 10-week introduction to the nature of academic research in the sciences, social sciences, and humanities for the student interested in enrolling in one of the research courses offered at Marlborough. The class explores how to start a research

project, and the similarities and differences between research in the sciences, social sciences and humanities. The course also includes introductory work in research methodologies, reading scholarly articles, writing and presenting research, and ethical considerations.

*Spring Semester
Grades 10-12*

HONORS RESEARCH IN HUMANITIES

This Program offers students the opportunity to do extensive, independent, and sustained research and writing on a humanities-related topic that lies beyond the scope of our traditional curriculum. Academic fields of interest might include: literature, linguistics, philosophy, history, religion, or art, to name a few. Students meet periodically with an off-campus academic mentor but spend the majority of time independently reading and writing, exploring the nuances of a thesis question. Students are also expected to meet weekly with the Marlborough course instructor to discuss their progress. The course requires that each student devote a minimum of one hundred hours in the summer preceding enrollment and approximately eight to ten hours per week during the school year to work on her independent project. By the end of the first semester, the student will produce a sizable body of primary and secondary source research that is organized into a comprehensive thesis and literature review. The second semester will be devoted to primary source research and analysis in support of the student's thesis, culminating in a final research paper between 30 and 50 pages in length. Student will also prepare a poster presentation summarizing their work.

Prerequisites: Satisfactory completion of "Introduction to Research" in the year prior to applying for Honors Research, and permission from the Director of Upper School and the Dean of Student Research.

*Full Year
Grades 11-12*

HONORS RESEARCH IN SOCIAL SCIENCES

This Program is an opportunity for students to pursue independent work in any social sciences-related discipline in collaboration with a mentor in the greater Los Angeles area and a Marlborough faculty member. Academic fields include, but are not limited to, political science, economics, and media studies. The research project often includes an experiential component and can cross disciplines. Students will demonstrate the ability to work independently and to share their findings and experiences in appropriate written and oral formats. The course requires that each student devote a minimum of one hundred hours in the summer preceding enrollment and approximately eight to ten hours per week during the school year to work on her independent project. By the end of the first semester, students will produce a sizable body of primary and secondary source research that is organized into a comprehensive thesis and literature review. They will also outline a preliminary research plan. The remainder of the school year will be dedicated to the design and execution of a research method to collect and analyze data relevant to the

student’s research question. Students will prepare a final research paper between 30 and 50 pages in length as well as a poster presentation summarizing their findings.

Prerequisites: Satisfactory completion of “Introduction to Research” in the year prior to applying for Honors Research, and permission from the Director of Upper School and the Dean of Student Research.

*Full Year
Grades 11-12*

HONORS RESEARCH IN SCIENCE

This Program offers students an opportunity to design and execute an original research project in a STEM subject for which they have an inherent passion. Each student works in collaboration with a Marlborough faculty mentor and a professional research scientist in the greater Los Angeles community. Students conduct their research projects in an academic laboratory setting with guidance and supervision from the laboratory staff. Students are required to work at least 100 hours during the summer preceding their enrollment in the course and approximately eight to ten hours per week during the school year. This program may require travel to an off-site location during the Marlborough school day. Students need to demonstrate the ability to work independently. At the end of the year students will prepare a final research paper between 25 and 35 pages in length as well as a poster presentation summarizing their findings. Students also may have the opportunity to submit their research project to various science fairs and competitions.

Prerequisites: At least two years of science in the Upper School, satisfactory completion of “Introduction to Research” in the year prior to applying for Honors Research and permission from the Director of Upper School and the Honors Research in Science Program Head.

*Full Year
Grades 11-12*

MEDIA ELECTIVES

Student Publications offer a variety of training in real-world, hands-on media skills in several disciplines. Students interested in journalism and producing a print publication should take Newspaper Production 1, 2 or Yearbook production. Students interested in more visual aspects of media should take VTV for video and podcast production or Special Studies in Visual Media for photography and graphics creation. Students interested in exploring possibilities are encouraged to take Newspaper Production 1 which provides a variety of training in all areas of journalism—print, online, and broadcast.

FILM STUDIES

The goals of the course are for students to become versed in relevant critical theories of Film, Visual Culture, and Media Studies; learn an overview of the history of Cinema both American and Foreign; understand the workings of narrative in the context of film, be

able to write a critical analysis of a film based on several methodologies (feminist, Marxist, auteur theory); become familiar with the technologies involved in the production process from pre-production through marketing as well as the various professional roles in the motion picture industry including that of a film critic. Students will research and write their own film reviews to publish on a class blog.

*One Semester
Grades 11-12*

NEWSPAPER PRODUCTION 1

This introductory journalism course provides students with an in-depth introduction to the journalistic skills of interviewing, news-writing, writing opinions, photography, publication design and multimedia design including broadcast production. Students learn through traditional classroom learning, as well as by serving as staff members of the UltraViolet, to which they contribute significant work—mostly online first semester and print second semester. Students are introduced to Photoshop, Adobe Premiere, and Wordpress. Semester 1 requires participation in each class meeting. Attendance is flexible semester 2. This course is a prerequisite for Newspaper Production 2

*Full Year
Grades 10-12*

NEWSPAPER PRODUCTION 2

Students put a wide range of journalistic skills into practice, including reporting, editing, photography, publication design, team-leading, and ethical judgment, as they produce six issues of the UltraViolet each year. Class meetings are all mandatory for the first 10 weeks, thereafter attendance is flexible.

Prerequisite: Middle School Journalism, participation on the M, Newspaper Production 1, or permission from instructor.

*Full Year
Grades 10-12*

SPECIAL STUDIES IN VISUAL MEDIA FOR PUBLICATIONS

Students interested in a staff photographer or illustrator position on either the UltraViolet or yearbook will study photojournalism and editorial photography or editorial graphics and illustration. The class is designed for students interested in contributing to Newspaper and its various outlets (print, online, broadcast) or participating in Yearbook as staff photographers, but who do not want to write or layout pages. Possible software skills include: Adobe Indesign, Wordpress, HTML, Photoshop, Adobe Illustrator, and Adobe After Effects. The class can be taken for multiple semesters; projects are self directed and assigned according to the needs of the student publication.

Note: 9th graders contribute to The M and/or VTV and 10-12th graders contribute to The UltraViolet, the yearbook and/or and VTV.

*One Semester
Grades 9-12*

VTV BROADCAST AND VIDEO PRODUCTION

Students produce a weekly news show and additional video and audio episodic works for VTV. Skills and software include: videography, editing, motion graphics for web and television, audio recording and editing, writing for the screen, Adobe Premiere, After Effects, Adobe Illustrator, Photoshop and Garageband. This course may be taken for multiple semesters.

*One Semester
Grades 8-12*

YEARBOOK PRODUCTION

This year-long course covers the principles and skills necessary to create the Sundial, an annual student-designed, computer-generated publication. Students interested in being staff members apply in March before being accepted into the class. Students are accountable for timely, satisfactory completion of pages assigned by the faculty advisor and/or the student editors-in-chief. Some work outside of class is necessary in order to complete pages. Journalistic skills are taught in addition to design concepts, layout, copy-writing and editing, photography, and desktop publishing. Computer-related skills covered include use of digital cameras to obtain images and manipulation of those images in Adobe InDesign and Adobe Photoshop.

Prerequisite: permission from the instructor.

Note: staff photographers are welcome to apply with submission of portfolio. Staff photographers will be enrolled in Special Studies for credit if desired.

*Full Year
Grades 10-12*

STEM+ ELECTIVES**ART & TECHNOLOGY**

Students in this semester course will have the opportunity to create original works of art that will each incorporate a technology component within the design. Projects could be two or three-dimensional in form and could be functional in design, or whimsical and playful in approach. It is hoped that the finished pieces will display original, creative thought and artistic technique, as well as, include technology, such as lights, sound, or an interactive element. No special art talent or coding/programming skill is required for this course—just a strong desire to design, create, and make things by combining art with technology. This course may be taken more than once for an art credit.

*Spring Semester
Grades: 10-12*

ENTREPRENEURSHIP

In this project-based, pass/fail course, students will explore leadership and entrepreneurship by learning how to turn ideas into successful realities. Learning will be active and collaborative, and students will develop essential leadership skills by solving real problems that don't have answers found in the back of a textbook. After identifying their personal leadership style and learning a framework for effective problem solving, students will partner with local startups to pitch viable solutions for real business problems. By the end of the course, students will understand the product development cycle, deliver multiple pitch presentations, and develop a unique business idea that is not only meaningful to them, but that can also instigate positive social change.

*One Semester
Grades 10-12*

FINANCE

In this project-based, pass/fail course, students will learn how to manage money in order to achieve economic success and reduce financial anxiety. Students will begin their journey to financial literacy by creating appropriate budgets, exploring common banking products, learning how to use credit cards wisely, applying for loans, and managing debt. Students will learn about the stock market and how to manage and grow wealth for future expenditures. Additionally, students will learn about business finance, company valuation, and investment strategies. By the end of the course, students will feel empowered to better manage their finances and understand the tools and products to help them do so. This course is open to all students in grades 10-12 and is an excellent choice for students who have taken Entrepreneurship and are looking to expand their skill set.

*One Semester
Grades 9-12*

THE SCIENCE OF ART

Participants will explore the intersection of science and visual art in this interdisciplinary, project-based course. Students research, create, collaborate and present three projects using chemistry, physics and engineering concepts to create various creative pieces. Projects include researching the ancient alchemy of paint, creating custom pigments, constructing a camera and using knowledge of the properties of light to make photographs, and designing a product requiring research of a problem and a solution which include industrial design concepts and 3D design.

*One Semester
Grades 10-12*

STEM+MUSIC

Computer-aided composition and Sound Design will give the student an aural palette for free-flowing compositions, sound-for-video and film, as well as currently popular musical stylings. Through the use of digital music software programs like Garageband, Logic, Ableton, and more, students have the ability to manipulate sound in a variety of ways. Some of these soundscapes can be based on currently trending pop music and others can be hours-long and completely random.

*One Semester
Grades 9-12*

PROGRAMS & RESOURCES

HUMAN DEVELOPMENT PROGRAM

The Human Development Program at Marlborough is designed to round out the curriculum by addressing topics crucial to adolescent development and attending to the wide spectrum of needs reflected in the student body. Human Development issues are integrated into the core curriculum while grade-level and developmental stage-specific workshops, speakers, and activities are scheduled throughout the school year. In addition, advisory presents the opportunity for small group exploration of pertinent Human Development questions and concerns.

Health classes, offered in Grades 7-9, cover areas related to peer relationships, identity, personal values, communication skills, decision-making, and conflict resolution. Subjects such as depression, substance abuse, human sexuality, nutrition, and eating disorders are also explored. A four-day substance abuse prevention program for the 8th Grade is offered annually.

In the Upper School, speakers and programs reflect the needs of older, more independent students. Other community based programs provide relevant information in engaging, thought provoking ways on such important topics as HIV/AIDS, human sexuality, and women's health issues.

ACADEMIC RESOURCE CENTER

An integral part of the School's learning and teaching environment, the Academic Resource Center (ARC) and the Special Projects in the ARC (SPARC) spaces host the School's library, educational and administrative technology services, IT, and Student ARC Task Force. These resources provide sophisticated digital tools alongside traditional print resources, excellent online resources, and state-of-the-art educational technology, fostering innovation and instilling life-long research and scholarship skills. Membership in various library consortia makes it possible to borrow materials from local independent school libraries, University of California at Los Angeles, and various libraries throughout the United States. The SPARC, home to the School's robotics, computer science, entrepreneurship, and digital citizenship programs, further enhances students' real world learning opportunities. The ARC and SPARC faculty and staff are available to work with students, faculty, and other members of the Marlborough School Community, guiding the collaborative nature of the space, and creating a community hub for recreational reading, exploration, and inquiry. Additionally, the ARC and SPARC host numerous events for students, employees, parents, and alumnae, including speakers, professional growth workshops, and student-run conferences.