

## WOMEN LEARNING I WOMEN LEADING

## Course Catalog 2012-2013

## Our Mission

Castilleja School inspires a quest for knowledge and learning that lasts a lifetime.
To prepare our students for the wider world, we infuse our challenging college preparatory program with a global curriculum that fosters awareness, compassion, and engagement with issues beyond Castilleja. Our comprehensive academic program and extensive cocurricular offerings develop in each student the self-confidence to reach her full potential. Above all, our faculty and staff dedicate themselves to excellence in educating young women and in cultivating young leaders.
Statement of Philosophy ..... 4
Diversity Statement ..... 4
History ..... 4
Academic Program and Policies ..... 5
Middle School Requirements ..... 6
Upper School Requirements ..... 6
Middle School Course Offerings ..... 7
Upper School Course Offerings ..... 8
What's New in 2012-2013 ..... 10
Course Descriptions
English ..... 11
Fitness and Wellness ..... 15
History ..... 17
Mathematics ..... 22
Modern and Classical Languages ..... 27
Science ..... 35
Visual and Performing Arts ..... 39
Interdisciplinary Electives ..... 46
Independent Study ..... 48
ACE Center Programs ..... 48
Cocurricular Opportunities
Athletics ..... 50
Clubs ..... 51
Student Government ..... 51
Visual and Performing Arts ..... 51
College Planning
College Entrance Tests and Curricular Choices in the College Search Process ..... 52
Castilleja Courses and the Subject Tests ..... 55
University of California "a-g" Subject Requirements for Admission (as of March 2012) ..... 56
Overview of Minimum Requirements for Castilleja Graduation, UC System, and College Admission in General ..... 57
Four-Year Course Planner (Upper School) ..... 58

## Statement of Philosophy

Castilleja School, founded in 1907, is dedicated to providing a rigorous college preparatory education for young women in grades six through twelve. It is the only non-sectarian all-girls middle and high school in the San Francisco Bay Area. Located in Palo Alto, the school benefits from the proximity of Stanford University and Silicon Valley, and the student body reflects the region's ethnic and economic diversity. Castilleja's philosophy is shaped by both tradition and current research that affirm the academic and personal advantages of all-girls education. We demonstrate this conviction in the conscious attention we pay to the needs, issues, pedagogies, and opportunities particular to girls. While emphasis is on the development of the intellect, Castilleja is committed to the education of the whole person: heart, body, and spirit, as well as mind.

Castilleja is committed to excellence. We believe in small classes led by dedicated teachers who exhibit strong academic preparation, enthusiasm for teaching and learning, and concern for each student. We value a curriculum that blends traditional teaching with thoughtful innovation, and we applaud both individual achievement and successful collaboration. We expect students to master information, use technology effectively, and develop the critical thinking skills that support life-long learning. Castilleja recognizes the importance of parents who are involved with their daughters' education and encourages them to work in partnership with the school.

Castilleja fosters leadership in the classroom and in a wide assortment of cocurricular offerings, including team sports, clubs, community service projects, student government, dramatic and musical performances, peer tutoring and counseling, art and science exhibits, teaching assistantships, exchange programs, and internships within the community. We recognize each student's individuality and help her excel in her unique interests.

Castilleja expects students to participate as citizens of a small school and a larger world. We promote, through experience and example, the development of self-confidence and concern for others and the capacity for responsible risk-taking and ethical decision-making. Conscience, Courtesy, Character, Courage and Charity Castilleja's Five Cs, which date back to the school's founding headmistress - still resonate, reminding students that personal values must accompany academic achievement.

Castilleja prepares graduates to succeed in challenging undergraduate programs and to pursue lives committed to personal fulfillment, social responsibility, and leadership.

## Diversity Statement

Castilleja is first and foremost an educational community. It is the collective responsibility of the faculty, students, staff, administration, parents and trustees to sustain a framework conducive to learning and to foster behavior built on trust, compassion, and appreciation for individual differences and ideas.

All members of the community are entitled to their views, mutual respect, and courtesy. The school will neither disparage any personal or family choice, belief or point of view, nor condone any expression of intolerance for community members or the school's commitment to diversity.

In order to prepare students for the world in which they will live, and in keeping with its Mission Statement, Castilleja School dedicates itself to an open environment in which all people, regardless of race, color, creed, gender, marital status, age, sexual orientation, political beliefs, physical abilities, ethnicity, socioeconomic status, or religion, can thrive.

## History

Castilleja's current strengths are, in part, the result of a long and distinguished history. The school was founded in 1907 by Mary Lockey at the urging of Dr. David Starr Jordan, the first president of Stanford University. Miss Lockey herself was a Stanford alumna, and Dr. Jordan convinced her of the immediate need for a college preparatory school for young women in the Bay Area. Castilleja's original purpose was to give an education that is broad, not merely academic, so daily life has always featured a healthy mix of course work, recreation, field trips, and community service.

## Academic Program and Policies

Castilleja's academic program is college preparatory in nature, designed to be intrinsically enjoyable and to help students make informed choices about their future roles in society. The school's pedagogical approaches and course offerings are informed by research findings that focus on the distinctive ways in which girls learn.

The educational program combines the tradition of academic excellence with educational innovation, strong individual achievement with an emphasis on teambuilding, knowledge of Western culture within a global awareness, and the development of self-confidence with compassion for other human beings.

Castilleja School offers a personalized advising system to assist students in planning their academic programs to assure the most appropriate course of study. In the Upper School, each student begins by filling out course plans and discussing them with her parents and her advisor. In setting her long-range academic goals, and her specific selections for the upcoming year, each student is encouraged to talk with her teachers, department heads, and her Castilleja college counselor. After she has drafted her plans and course requests, she obtains a signature from her parents and submits them to her advisor for consultation and approval. Once the advisor has approved the student's request form, it is submitted to the class dean, who reviews it for balance in curricular and cocurricular choices. The form then goes to the Head of Upper School to assure that the requests are in keeping with the school's graduation requirements and the student's academic goals and abilities. Every effort is made to give students their elective choices, with priority going to girls in the upper classes.

A Block classes are classes that meet outside of the regular schedule either after school, during EOP or on weekends. Students who sign up for these classes need to be flexible in their availability in off school hours. An A Block class counts as one of the six classes that upperclassmen may sign up for.

Drop/Add policy: an Upper School student wishing to drop a course may do so anytime during the first half of the semester, with the permission of the Head of Upper School.* The student should first speak to the Head of Upper School about dropping the course, and receive permission for the drop. The student should then discuss the intent to drop with the course instructor, acquire the approval of her parent or guardian and advisor and, finally, complete the process with the Head of Upper School. Registering for a course implies a commitment to finish that course except in unusual circumstances. Permission to drop a course after the deadline will generally not be granted. Any course dropped after the deadline will appear on the student's transcript.

A student wishing to add or change a course may do so during the first two weeks of a course with the permission of the instructor and the Head of Upper School or Head of Middle School ("Division Head"). The student should first speak to the Division Head about the reason for adding or changing the course and get permission for the addition or change. The student should then discuss the intent to add the course with the course instructor, acquire the approval of a parent/guardian and advisor, and, finally, complete the process with the Division Head. Permission to add a course is contingent on available space and ease of scheduling. A teacher may not add a student to a class who has not gone through the process described above.
*Juniors and seniors are advised to consult with their Castilleja college counselor before dropping a class, as doing so could affect their college choices.

## Middle School Requirements

3 years each:

## English

Fitness and Wellness
History
Mathematics
Modern Language
Science
Visual and Performing Arts
and 8th grade speech
Electives - Offerings vary from year to year and vary throughout the year.

## Upper School Requirements

4 years English

- English I
- English II
- AP English: American Voices
- two semesters of AP English Literature electives in $12^{\text {th }}$ grade

2 years Fitness and Wellness
3 years History

- Cultures and Civilizations
- The Individual and Society and The American Political System
- US History

3 years Mathematics-For Class of 2014 and beyond

- Geometry, Algebra II, and one additional year

OR
3 years Mathematics-For Class of 2013

- through Algebra II

3 years Modern or Classical Language

- through level III of Chinese, French, Latin, or Spanish

3 years Science

- Physics, Chemistry, and Biology

2 years Visual and Performing Arts

- Core Arts
- one full-year course in a single arts discipline
and Presentation of Senior Talk
Community Service Commitment
Completion of Global Investigator Program
Completion of Senior Leadership Program


## Middle School Course Offerings

## English

English 6
English 7

## English 8

Fitness and Wellness
Fitness and Wellness 6
Fitness and Wellness 7
Fitness and Wellness 8

## History

Ancient Civilizations 6
World History 7
American History 8

## Mathematics

Math 6
Pre-Algebra
Algebra I
Algebra I Honors

## Modern Languages

Chinese
Chinese IA
Chinese IB
Chinese I \#
Chinese II
French
French IA
French IB
French I \#
French II
Spanish
Spanish IA
Spanish IB
Spanish I
Spanish II

## Science

Science 6
Science 7
Science 8

Visual and Performing Arts
Sixth Grade
Art 6: Explore and Create
Dance 6: Move It!
Drama 6: Curtain!
Music 6: Experiencing Music
Seventh Grade
Art 7: Exploring Form and Color
Music 7: Discovering the Joy of MusicMaking
Dance 7: Dancing to the World's Beat
Drama 7: Creating Characters
Eighth Grade
Art 8: Art, Fashion and Print
Ceramics 8: An Introduction to Hand-Built Forms
Dance 8: Choreography
Drama 8: Original One Act
Movietime 8: Lights! Camera! Action!
Music 8: Instrumental Chamber Music
Music 8: Show Choir

## Upper School Course Offerings

## Please see course descriptions for detailed information about required course sequences and prerequisites.

NOTE: In order for a class to be offered, a minimum of eight students must be enrolled.

## English

English I
English II
AP English: American Voices
AP English Literature Electives:
British Literature - the Nineteenth Century* (spring)
British Literature since 1900* \#
Coming of Age* (fall)
Contemporary World Literature* \#
The Family in Literature* (spring)
Friends and Lovers* (spring)
The Literature of Rebellion* \#
Modern European Literature* (fall)
Poetry* (fall)
Shakespeare* \#
Short Fiction* (spring)
Tragic Mode* \#

## Fitness and Wellness

Fitness and Wellness I
Fitness and Wellness II

## History

Cultures and Civilizations
The American Political System*
The Individual and Society*
United States History Honors
AP United States History
Electives:
African Studies* \#
Economics* (fall)
AP European History
International Relations* (spring)
Modern Latin America and the Caribbean* (fall)
Modern East Asia* (spring)
The Politics and Science of Gender* (fall)
Russian History* \#

## Interdisciplinary Electives

Computer Science: Algorithms and Design* (fall)
Contemporary American Culture* \#
Engineering Sustainable Solutions* (spring) offered during A-block
Introduction to Engineering, Programming and
Robotics* \#
Introduction to Philosophy* (spring)
Shakespeare: Stage and Page* (spring)

## Mathematics

Algebra I
Algebra I Honors
Euclidean and Analytic Geometry
Euclidean and Analytic Geometry Honors
Algebra II and Trigonometry
Algebra II and Trigonometry Honors
Precalculus with Applications
Introductory Calculus AB Honors
Introductory Calculus BC Honors
Calculus Theory I Honors \#
AP Calculus AB
AP Calculus BC
AP Calculus Theory II
AP Statistics
Semester Electives:
Advanced Topics in Mathematics: Linear Algebra* (spring)
Advanced Topics in Mathematics: Mathematical Modeling* \#
Advanced Topics in Mathematics: Number Theory* (fall)
Advanced Topics in Mathematics: Probability* \#

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## Upper School Course Offerings (cont.)

## Modern and Classical Languages

Chinese
Chinese I
Chinese II
Chinese III
Chinese IV
Advanced Topics in Chinese: Language and Literature
French
French I \#
French II
French III
French IV
AP French Language
Advanced Topics in French: French Seminar Latin

Latin III
Latin IV
AP Latin
Spanish
Spanish I
Spanish II
Spanish III
Spanish IV
AP Spanish Language
AP Spanish Literature
Advanced Topics in Spanish: Spanish Seminar \# Ancient Greek and Ancient Greeks
Italian Culture and Language \#
Rome: Advanced Introduction to Latin and the
Augustan Age \#

## Science

Physics
Physics Honors
Chemistry
Chemistry Honors
Biology
Biology Honors
Advanced Topics in Biology: Genes, Development and Evolution
The Biology and Economics of Cancer* (spring)
Biotechnology and Bioethics* (fall)
Advanced Topics in Chemistry: Equilibrium, Kinetics and Thermodynamics
Human Physiology* \#
Introduction to Organic Chemistry and Biochemistry* (fall)
Advanced Topics in Physics: Modern Mechanics

## Visual and Performing Arts

Core Arts
Dance
Dance Production Workshop I* and II* (A-Block)
Advanced Dance Production Workshop (A-Block)
Music
Instrumental Chamber Music I* and II*
Advanced Instrumental Chamber Music* (both semesters)
Vocal Music Workshop I* and II*
Advanced Vocal Music Workshop* (both semesters)
Honors Vocal Music* (both semesters)
Theater Arts
Drama I* and II*
Visual Art
Ceramics: History and Making I* and II*
Design and Sculpture I* and II*
Drawing and Painting I* and II*
Film I* and II*
Photography I* and II*
Advanced Visual Art* (both semesters)
AP Studio Art (Drawing and Painting, or Design, including Photography)

[^1]
## What's New in 2012-2013

## Change in Science Curriculum

Beginning in the fall of 2012, Castilleja will offer Advanced Topics in Physics, Chemistry and Biology. These courses replace AP offerings in each of the disciplines.

## New Courses in the Middle School

Music 8: Instrumental Chamber Music (see page 40 for course description)
Music 8: Show Choir (see page 41 for course description)

## New Courses in the Upper School

Advanced Topics in Mathematics: Linear Algebra (see page 26 for course description)
Advanced Topics in Mathematics: Number Theory (see page 26 for course description)
Advanced Topics in Chinese: Language and Literature (see page 28 for course description)
Advanced Topics in Biology: Genes, Development and Evolution (see page 37 for course description)
Advanced Topics in Chemistry: Equilibrium, Kinetics, and Thermodynamics (see page 37 for course description)
Advanced Topics in Physics: Modern Mechanics (see page 37 for course description)
Advanced Dance Production Workshop (see page 42 for course description)
Instrumental Chamber Music I \& II (see page 42 for course description)
Advanced Instrumental Chamber Music (see page 42 for course description)
Honors Vocal Music (see page 43 for course description)
Computer Science: Algorithms and Design (see page 46 for course description)

## Name Changes

Chorus I \& II is now Vocal Music Workshop I \& II
Honor Choir is now Advanced Vocal Music Workshop I \& II
Advanced Drawing \& Painting is now Advanced Visual Art

## An exciting offering from the Science Department

Extensions in Science Laboratory and Research Methods
This series of mini-courses focuses on science process and laboratory skills while introducing science research not generally covered in the core science courses. Each mini-course will emphasize skills such as critical thinking, data analysis, collecting and processing evidence, and computer programming through a rigorous lab-based course. Students taking one or more of these mini-courses will be better prepared for research-based internships and will receive preferential, though not exclusive, treatment when internships are assigned. These mini-courses will also provide a springboard for students who wish to do independent research to participate in science competitions. Prerequisites: teacher recommendation; Prerequisites may vary based on mini-unit content.

## English

The goal of the English department is to help students become attentive readers and clear writers. The curriculum is founded on great works of world literature chosen to introduce students to important literary traditions, to help them learn to develop and defend their own ideas, and to foster a lifelong love of reading.

## English 6

English 6 sets out to spark a curiosity and love for language and literature, using historical context, art, research, and the material world to inform the reading and writing. Students read a variety of genres meant to challenge and inspire, including novels, poetry, fairy tales, and myths; students develop their writing skills in the context of the literature through descriptive, analytical, and creative responses; vocabulary is dawn from classical roots with an emphasis on understanding etymology and origin; and grammar sets a foundation for strong writing skills by focusing on parts of speech and sentence structure. Students learn to read closely, think deeply, pause for reflection, write coherently, speak powerfully, and listen to their peers.

## English 7

English 7 is an exploration of identity in literature and life, touching on issues of conformity, coming of age, judgment, and the ways identities develop and change. We read short stories, poetry, a graphic novel, pop culture texts (like advertisements and music videos), and full-length books ranging from classics (Cyrano de Bergerac, 1001 Arabian Nights, The Diary of Anne Frank) to thought-provoking contemporary young adult novels. Grammar and vocabulary lessons are drawn from the literature, with a focus on building clarity and precision of expression. Students write and revise often, developing a voluminous portfolio of analytical, creative, and persuasive pieces as they sharpen their ability to communicate their ideas to an audience. Overall, this course is designed to challenge the growing minds of young teenagers while fostering a deep and lasting engagement with reading, writing, and discussion.

## English 8

English 8 continues to emphasize reading and writing through the development of critical tools for literary analysis. Using the writing process, students learn to focus their ideas, formulate a thesis statement, and develop the thesis in a clear and logical manner. Among works typically studied are Romeo and Juliet, To Kill a Mockingbird, Jane Eyre, The House on Mango Street, Persepolis, and The Book Thief.

## English I

English I serves as an introduction to high school English and offers students a strong foundation in the study of literature, writing, grammar, and vocabulary. Students write frequently in a variety of modes: the analytical, the expressive, the observational, and the informative. Students write essays of various lengths, poetry, a short story, and journal entries. This range of experience helps students develop their own voices, increase their selfawareness as writers and readers of their own and others' prose, and hone their skills of revision. The theme of the course is the journey of the hero or heroine and the process of self-discovery and recovery. Readings include The Odyssey, Antigone, Othello, Their Eyes Were Watching God, The Catcher in the Rye, poetry, and short stories.

## English II

English II continues the work begun in the ninth grade in developing students' critical reading and analytical writing skills. Readings in English II introduce students to significant works of British and American literature, including Macbeth, Wuthering Heights, The Importance of Being Earnest, The Bluest Eye and The Great Gatsby. These major texts are joined by in-depth studies of non-fiction essays, short stories, and poetry. Students also continue building vocabulary and refining their grammar and usage skills. Throughout the year, the course offers opportunities for students to expand their expressive abilities through creative writing assignments and performance-based presentations.

AP English: American Voices (14 ${ }^{\text {th }}$ grade)
The junior AP English course introduces students to great works and significant genres of American literature, continuing their literary education in familiar genres and introducing them to new genres (e.g., literary non-fiction) and new media. Wherever possible, the course intersects with the U.S. History course to deepen students' understanding of the ideas, landscapes, and global influences that have shaped American history and literature. The course is designed to heighten and refine students' powers of observation - of both literature and the world around them - through close reading and frequent and varied compositions. Readings may include Walden (Thoreau), The Bullfighter Checks Her Makeup (Orlean), Travels With Charley (Steinbeck), Hiroshima (Hersey), Daisy Miller (James), The Adventures of Huckleberry Finn (Twain), In Our Time (Hemingway), Beloved (Morrison), Hunger (Chang) and selected poetry and essays.

AP English Literature: Electives ( $12^{\text {th }}$ grade)
Seniors complete the required English sequence with two one-semester courses, chosen from the following. Not all electives are offered each year. See pages 8 and 9 for a list of the courses to be offered in 2012-2013. Seniors may take more than one course each semester, depending on their schedule.

## British Literature-the Nineteenth Century

This course introduces students to great works of nineteenth-century British literature. Readings typically include "The Rime of the Ancient Mariner" (Coleridge) and other Romantic poetry (Wordsworth, Keats, Shelley, and Byron); the dramatic monologues of Tennyson and Browning and other Victorian poetry (Elizabeth Barrett Browning, Christina Rossetti, and Matthew Arnold); and novels by Austen, Dickens, Hardy, and Stevenson.

## British Literature since 1900

The beginning of the twentieth century in England witnessed a profound change in established social order. Writers struggled to give voice to the dissonant nature of "modern" life, breaking away from traditional literary modes and forms. In this course we will examine stories of reaction-to the past, the self, and society-set in a world which no longer seems to function according to established structures of meaning. From the birth of modernism through the beginnings of a new century, we will read fiction and poetry that offer new ways of conceiving identity and culture. Our syllabus will include works by Ford Madox Ford, Virginia Woolf, Samuel Beckett, James Joyce, Katharine Mansfield, Jeanette Winterson, Seamus Heaney, Philip Larkin and others.

## Coming of Age

This course explores the universal experience of moving from childhood into adulthood. We discuss the different kinds of knowledge that the journey reveals and consider how these experiences contribute to our humanity. While investigating the process of growing up, the course focuses particularly on the changes we all undergo during adolescence and the factors that help us negotiate these changes. Readings include Faulkner, The Bear, Humphreys, Rich in Love; and Joyce, A Portrait of the Artist as a Young Man. Poetry, essays, and short stories dealing with coming of age themes are also studied. In addition to essays on literary topics, students write personal responses to the literature. They also view and critique a coming of age film. The course culminates in the writing of an autobiographical portrait.

Contemporary World Literature
This course uses recent works of literature from around the globe as a lens through which to examine a particular theme or issue, which changes from year to year. Recent themes have included exile, immigration, personal and national identity, and contemporary global women writers.

## The Family in Literature

This course uses the family as a focal point of life. To look at the family is to see the great themes of which lives are made-love and hate, connection and solitude, care and indifference, comfort and hurt, truth and falsehood, the nature of male and female, and the passage of time. In this course we will meditate upon these issues in and through some twentieth-century works of fiction. Readings include Marquez, One Hundred Years of Solitude;

Faulkner, As I Lay Dying; Robinson, Housekeeping; Salinger, Franny and Zooey, and a collection of short fiction and poetry.

## Friends and Lovers

Love is among the most complex and universal of human emotions. This course will investigate different kinds of love in human relationships as revealed in literary works throughout the ages. Readings include Plato's Symposium; the classical myth "Psyche and Eros"; Shakespeare's Antony and Cleopatra; and Rilke's Letters to a Young Poet. In addition to selected poetry and short stories, novels include Hemingway's A Farewell to Arms, Woolf's To The Lighthouse, and Knowles's A Separate Peace. Students will be involved in close reading, careful writing, and active class discussion.

## The Literature of Rebellion

This course will consider texts from a broad sampling of genres, all of which were written by individuals who raised their voices in opposition to, and often in outright protest of, oppressive social norms and literary conventions. We will situate central issues of identity, class, race, sexuality, and political ideology raised by these texts within broader themes of coming of age, finding a voice of one's own, creating community, resisting cultural, historical, and literary limitations, and the price of artistic freedom. The readings, assignments, class discussions, and in-class exercises are designed to encourage critical thinking, interpretation, analysis, and-above all-to cultivate a strong sense of appreciation for, and inspiration from, revolutionary writers throughout history.

## Modern European Literature

This course studies several of the greatest works of literature produced in continental Europe during the last century. They date from the time of the modernist break with tradition and reflect the shifting artistic and intellectual climate of the twentieth century. Though difficult, these works have a philosophic and spiritual depth that pays rich dividends to the determined reader. Our study of poetry, fiction, and drama will include such works as Flaubert, Madame Bovary; Rilke, The Duino Elegies; Mann, Death in Venice; Kafka, The Trial; Kundera, The Unbearable Lightness of Being; and Woolf, Mrs. Dalloway.

## Poetry

Coleridge wrote, "Prose is words in their best order; poetry is the best words in their best order." This course will sample the panoply of such words from the past millennium, with primary emphasis on the work of the past three centuries. Our focus will be on the poems themselves-how they sound, look, mean, and work-and on the varying contexts in which they may be read. These contexts include the life and career of the poet; important poetic movements; verse forms ranging from the strictly patterned to the seemingly random; and the social/historical context of the work. Students will write a variety of critical essays on selected poems and a major paper examining one poet's work in depth. They will also reflect on the readings in prose and verse as they compose responses in poetry journals.

## Shakespeare

The Shakespeare course focuses on close reading and exploration of language in selected sonnets and plays. Students read six plays and study additional plays through film. The reading in recent years has included Richard III, As You Like It, Hamlet, Twelfth Night, The Merchant of Venice, and The Tempest. Written assignments include short imaginative compositions as well as longer critical essays. Members of the class also organize and perform in the annual all-school Shakespeare Birthday Celebration.

## Short Fiction

Storytelling is a universal occupation, extant in every culture. Yet not all stories are best told at great length. This course will examine the role of short fiction-novellas, short stories, flash fiction, and micro-fiction-in a global context. We will read stories both within their cultural context (for example, the new trend in Chinese flash fiction) and topically, across cultures (stories of grief and revenge from several different countries). The course readings will encompass many of the classic short story writers from the American, British, and European traditions, such as Henry James, Kate Chopin, and Anton Chekhov. However, we will also spend time with writers from shores
farther abroad: Jorge Luis Borges, Jhumpa Lahiri, Margaret Atwood, Junot Diaz, and Haruki Murakami. Students will write a variety of critical essays on selected short fiction and a major paper examining one author's work in depth. They will also reflect on the readings in prose and creative writing in short compositions.

Tragic Mode
Beginning with the Greek plays that were called "tragoidia," we will examine a variety of works that seem in some sense to continue the tradition of tragic art. For relief and comparison, we will view at least one comic film with tragic undercurrents. The class will revolve around three simple questions: What is the essence of tragedy? What explains the appeal and the value of works that are, by their nature, unhappy? Do tragic works of art point us toward a philosophy of life? We will study the way major theorists such as Aristotle, Hegel, and Nietzsche answered these questions, and we will work toward developing our own answers. Literary works studied include Sophocles, Oedipus Tyrannos and Antigone; Shakespeare, Hamlet; selections from Nietzsche, The Birth of Tragedy; Faulkner, The Sound and the Fury. We will also listen to Beethoven's Eroica symphony and view von Steinberg's The Blue Angel and Bergman's The Seventh Seal.

## Fitness and Wellness

## The goal of the Castilleja Fitness and Wellness program is to empower students with the knowledge that will enable them to make informed choices for lifelong fitness, health, and well being.

## Fitness and Wellness 6

Fitness and Wellness 6 is an integrated program in which students engage in a variety of developmentally appropriate units. Fitness units include swimming, team and individual sports such as soccer, team handball, floor hockey, track and field, pickleball, volleyball, and striking games from around the world,. Fitness components are integrated into all units. Emphasis is placed on acquisition and building of movement skills through sequential learning and practiced motor patterns, and then applied in activities or games. Students have opportunities for creativity and self-expression while collaborating on group routines in the acro-yoga and circus units. Wellness units include an introduction to the Castilleja community, forming new relationships and the role of the five Cs in our lives. Students participate in a series of activities to promote healthy choices about nutrition, exercise, communication and cooperative skills, time management, emotional health, and human growth. During this series of units they acquire the knowledge and skills needed to care for their changing bodies.

## Fitness and Wellness 7

In Fitness and Wellness 7, students participate in a variety of developmentally appropriate units, including water polo and other aquatic activities, softball, ultimate, basketball, volleyball, badminton, and lacrosse. Fitness activities that focus on the many health and skill-related components of fitness are integrated in all units. The overall content of the curriculum emphasizes acquiring and improving skills, and a gradual introduction of strategies and tactics, which are then applied in activities and games. Students have opportunities for creativity and self-expression while collaborating on group routines in the Zumba and Tae Kwon Do units. Wellness units focus on developing an understanding of self and group dynamics through an exploration of personal values, self esteem, relationships, body image, substance abuse and addiction, diversity, and leadership. Through partner work, small and large group discussions, individual and collaborative projects, girls develop a deeper understanding of interpersonal relationships, and effective group interaction. The year in wellness ends with a culminating identity project in which each girl shows her personally meaningful understanding of her identities in relationship to the topics explored in $6^{\text {th }}$ and $7^{\text {th }}$ grade.

## Fitness and Wellness 8

Fitness and Wellness 8 is an integrated program in which students engage in a variety of fitness units that further their earlier Middle School experiences and bridge to the Upper School curriculum. Fitness blocks incorporate exercises that target both skill and health-related components of fitness, and in particular, students become more familiar with cardiovascular and muscular strength training through experiences with a diverse range of fitness equipment. Some of these workouts are intertwined with team games in a stations format, while others occur in the fitness center. Units in field hockey and flag football extend the invasion games units in sixth and seventh grade fitness. In Wellness, activities focus on developing and maintaining a balanced lifestyle by establishing a foundation built on positive relationships and thoughtful decision-making. During units covering sexual education and body awareness, emphasis is placed on maintaining a healthy self-respect as the girls encounter choices and new experiences. A unit on Social Justice incorporates researching an inequity and interviewing an advocate, before presenting findings to peers. Group dynamics and the opportunity for independence and responsibility are highlighted during a week-long trip to Washington, DC.

Fitness and Wellness I and II
The Upper School Fitness and Wellness program is designed in a holistic manner, where messages given in Wellness are threaded through Fitness opportunities.

Fitness I and Fitness II
The Upper School fitness program includes an elective-based program in which students are given the opportunity to participate in lifetime fitness activities, such as strength training, step aerobics, indoor cycling, yoga,
kickboxing, and indoor climbing. Units are typically two to three weeks in length, and expose the girls to both the health-related and skill-related components of fitness.

## Wellness I

Wellness I is a required course for all ninth graders. The course addresses many of the challenges the young women of our community may experience. With their transition to Upper School, students are supported through discussions on time management, being new, and relaxation techniques. The course concentrates on a broad range of topics dealing with the theme of developing a student's ability to make well-informed and responsible decisions regarding health and personal development. Attention is given to getting to know oneself and looking at how one contributes to the formation of a community of ninth grade students. Topics discussed include (but are not limited to) time and stress management, study skills, wellness (including nutrition, diet, substance abuse and exercise), human growth and development, gender and sexuality, relationships and communication skills.

## Wellness II

Wellness II is a required course for all tenth graders. Students are trained and certified in Adult CPR, Child CPR, Infant CPR and Standard First Aid through the American Red Cross program. They acquire the knowledge and skills they need to keep safe and to give care in medical emergencies, such as choking, heart attack, stroke or an allergic reaction. Teen safety is the major focus of the course, so other topics such as driving, substance abuse, safe social networking, and teen relationships are also included. In addition, assertiveness training expands on the communication skills discussed in freshman year, and an introduction to self-defense builds on their sense of power and being.

## History

The History Department believes that knowledge of the past provides a sophisticated lens through which to understand the present and to view the future. It seeks to inspire in Castilleja students a love of learning in general and of history in particular. The history curriculum supports and enhances Castilleja's focus on global learning. While students master the "canon" in the fields of world and American history, they practice and hone their skills in thinking, reading, writing, and speaking. They learn to gather and analyze information from traditional and electronic sources. Thus, they graduate well versed in historical knowledge, comfortable with both print and electronic research, and competent in their critical skills.

## Ancient Civilizations 6

This class explores early history from around 9000 BCE through 500 CE. Students examine historical patterns, using six themes: geography, government, economics, belief systems, culture, and science and technology. The curriculum examines the ancient societies, empires, and kingdoms of Mesopotamia and Asia Minor, Egypt and Sub-Sahara Africa, India, China, the Americas, Greece, and Rome. Students learn the foundations and basic teachings of Hinduism, Buddhism, Judaism, Christianity, and the influential philosophies of Confucius, Lao Tzu, and Socrates. Inter-disciplinary explorations include the Classics Thread with English, Archaeology Day and mapping skills with Science and Math, and the Festival of Antiquity with Visual and Performing Arts. Summative assessment projects are designed and developed in collaboration with the Library, Ed Tech, and the Educational Support Coordinator. Class activities are designed to be fun and engaging, to develop skills as critical thinkers and independent learners, and to promote a love of history. This course culminates with the Festival of Antiquity, a daylong cross-cultural, interdisciplinary exploration and celebration of the year's curriculum.

## World History 7

World History is a continuation of the study of civilizations begun in the sixth grade. The course begins with the fall of the Roman Empire and moves chronologically to the exploration of the Americas. Through text readings, projects, discussion, group activities, and oral reports, students learn about Western and non-Western people and cultures from the period 500 CE through modern times. Seventh grade students learn how to outline, take notes, and develop their skills in written and oral expression. They also study geography and current events. Students' understanding is further enhanced through outside speakers, videos, and assignments that integrate history and technology.

## American History 8

American History is an introductory survey beginning with the first Americans and ending with the events of the 1980s. Multiple methods of instruction help students learn the important facts and trends as well as the values that have influenced the development of this nation. Students learn the important events and themes of American history, develop research, technology, and presentation skills by completing several projects (including historical documentary filmmaking and collaborative writing), and strengthen oral skills by participating in group presentations. Analysis of primary sources, map studies, videos, technology projects, and a unit on the structure of American government enrich this course and help students in their understanding of American history. Students also participate in National History Day and work on preparation for the eighth grade trip to Washington DC.

Cultures and Civilizations
Cultures and Civilizations (C\&C) is a required, year-long course for freshmen that introduces students to the political, economic, social, and cultural histories of the Western and non-Western worlds from the $15^{\text {th }}$ through the $20^{\text {th }}$ centuries. It emphasizes global interactions and connections--from the Great/Columbian Exchange through the world wars, decolonization, and international realignments--that affected Europe, the Americas, Africa, East Asia, and the world of Islam. C\&C emphasizes a solid grasp of appropriate content, chronology, and geography; it fosters an understanding of historical themes, such as international relations, causation, change over time, and comparison/contrast between or among different societies; it helps students achieve competence in analytical and expository writing. Works of world literature such as Germinal, Night, and Things Fall Apart enrich the course content and partially represent its
interdisciplinary component. C\&C incorporates $21^{\text {st }}$ century teaching pedagogies in its intentional inclusion of technology, collaboration opportunities, and presentation requirements. It encourages critical thinking in regular examination and analysis of primary source documents, both written and visual, as well as in age- and grade-appropriate assessments.

## The American Political System

This required one-semester course traces the origins, development, and structure of the American political system. Using a constitution-centered text and supplemental materials, students critically evaluate significant events and controversies that have shaped America's democracy from its foundation to the present. The course examines constitutional issues having to do with civil liberties and civil rights, powers and processes of the three branches of government, the role of political parties, media, interest groups, and social movements in the political arena. Special emphasis is given to debate technique and the effective use of rhetoric. During the semester, the class conducts several formal debates on controversial issues. Debate topics include the death penalty, abortion, gun control, and other current issues. Each student participates in two debates. In addition, each student will cofacilitate one of the weekly roundtable discussions on current political controversies. The course concludes with an independent research project in which each student does a comparative investigation on one aspect of government in a foreign country.

## The Individual and Society

This required one-semester course introduces students to social science, political theory, and philosophy, addressing the central questions: What encourages conformity and non-conformity in human beings? What important theories attempt to account for these compulsions at social as well as instinctive levels of human experience? The course explores these questions through an examination of how societies, in historical and theoretical settings, attempt to balance individual freedom with the interests of the society through the formation of political, economic, cultural, and religious institutions. The course evaluates how the struggle to resolve the conflicting compulsion of freedom and social order takes different shapes across time and geographical region, ultimately reaching an unprecedented degree in the 20th century due to technological advances. Significant theories of human behavior are introduced to demonstrate the difficulties in accounting for patterns and tendencies found in the relationship between individuals and groups. Students will use primary and secondary documents from a variety of theorists to examine topics such as the Greek polis, totalitarianism, Marxism, and behaviorism, conduct psychology experiments and participate in an interdisciplinary seminar on evolutionary biology, and lead seminars on specific topics ranging from Campbell's "Hero's Journey" to realist legal theory.

United States History Honors Note: taught in a combined class with AP US History
Open to eleventh and twelfth graders, United States History is a two-semester course that introduces students to the critical issues of our nation's past. The chronological narrative provides a perspective on both historical development and contemporary events. While the course represents the traditional topical approach to American History, the syllabus has equal emphasis on the exciting diversity of America's cultural and social heritage. The curriculum encourages students to refine their skills in critical analysis, effective oral communication, discussion, and expository writing. Students may take U.S. History in either the eleventh or twelfth grade, though eleventh is strongly recommended due to its topical alignment with the eleventh grade English course.

AP United States History
Advanced Placement United States History is a college-level two-semester course open to eleventh and twelfth grade students. The course requires extensive reading, research, and analytical writing. Students examine varying interpretations of American History and methods of historiography. The class includes a session each week devoted exclusively to a seminar discussion in which the students assume the responsibility for preparation and leadership. After the AP exam second semester, students identify and research a topic of historical significance. Students take the U. S. History AP exam in May. Students may take U.S. History in either the eleventh or twelfth grade, though eleventh is strongly recommended due to its topical alignment with the eleventh grade English course.

## Electives

Open to eleventh and twelfth grade students (except for AP European History). Not all electives are offered each year. See pages 8 and 9 for list of courses offered in 2012-2013.

## African Studies

African Studies is a one-semester history elective open to juniors and seniors that focuses on the development of sub-Sahara Africa from the Bantu migrations to the present. Students examine the elements of Africa's heritage through lecture, discussion, and seminars based on primary sources, guest speakers, off-campus experiences, and recent African fiction. They evaluate, through country reports, the aftermath of decolonization and the impact of technology and globalization on traditional societies; they master Africa's physical and political geography; they develop competence in exploring print and electronic sources of information; they continue to develop their fluency in written and oral expression. Outside readings might include Nervous Conditions; Cry, the Beloved Country; short stories by Nadine Gordimer; and excerpts from King Leopold's Ghost and Bury the Chains. A rich, comprehensive website enhances the course content.

## Economics

Economics is a one-semester elective with the primary goal of giving students an understanding of the way in which individuals, households, firms, industries, and governments decide to employ their given talents and material resources to best meet individual and societal needs and wants. Economic understanding functions on the individual level (we will work on personal finance and our role in our own financial lives), systems (we will look at the government and financial institutions) and global (we will examine foreign markets and the U.S. role in the international economy). Students learn the foundation of economic thought, the nature and function of product and factor markets, the role of the government in promoting greater efficiency and equity in the economy, the role of money and financial institutions, how to measure overall economic productivity and stability, and the increasing role of global markets. Theory is practiced in case applications and simulations, by participating in class seminars, by listening to expert guest speakers and through current events reading. There are quizzes on concepts and two projects are required: the personal finance portfolio in the first half of the semester and another project examining an international global issue in the second half.

## AP European History

This year-long course open to seniors offers a rigorous, in-depth study of European history from 1450 to the present. It conforms to the 2010 recommendations of the Advanced Placement European History Task Force by focusing on five major themes in four chronological time frames. ${ }^{*}$ It covers the economic, political, intellectual, social, and cultural developments of Europe's history in a global context. Student-led seminar discussions and analytical writing assignments require students to examine and deconstruct primary sources, to delve deeply into historical causation and change over time, and to assess outcomes of events, personalities, trends, and the like. A rich and comprehensive ancillary website explores European art; incorporation of DVD and YouTube excerpts helps to bring the course content to life and to offer alternative interpretations or points of view. The course provides students with opportunities to read, discuss, and analyze the great authors and ideas of Europe's past. Student performances of the music of the period add another dimension to the class. Prerequisites: completion of C\&C, APS/I\&S, AP US History, and commitment to a challenging workload.
*The themes defined by the College Board and Educational Testing Service are: Interaction between Europe and the World; Poverty and Prosperity; Objective knowledge and Subjective Vision; States and Other Institutions of Power; The Individual and the Community. The time frames are: $1450-1648 ; 1648-1815 ; 1815-1914 ; 1914$ - the present.

## International Relations

International Relations (IR) is a one-semester elective for juniors and seniors who seek an intellectually rigorous course in contemporary international affairs. This course introduces students to the fundamental concepts and theory behind IR and seeks to develop an understanding of the actors in the global community. One class per week requires students to report on contemporary world affairs. By the end of the class, students will be able to examine contemporary events through an IR lens. Past projects include: participation in the WACS competition with other Bay Area high school students, an examination of the different levels of analysis appropriate for making
change in the international state system, exploration of the world arms trade, and an evaluation of past disasters to determine how to understand cause and effect. Students gain the necessary vocabulary to discuss issues with other specialists and evaluate scholarly work in the field. They also gain a greater understanding of the world and America's role in global relations. Readings and discussions examine issues related to politics, economics and the environment in the field of international relations. This class follows a seminar format with a high degree of student participation.

Modern Latin America and the Caribbean
This seminar-style survey course will take students south of the Río Grande, from México to Tierra del Fuego, with detours in the Caribbean as well. We will briefly study pre-Columbian civilizations, as well as the colonial and independence periods, paying particular attention to the experiences of women. Later units will include the transition into the 20th century, with a strong emphasis on post-independence struggles for national, social and economic liberation. As part of learning about the current situation in Latin America and the Caribbean, students will collaboratively engage in projects designed to stimulate community action, and will make their learning visible to the broader community.

## Modern East Asia

Modern East Asia explores the role of the past in shaping the present experience of the three "power-houses" of Northeast Asia: China, Japan, and Korea. Their history will be surveyed with an eye towards explaining current events. The course provides a rich knowledge of national differences as well as the dominant narratives for Asia. The course follows thematic lines to examine each nation and its history in turn. Questions to be answered include: For Korea, why is a country that is ethnically and historically the same divided? What is the extent of the nuclear weapons threat posed by North Korea and how can it be effectively neutralized? How did Japan become the first Asian country to defeat an industrialized European country? How does the military aggression of the first half of the 20th century fit with the commercial aggression and now stagnation of the late 20th century? How did China adopt communism, and to what extent has it moved away from that model? How can we understand China's strengths as it enters its third decade of double-digit growth while a majority of its population still lives on $\$ 2$ a day or less. The class structure includes lectures on historical background, seminars based on readings, and interactive role-playing. Assessments will include a nuclear disarmament negotiation for Korea, an examination of the Tokyo war crimes tribunal, creation of a timeline for Tiananmen Square, and production of a travelogue for a country.

## The Politics and Science of Gender

This one-semester elective surveys the scientific debate about gender and the brain, as well as the ongoing political struggle for gender equality in the context of evolving social and scientific perspectives on gender difference. The course traces the contrasting philosophical perspectives to do with gender difference, as well as current research and emergent theories in the cognitive sciences and challenges to these claims. Excerpted authors include Brizendine, Pinker, Fine, Kenrick, and others. The course also examines issues of gender discrimination and oppression and the rise of women's and LGBTQ movements to counter these forces. Topics include political participation and equality, labor rights, poverty, abortion, Title IX, domestic violence, lesbianism, sexual harassment, pornography, religious tradition, prostitution, and human trafficking. Integral to the course is an analysis of legal remedies (Supreme Court decisions, federal laws, and international agreements) that have been applied to improve the political and economic standing of women and members of the LGBTQ community. Key feminist and LGBTQ voices are explored in journal articles and excerpted readings. These include Wollstonecraft, Steinem, Friedan, Ehrenreich, and others. The class is in a college-level format, with student facilitated seminar discussions on controversial issues. The course includes class activities, video documentaries, and guest speakers. As a final independent research project, students identify and research a current women's rights or gender issue, develop a thesis and argue a perspective. The course includes an option to volunteer at a non-profit or co-lead a campus ACE organization and reflect on the experience and the organization as a final project.

## Russian History

Russian History is a one-semester survey course of Russia, the Soviet Union, and post-Soviet Russia. It begins with an in-depth examination of the era from 1985-2011 (the collapse of the Soviet Union/Gorbachev -
Putin/Medvedev) and then proceeds backwards in time to the18th century and Peter the Great to work forward in chronological order to 1985. The content focuses on themes of continuity and change, reform and revolution, authority and dissent. Lecture, discussion, assigned readings, and student-led seminars comprise the pedagogies of the course, which is enriched with videos, documentaries, and selections from Russian literature, including Journey into the Whirlwind and One Day in the Life of Ivan Denisovich. A rich, comprehensive website enhances the course content. Occasional outside speakers provide insights into the post-Soviet world. Students work independently to research and assess Russian, Soviet, and post-Soviet leadership strategies.

## Mathematics

The goal of the Mathematics Department curriculum is for students to develop computational skill, conceptual understanding, and problem-solving ability. The Middle School curriculum begins with Math 6, which is directed toward mastery of a body of computational skills and laying the foundation for the PreAlgebra and Algebra courses. The Upper School curriculum provides each student with rigorous skill development combined with significant problem-solving experience that together form a strong college preparatory background in mathematics.

Beginning with Algebra I, the Mathematics Department provides both standard college preparatory and honors sections so that students can receive appropriate challenge and support from peers at a similar developmental level. New students are placed in mathematics courses using entrance test results, placement test results, and teacher recommendations. Not all mathematics electives are offered each year. See pages 8 and 9 for the list of courses offered in 2012-2013.

Beginning with the class of 2014, Upper School students will be required to take three years of Upper School math, including Geometry, Algebra II, and one additional year beyond Algebra II. Algebra I will then be considered a Middle School course. For students in the class of 2013, the mathematics requirement will remain three years of upper school math, through the Algebra II level (Algebra I, Geometry, Algebra II).

## Upper School Mathematics Prerequisites (unless otherwise noted)

To enroll in the next standard college preparatory course, a student must earn a passing grade in each semester of her current course.

A student in an honors course who wishes to enroll in the next honors course must earn at least a $B$ average in all assessments (including the final exam) each semester. In addition, the student must obtain department recommendation, which is based on the student's demonstrated interest in and engagement with the in-depth study of mathematics, and on her demonstrated ability to independently manage the rigor and time demands of the honors curriculum.

A student in a standard college preparatory (not honors) course who wishes to move to the honors level course the next year must meet the advancement criteria outlined in the following table, based on the course progression.

| Course Progression | Difference in courses | Requirements to advance |
| :---: | :---: | :---: |
| Algebra 1 to Geometry H Geometry to Algebra II H Algebra II to Intro Calculus BC H | Less structure - no study guides, reviews Less repetition Increased amount of nightly work Tests are a stretch - concepts have to be used in new ways More conceptual, less emphasis on the mechanics | High A (94\%) average on all assessments combined (including final) High A (94\%) for both semesters. Student needs to demonstrate individual interest and initiative by doing additional extensions or enrichment problems Student work needs to clearly show discipline, structure and organization required to succeed in a honors level class Student needs to demonstrate, on individual work and in class discussions, her problem-solving ability and the ability to articulate her solution. Student demonstrates maturity and confidence when facing challenges Department recommendation |


| Algebra II H to Calculus | Higher level of challenge | Demonstrated interest and motivation in |
| :--- | :--- | :--- |
| Theory I H |  |  |
| Intro Calc AB H to Calculus | Faster paced, less repetition |  |
| MC AP conceptual, less emphasis on the | the current course |  |
| Demonstrated ability to grasp new |  |  |
| concepts quickly |  |  |
| mechanics |  | Student needs to be consistently doing A <br> level work on assessments or show <br> steady upward progress resulting in <br> consistent high A work on recent <br> assessments <br> Department recommendation |
|  |  |  |

Math 6
In this course students explore fundamentals of arithmetic, algebra, and geometry with an emphasis on understanding underlying concepts. Students transition from the practice of arithmetic to the study of mathematics, with focus on understanding and communicating solutions to problems rather than merely calculating answers. The course is intended to work with students of various math backgrounds while providing challenge and encouragement to all. Students actively participate in collaborative problem solving and help create an atmosphere in which learning mathematics is interesting and fun. Hands-on activities are used to explore concepts, while mastery of arithmetic skills and estimation is strongly emphasized. In the end, the student should be capable and confident in her abilities to use mathematical concepts and logical reasoning to solve problems.

## Pre-Algebra

In Pre-Algebra, students explore a variety of topics as they transition from concrete to abstract mathematics. Students master arithmetic skills through the study of number theory, ratios, proportions, percents, and probability; extend their knowledge of two- and three-dimensional geometry; and develop a strong understanding of algebraic concepts such as variables, equations, inequalities, and the coordinate plane. In all areas, an emphasis is placed on developing problem-solving skills, understanding the why behind the how, and communicating effectively. Class sessions combine individual and group work, hands-on activities, arithmetic and analytic skill practice, and discussions about alternative problem-solving strategies.

## Algebra I

In this course, students learn the fundamental concepts and skills involved in simplifying expressions and solving equations. This course emphasizes the logical reasoning behind algebraic rules and relationships, in addition to their application. Students study linear and quadratic equations with one and two variables, and they investigate the patterns associated with the graphs of these equations. Creative problem solving is also an important component of this course, and students collaborate to solve interesting and challenging problems using a variety of problem-solving strategies.

## Algebra I Honors

This course covers the same fundamental concepts and skills as the standard college preparatory course, with a similar emphasis on creative problem solving. A faster pace allows a more in-depth study of common topics and the investigation of additional material. Additional skills and topics may include data analysis using graphing calculators and systems of equations in three variables.. Placement in this course is based on performance in Pre-Algebra, scores on the Algebra Readiness Test, and department recommendation.

## Euclidean and Analytic Geometry

This is a comprehensive geometry course with significant emphasis on algebraic processes and problem-solving skills. Multiple approaches to problems are encouraged and routinely investigated. Students investigate lines, polygons, and vectors in two dimensions. Right-triangle trigonometry is introduced, as are circles. Linear motion is explored, leading to the use of parameters to describe that motion and parametric equations as an alternate representation of linear motion. Similarity and congruence are discussed, both from traditional Euclidean and transformational approaches. Linear algebra is introduced as a way to solve systems of equations and represent
transformations. This course will include a unit of computer programming. Prerequisite: successful completion of Algebra I or equivalent.

## Euclidean and Analytic Geometry Honors

This course covers all the material in the Euclidean Geometry course. A faster pace allows a more rigorous study of all topics and the investigation of additional material. Deductive structure, logical reasoning, and proof are topics explored in depth. Students are introduced to a variety of approaches to proof, including deductive proof, proof by contradictions, traditional Euclidean proofs, and coordinate techniques. More extensive work is done with computer programming in the Python language. Placement in this course is based on performance in Algebra I or Algebra I Honors, advancement criteria, and department recommendation.

## Algebra II and Trigonometry

In this course, students solve problems that lead them to expand their view of algebra and geometry to include non-linear motion and non-linear functions. The investigation encompasses trigonometric functions as a result of circular motion and as applied to solving triangles; exponential and logarithmic functions and their applications, including population growth and compound interest; and dot products and matrices as a tool for understanding geometric transformations. The focus of this work is to enable students to create models of physical behavior. Students are also introduced to combinatorics and recursion, leading to work with sequences, series, and the binomial theorem. Prerequisite: successful completion of Euclidean and Analytic Geometry or equivalent.

## Algebra II and Trigonometry Honors

This course covers all the material in the Algebra II course. A faster pace allows a more in-depth study of common topics and the investigation of additional material including explorations of conic sections, polynominals, modular arithmetic, and computer programming. In addition, the students cover complex numbers, polynomials and symmetry, which leads to the fundamental theorem of algebra. More emphasis is placed on proofs and derivations of the concepts and on developing a fluency in the language of mathematics than in the standard college preparatory class. Placement in this course is based on performance in Euclidean and Analytic Geometry or Euclidean and Analytic Geometry Honors, advancement criteria, and department recommendation.

## Precalculus with Applications

This course examines functions, graphs, and numerical analysis with emphasis on algebraic rigor and conceptual connections. Course topics may include sets and logic, compositions and inverses of functions, exponential and logarithmic functions, periodic and trigonometric functions, analytic geometry, sequences and series, mathematical modeling, complex arithmetic, and matrices. For each topic covered, students will relate various real-world applications to core mathematical principles. Upon successful completion of the course, students are eligible to enroll in AP Statistics or Introductory Calculus AB Honors. Prerequisite: successful completion of Algebra II and Trigonometry or equivalent.

## Introductory Calculus AB Honors

In the first semester, we cover pre-calculus topics: exponential growth; decay and compound interest; analytic trigonometry; compositions, inverses, and combinations of functions; power, polynomial and rational functions; and sequences and series. In the second semester, we begin our study of differential calculus, including limits, continuity, the derivative concept, methods of differentiation, curve sketching, and applications to include projectile motion, related rates, and optimization problems. We continue to explore advanced graphing calculator features and skills. Successful students are prepared to enroll in AP Calculus AB. Placement in this course is based on performance in Algebra II and Trigonometry; Algebra II and Trigonometry Honors; or Precalculus with Applications, and department recommendation.

## Introductory Calculus BC Honors

This course covers all the material in the AB course. A faster pace on core topics allows both a more in-depth study of selected topics and the investigation of additional material, such as the logistic function and mathematics of finance. Successful students are prepared to enroll in AP Calculus BC. Placement in this course is based on
performance in Algebra II and Trigonometry, or Algebra II and Trigonometry Honors, advancement criteria, and department recommendation.

## Calculus Theory I Honors

This is the first course of a two-year sequence of honors pre-calculus and calculus. This course covers the same topics as the Introductory Calculus BC Honors course, but goes into more depth and concentrates on theoretical aspects as well as applications of calculus. Problem solving and clear written exposition are also emphasized. Topics include properties of real numbers, functions, limits, continuity, and differentiation. Placement in this course is based on performance in Algebra II and Trigonometry Honors, advancement criteria, and department recommendation.

## AP Calculus AB

This course continues the exploration of differential calculus topics begun in Introductory Calculus, and then turns to integral calculus and differential equations. Differential calculus topics include implicit differentiation, related rates, optimization, and l'Hopital's rule. Integral calculus topics include computing areas and volumes, indefinite and definite integrals, integration techniques, approximating accumulation from tables or graphs of rates of change, antiderivatives, the Fundamental Theorem of Calculus, and applications such as rectilinear motion. Finally, we turn our focus to differential equations and some applications: solving first order differential equations, initial value problems, integral curves, slope fields, Euler's method, exponential growth and decay, cooling and heating models, and predator-prey models. Much time is spent working on actual AP exam problems to help the student understand the connections between topics. Supplementary mock AP exam problems are also used to give students a thorough and comprehensive review and practice before the AP exam. All topics listed in the Advanced Placement syllabus for Calculus AB are covered. Prerequisites: successful completion of Introductory Calculus $A B$ or $B C$ Honors and department recommendation.

## AP Calculus BC

This course covers all the material in the AB course, plus generalizations or extensions of core topics, proofs of theorems, and exploration of topics that are unique to the Advanced Placement syllabus for Calculus BC. Such topics include differentiation and integration of parametric, polar and vector functions; integration by parts and by partial fractions; computation of arc length; differential equation models of cooling and heating in non-constant ambient environment; logistic growth; and infinite series. Much time is spent working on actual AP exam problems to help the student understand the connections between topics. All topics listed in the Advanced Placement syllabus for Calculus BC are covered. Placement in this course is based on performance in Introductory Calculus BC Honors; or Introductory Calculus AB, advancement criteria, and department recommendation.

## AP Calculus Theory II

This course is the second course in a two-year sequence of honors pre-calculus and calculus. The second year covers integration, the fundamental theorem of calculus, infinite series, polar and vector functions, complex functions, and an introduction to differential equations. Compared to the regular BC sequence this course goes into more depth, and concentrates on theoretical aspects as well as applications of calculus. Students will be wellprepared for the BC level AP exam, as well as honors-level college mathematics courses. Placement in this course is based on performance in Calculus Theory I Honors and department recommendation.

## AP Statistics

This full-year course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The four major themes of the course are (1) exploring data, visually and numerically, to discover and describe patterns; (2) designing a survey or experiment, collecting data and controlling for sources of bias; (3) creating and using probabilistic models to understand data distributions; and (4) interpreting results, using hypothesis testing, confidence intervals, or P-values to draw conclusions. The course uses both the graphing calculator and computer as tools for the analysis of real-world data sets. Students also participate in group projects, collecting, analyzing, and presenting their own data. Prerequisites: successful completion of Precalculus with Applications; or concurrent registration in Introductory Calculus AB or BC Honors; or senior
standing and successful completion of Algebra II, Trigonometry, and Modeling or equivalent and department recommendation.

Advanced Topics in Mathematics: Linear Algebra
This semester-long, college-level course explores the mathematics of high-dimensional space. We will study vector spaces, bases, systems of linear equations, dot product, projection, determinants, and eigenvalues. Time permitting, symmetric matrices and least squares approximation will also be introduced. This course is comparable to a first-semester college linear algebra course and merits consideration for students interested in taking multi-variable calculus later in their careers. Prerequisite: successful completion of AP Calculus or equivalent (with an A- or better in AP Calculus $A B$ or a $B$ or better in $A P$ Calculus BC or AP Calculus Theory II).

Advanced Topics in Mathematics: Mathematical Modeling
This semester-long, college-level course explores the art and science of mathematical modeling. It fosters problem formulation and problem solving skills, and it gives the student practice in communicating the results of quantitative analyses. Working both in groups and individually, students create models of real-world situations and textbook problems. Students gain significant experience in using spreadsheets to build mathematical models and perform analyses. Data analysis has become and essential skill in many areas and students will also be exposed to different techniques for analyzing and presenting data. Students work on several small modeling projects and one or two major projects. This course is good training for those who will pursue further study or careers in quantitative analysis, such as the sciences, social sciences, engineering, or mathematics. Prerequisite: successful completion or concurrent enrollment in an AP level Calculus course and department recommendation.

## Advanced Topics in Mathematics: Number Theory

This semester-long, college-level course investigates properties of the natural numbers. Topics include the Euclidean algorithm, Diophantine equations, quadratic reciprocity, modular arithmetic, continued fractions, applications to cryptography, and the density of primes. Emphasis will be placed on logical reasoning, writing clear arguments as well as reading more advanced texts. Prerequisite: successful completion of AP Calculus or equivalent (with an $A$ - or better in AP Calculus $A B$ or a $B$ or better in AP Calculus BC or AP Calculus Theory II).

Advanced Topics in Mathematics: Probability
This semester-long, college-level course introduces the theory and applications of probability. It fosters problem formulation and problem solving skills and informs the student's thinking about uncertainty. Topics include combinatorial analysis, conditioning, discrete and continuous distributions, and joint distributions. As we learn new concepts, we explore their application in textbook problems and their connection to real-world phenomena. We also discuss related topics from behavioral psychology, such as the heuristics and biases that are found when people make judgments of uncertainty. This course is intended for those advanced students who want an intensive course in probability theory and its applications. It is good training for those students who will pursue further study or careers in quantitative analysis, such as the sciences, social sciences, engineering, or mathematics. Prerequisites: successful completion of $A P$ Calculus or equivalent (with an $A$ - or better in AP Calculus $A B$ or a $B$ or better in $A P$ Calculus $B C$ or $A P$ Calculus Theory II) or concurrent enrollment in AP Calculus $B C$ or $A P$ Calculus Theory II, and department recommendation.

## Modern and Classical Languages

Our language classes provide an atmosphere where learning a second language is a positive and rewarding experience. Beyond the goal of mastery of the material, our classes afford students the opportunity to develop critical thinking skills and effective learning strategies that facilitate secondlanguage acquisition and use of the language outside of the school setting. MCL courses foster an appreciation for the benefits and joys of the study of a second language. Students develop skills in reading, writing, listening, and speaking as they gain an understanding of, appreciation for, and sensitivity to the culture of the target language. In the modern languages there is an additional emphasis on communicative proficiency so that students achieve reasonable fluency by the end of level III. At every level we incorporate geography, history, literature, the arts, scientific contributions and current events as they relate to the language and culture taught. Technology, including the digital language lab and Smartboard, enhances language acquisition both in and out of the classroom.

Students are placed in language classes according to their ability, maturity, experience, and performance, and are continually monitored for correct placement. As such, before moving up to the next level, a student may be asked to strengthen her foundation in accordance with the recommendation of her instructor. Level IV and Advanced Placement courses require grades of $B$ or better and teacher recommendation. Beginning Middle School students follow a two-year sequence in the sixth and seventh grades. Upon successful completion of Levels IA and IB, students are typically placed in Level II.

Please note that not all courses may be offered every year. See pages 7, 8 and 9 for courses offered in 2012-2013.

## Chinese

Chinese 1A
This Middle School course will introduce students to Mandarin Chinese, the official language of China and Taiwan. Students will begin to gain proficiency in the four basic skills of listening, speaking, reading and writing the Chinese language. In addition, they will gain an understanding of Chinese culture. They will learn to use basic vocabulary and sentence structures in everyday situations and to create and respond to simple statements and questions. Students will be able to identify a number of character components and high-frequency characters, and will begin to develop the skills necessary to read instructions and directions. Additionally, students will practice writing sentences and short phrases on various topics such as self-introduction, greetings, nationality, family members, numbers, times and dates, etc. Open to incoming sixth graders who have little or no previous experience in Mandarin.

## Chinese 1B

A continuation of Chinese IA, Chinese IB builds on the skills acquired during the previous year. Listening and speaking skills continue to be developed, with even more emphasis placed on the tones. Students continue to improve communication skills through a variety of communicative activities and interactive games. Vocabulary is expanded and more complex sentence structures are acquired through thematic units centered around daily life. The functions that students will be able to perform after successfully completing this course include introducing oneself and family, asking for addresses and phone numbers, making and responding to a plan, handling various phone situations, describing one's daily schedule, and ordering food at a restaurant. Upon successful completion of this course, students will continue on to Chinese II. Prerequisite: Chinese IA or enrollment based on placement test and interview.

## Chinese I

Chinese I covers in one year the material presented in the two-year Middle School sequence of IA and IB. This course will introduce students to Mandarin Chinese, the official language of China and Taiwan. Students will develop basic listening, speaking, reading, and writing abilities, and understand the customs and life of modern

China. In speaking, students will develop accurate pronunciation through the Pinyin system and will develop good communication skills in dialogues and be able to describe daily activities using a broad basic vocabulary. Culture is integrated into the curriculum, and includes both modern life as well as traditional arts and crafts. Students will learn the structure and pattern of Chinese characters and be able to write short sentences. In addition, students will use the Pinyin system to compose dialogues and penpal letters on a computer. Open to Upper School or eighth grade students with little or no previous experience in Chinese.

## Chinese II

In Level II, students will continue to gain communicative competence in the four skill areas of listening, speaking, reading and writing. Students will be able to understand sentence-length expressions and will be able to maintain face-to-face conversations, performing such tasks as initiating and responding to simple statements and questions, ordering a meal, asking for directions and making purchases. Although the focus of reading will be primarily for basic personal and social needs, students will have the opportunity to read selections of authentic materials and will be able to decode elements from texts such as signs, public announcements, and short instructions dealing with public life. They will be able to meet limited but practical writing needs such as writing short messages, postcards, and taking telephone messages. Students will become increasingly familiar with the geography and cultures of China and Taiwan as they study traditions, festivals and history. Prerequisite: Chinese I or equivalent.

Chinese III
A continuation of Chinese II, Chinese III builds learners' abilities in the four skills of listening, speaking, reading, and writing, with special emphasis on the integration of culture. In addition to consolidating knowledge acquired from the previous two years, students will learn more sophisticated vocabulary and grammatical structures with thematic units centered around more abstract topics; e.g., receiving guests and expressing hospitality, talking about possibility and feasibility, as well as current societal phenomena in the Chinese community. Furthermore, to prepare students for advanced Chinese study, formal expressions, common Chinese idioms, media literacy such as newspaper and internet news/magazine articles will be interwoven into the course. Successful completion of this course fulfills the language requirement for graduation. Upon recommendation of the instructor, most students continue on to Chinese IV. Prerequisite: Chinese II or equivalent.

Chinese IV
This intermediate level course is a continuation of Chinese III, and will help students continue to develop their communicative competence in the four skills of listening, speaking, reading and writing, with special emphasis on the integration of culture. In this course, students are required to comprehend and produce paragraph-level Chinese with high accuracy and fluency. They will expand vocabulary and increase their understanding of grammatical structures through the exploration of various topics reflecting multiple aspects of Chinese society and culture, including travel plans, employment, and a comparison of education systems. In addition, students will have the opportunity to learn more about Chinese culture. By the end of the course, the topics students will be able to talk about will not only involve personal information, but social issues as well. Students will become increasingly familiar with the geography and cultures of China and Taiwan as they study traditions, festivals and history. Prerequisite: Chinese III or equivalent.

Advanced Topics in Chinese: Language and Literature
A college-level course, AT Chinese enables students to further refine and expand linguistic skills through the exploration of topics that reflect multiple aspects of Chinese society. Through a wide array of authentic sources in various linguistic registers and expressive styles, students will explore both contemporary and historical Chinese culture, while greatly expanding their mastery of vocabulary, idiomatic expressions, grammatical structures, and written characters. Students are expected to read and write on a weekly basis, and oral skills are emphasized through class discussion, providing opportunities for students to articulate and debate their understanding of topics that include gender equality, environmental protection, and Chinese history and literature. Literary texts include short stories from noted writers Lu Xun and Zhu Ziqing. Students may choose between simplified and traditional characters. Prerequisite: B or higher in Chinese IV or equivalent and teacher recommendation.

## French

The French curriculum draws from the National Standards for Foreign Language in the 21st Century to maximize learning opportunities for our students in the following areas: communication, cultures, connections to other disciplines, comparisons (both linguistic and cultural) and communities where the target language is used. An emphasis is placed on the cultural diversity of the Francophone world, which extends far beyond the borders of France to almost all continents, preparing students to function in an increasingly global world.

French IA
French IA is an introduction to the French language, Francophone culture, and language-learning study strategies. Whether students are starting from scratch with no previous exposure to French, or have some background, this course provides a strong grounding in the fundamental structures of the language. Students work independently, in pairs, and in groups, as they learn how to introduce themselves, describe themselves and their family, talk about their classes at school, express their likes and dislikes, tell what activities and sports they do, and more. Vocabulary, grammar, and culture are introduced through a wide variety of activities, games, videos, projects, and the language lab in order to develop their proficiency in interpersonal, interpretive, and presentational communication. An emphasis is placed on the cultural diversity of the Francophone world. Students complete chapters one through five in the textbook Bien Dit. Open to incoming sixth graders who have little or no previous experience in French.

## French IB

A continuation of French IA, French IB builds on the skills acquired during the previous year. Students continue to develop their proficiency in interpersonal, interpretive, and presentational communication through a variety of lively oral activities and games, as well as authentic texts and primary sources, including L'Histoire de Babar. Students learn how to communicate about many aspects of daily life, and how to relate past events. Grammar study is integral to the development of accurate communication in both speaking and writing. Students complete chapters six through ten in the textbook Bien Dit. Upon completion of this course, students will be recommended for either French I or French II, depending on their level of proficiency and maturity. Prerequisite: satisfactory completion of French IA or enrollment based on placement test and interview.

## French I

As with French IA and IB, French I provides an introduction to the French language, Francophone culture, and language-learning study strategies. It allows students to develop in one year the proficiency achieved at the end of the two-year Middle School sequence of IA and IB. Whether students are starting from scratch with no previous exposure to French, or have some background, this course provides a strong grounding in the fundamental structures of the language. Through a wide variety of activities, games, and multimedia, students develop their proficiency in interpersonal, interpretive, and presentational communication. They learn how to communicate about themselves, their family, their environment, and many other aspects of daily life. They also become familiar with the culture and geography of Francophone countries and France's relationship to them. Students also read L'Histoire de Babar and create their own short stories in French. After successful completion, students continue on to French II. Open to Upper School students or eighth graders with little or no previous experience in French. Middle School students who have completed French IA and IB but who need further review may be recommended for French I.

## French II

Students continue to develop their proficiency in interpersonal, interpretive, and presentational communication, expanding both their vocabulary repertoire and their mastery of grammatical concepts, with special attention to verbs and verb tenses. At the same time, they continue to deepen their understanding of the concept of culture through comparisons of the Francophone cultures studied and their own through a variety of authentic and primary sources. Films are used to explore various dimensions of the culture and history of the regions studied. In the spring, each student creates a film about her or someone else's childhood as a way to demonstrate mastery of imperfect and passé composé verb tenses in context. At the end of level II students should be able to speak
and write about friends and family, home, school, daily life, interests, personal opinions and preferences in present, past, future and conditional tenses. Prerequisite: French I or equivalent

French III
At this level, students are increasingly able to make connections with other disciplines, and develop further insight into the nature of language and culture. Students expand their vocabulary repertoire and consolidate the fundamentals of French grammar before being introduced to more complex tenses and structures. Films and authentic readings taken from a variety of French language publications give students a chance to deal with materials aimed at the French-speaking general public; they also read excerpts from Le Petit Prince in the spring. Students are given the opportunity to develop their communication skills through various activities in the language lab and during class discussion. Successful completion of this course fulfills the language requirement for graduation, although students generally continue on to French IV and are encouraged to do so with instructor approval. Prerequisite: French II or equivalent.

French IV
French IV is an advanced-level course that is an excellent prelude to the AP language level. Students hone their proficiency skills in all areas. Work in advanced grammar and vocabulary allows for more advanced written and oral communication; writing receives special emphasis at this level. Students learn how to read and analyze authentic texts from literature, history, and current events. They continue to connect with other disciplines and acquire new knowledge. Students broaden their vision of the French-speaking world and become more familiar with issues of immigration and identity through the reading of Un Papillon dans la Cité. Projects and class discussions touch on a variety of other topics such as Media and Technology, Science, and Travel. Upon completion of this course, students with a grade of B or higher are permitted to enroll in AP French Language, at the end of which they will be prepared to take the AP French Language and Culture exam. Prerequisite: B or higher in French III or equivalent and teacher recommendation.

## AP French Language

This course allows students the opportunity to study French at the college level. They review and deepen their understanding of the nuances of French grammar. Emphasis is also placed on vocabulary acquisition so that students can express themselves with fluency and more sophistication. By this level, students are routinely making connections to other disciplines, as well as linguistic and cultural comparisons with their own language and culture. Readings serve as a springboard for discussion of the following themes, as part of the new AP Language and Culture framework: Personal and Public Identities; Contemporary Life; Beauty and Aesthetics; Families and Communities; Science and Technology; and Global Challenges. Extensive training in the organization and writing of essays is emphasized, and students keep a written journal. Listening skills receive special attention; daily group discussions as well as regular practice in the language lab enable students to strengthen their proficiency and prepare for the AP exam in May. Prerequisite: B or higher in French IV or equivalent and teacher recommendation.

## Advanced Topics in French: French Seminar

The advanced seminar is designed for those students who have completed AP French Language. Its objective is to raise awareness of French literary masterpieces and then apply their themes to current events through media. Students also deepen their understanding of contemporary French society through its history and culture. They may study the role of women in Francophone literature, or the issue of dictatorship and human rights throughout the 20th century, for example. Other topics for exploration include aspects of French art and cinema. Films, guest speakers, and cultural readings and presentations will enhance the study of a diverse group of countries and cultures. Students will experience a full day immersion at the Lycée Français La Pérouse in San Francisco during the second semester. They also keep up with current world events by reading newspapers and magazines, as well as viewing TV5 Monde. Prerequisites: AP French Language and teacher recommendation.

## Latin

Language Foundations Task Force Statement on Latin at Castilleja School:
The Language Task Force was created in the spring of 2009 to create a vision for language learning at Castilleja that meets the needs of $21^{\text {st }}$ century students and supports the school's mission: To prepare our students for the wider world, we infuse our challenging college preparatory program with a global curriculum the fosters awareness, compassion, and engagement with issues beyond Castilleja. (Castilleja School's Mission Statement) The report was shared widely in the spring of 2010 with Trustees, Faculty, Staff, Parents, and Students.

As per Task Force recommendations, an interdisciplinary Classics Thread is being developed for sixth grade that incorporates Greek and Latin language, history, and archaeology into English and History. Sixth graders are currently examining the following Essential Questions:

- What is the relationship between antiquity and modernity?
- Where do we find the old in the new? (i.e., where do we see Ancient Rome and Greece in our world today?)
- What is the relevance of the Classics?

Studies of Greece and Rome will be further integrated into other classes as it continues to develop over the next two years. In this way, all middle school Castilleja students benefit from some foundation in classical language and history.

The school stands by its current commitment to students currently enrolled in Latin in the following way. Students currently enrolled in Latin II and up will be able to continue to the AP level in separate or combined classes.

To align ourselves with the school's Strategic Plan of preparing our students "for the wider world" and infusing "our challenging college preparatory curriculum with a global program that fosters awareness, compassion, and engagement with issues beyond Castilleja," the department of Modern and Classical Languages made the following recommendation, which has been approved by the Academic Administration:

Beginning with the class of 2016, students will fulfill their language requirement through study of a modern language so that students develop competency in a spoken language by the time they graduate. We also recommend that the school continue to explore various ways to offer immersion experience to Middle and Upper School students (including expanding the Global Investigator trips) in destinations where each of the modern languages offered is spoken so that there is a broader connection to language study in these travel experiences.

At the same time, the department reaffirms the important role of classical studies at Castilleja, particularly in light of our development of interdisciplinary studies, and thus will expand its US elective offerings to include Latin and Greek for students who have completed their language requirement.

Latin III
This course continues the reading of Latin authors, including Cicero, Horace, Catullus and Ovid. Students will also systematically review Latin grammar. In the readings, students will pay attention to rhetoric and poetics. In addition to readings in Latin, there will be selections from English authors influenced by the Classical tradition. Successful completion of this course fulfills the language requirement for graduation. Upon recommendation of the instructor, most students are encouraged to continue on to Latin IV. Prerequisite: Latin II or equivalent.

## Latin IV

This is a Latin literature course that allows students to improve their fluency and competency in reading, understanding, translating, and writing about authentic Latin poetry and prose. Students develop an understanding of the cultural, social and political background of the authors studied: Livy, Cicero, and Vergil. Literature about and by women of the ancient world is given special emphasis. This course prepares students for the SAT Subject Test in Latin and serves as an important preparation for the Advanced Placement program in Latin. Prerequisite: B or higher in Latin III and teacher recommendation.


#### Abstract

AP Latin The focus of this course is an in-depth reading and critical analysis of Caesar's De Bello Gallico and Vergil's Aeneid. Both of these work have had continuing influence on literature, art and history. The grammatical concepts, vocabulary, meter, figures of speech, and rhetorical devices essential for reading Latin are studied. Extensive work is done on reading comprehension, sight translation, and writing critical essays. Students become familiar with the cultural, social and political history of the Late Roman Republic and the Augustan Age. By the completion of this course, students are prepared to take the AP exam in Latin. Prerequisite: B or higher in Latin IV and teacher recommendation.


For Electives in Greek and Latin, see "Electives" at the end of the MCL section.

## Spanish

## Spanish IA

This Middle School course introduces students to the four skills of listening, speaking, reading, and writing. Special emphasis is given to speaking the language and to encouraging students to use Spanish in and out of the classroom whenever possible. Vocabulary and grammar are introduced through a wide variety of activities, games, songs, projects, videos and the language lab. Students learn about aspects of Hispanic culture by preparing food, learning about Hispanic holidays, listening to music, and doing individual projects. Open to incoming sixth graders who have little or no previous experience with Spanish.

## Spanish IB

A continuation of Spanish IA, this course places further emphasis on developing the four skills of listening, speaking, reading, and writing. Students continue to expand their vocabulary and learn more complex grammar and sentence structures. Independent projects challenge students to demonstrate what they have learned through group work and class activities. Students continue to learn about Hispanic culture through video, cuisine, and projects. They also become familiar with the geography of Central and South America. Upon successful completion of this course, students will continue on to Spanish II. Prerequisite: Spanish IA or enrollment based on placement test and interview.

## Spanish I

This course covers in one year the material presented in the Middle School sequence of Spanish IA and IB. Students begin to develop their listening, speaking, reading, and writing skills in Spanish. Vocabulary and grammar are introduced through oral activities and written exercises, games, and projects. Students will also have opportunities to explore aspects of Hispanic culture through independent projects. After successful completion of this course, students continue on to Spanish II. Open to Upper School students or eighth graders with little or no previous experience in Spanish. Middle School students who have completed Spanish IA and IB but who need further review may be recommended for Spanish I.

## Spanish II

In Level II, students study all of the basic grammatical structures and verb tenses. They continue to expand their vocabulary as well as their listening and speaking skills through readings, skits, games, and the use of authentic materials. Oral exercises in the classroom as well as in the language lab offer opportunities for students to gain fluency as they work towards developing accurate pronunciation. Using their laptop computers, students improve their writing through a variety of group and individual exercises. Students become increasingly familiar with the geography of Spain and Latin America as well as with aspects of Hispanic history and culture. Prerequisite: Spanish I or equivalent.

## Spanish III

Level III consolidates mastery of topics covered in previous years of study, as well as introduces the remaining core grammatical topics in the Spanish language, placing particular emphasis on communication skills, both oral
and written. Throughout the year students also refine their reading comprehension, increase their vocabulary and explore a variety of cultural topics throughout the Hispanic world. Cultural topics studied include historically significant Spanish-speaking figures and the wide variety of cuisines found throughout Spain and Latin America. Successful completion of Spanish III fulfills the language requirement for graduation. Upon recommendation of the instructor, most students are encouraged to continue on to Spanish IV. Prerequisite: Spanish II or equivalent.

Spanish IV
This literature-based course allows Upper School students the opportunity to improve their fluency and competency in writing and speaking while enjoying Spanish, Latin American, and Caribbean drama, fiction, poetry, and history. Among the authors studied are Sandra Cisneros and Antonio Buera Vallejo. Students also view films that serve to stimulate discussion of historical and literary themes, and create a few, short films themselves. Finally, students in this class engage in project-based learning to explore social justice topics. This is particularly relevant for students who will be participating in the Global Investigator Trip to Guatemala during junior year. Prerequisite: B or higher in Spanish III or equivalent and teacher recommendation.

## AP Spanish Language

All four language skills (listening, speaking, reading, and writing) are equally emphasized in this course, which builds and expands on previously acquired abilities. In addition to writing essays, students work regularly in class and in the language lab to improve their accent and fluency. Major grammatical points are reviewed and vocabulary is expanded so that the student may express herself with greater precision and nuance. A full-length literary work and a variety of short stories by Spanish and Latin American authors are read and analyzed. Conducted entirely in Spanish, this course includes daily group discussion and brief oral presentations on current events. By the completion of the course, students are prepared to take the AP exam in Spanish Language. Prerequisite: B or higher in Spanish IV and teacher recommendation.

## AP Spanish Literature \& Culture

The redesigned 2012-2013 AP Spanish Literature \& Culture course introduces students to the formal study of a representative body of texts from Peninsular Spanish, Latin American, and U.S. Hispanic literature. The overarching aims of the course are to provide students with ongoing and varied opportunities to further their proficiencies across the full range of language skills -- with special attention to critical reading and analytical writing -- and to encourage them to reflect on the many voices and cultures included in a rich and diverse body of literature in Spanish. The course aims to help students progress beyond reading comprehension to read with critical, historical and literary sensitivity. Emphasis is placed on approaching the study of literature through global, historical and contemporary cultural contexts. Successful completion of the course enables students to take the AP exam in Spanish Literature \& Culture. Prerequisite: AP Spanish Language and teacher recommendation.

## Advanced Topics: Spanish Seminar

Students in this course delve deeply into the literature and history of the Hispanic world. The curriculum includes "classics" as well as recent bestsellers. Participants in the seminar provide the class with background information for each author on a rotating basis, and most class discussions are led by the students. Students are challenged to pursue their individualized interests and passions through individual and collaborative projects, with a particular emphasis on film studies and social justice issues. Prerequisite: $B$ or higher in $A P$ Spanish Language or $A P$ Spanish Literature and teacher recommendation.

## MCL Electives

## Ancient Greek and Ancient Greeks

This course is a full-year elective open to students who have completed level III of Chinese, French, Latin, or Spanish. Students will complete an accelerated introduction to Attic Greek, covering the essential forms of verbs in the indicative, subjunctive, and optative and all noun forms, as well as participles and infinitives. By the end of the year, students will have studied the majority of our text, An Introduction to Greek by Crosby and Schaeffer. We will also study Fifth-Century Athens through the politics, rhetoric, poetry, drama, and philosophy of that age,
examining the growth of democracy under Pericles and Ephialtes, the causes and course of the Peloponnesian War, and the life and teachings of Socrates. Much of the reading for this course will be from primary sources and in Greek when possible. Prerequisite: successful completion of Level III Chinese, French, Latin or Spanish.

## Italian Culture and Language

This course is a full-year elective open to students who have completed level III of Chinese, French, Latin or Spanish. Italian language instruction will be structured in order for students to gain an introductory understanding of the rich scope of Italian culture, including aspects of its history, food, music, art, and folklore. Students will learn basic grammatical structures, develop conversational listening and speaking skills, as well as beginning reading and writing capabilities. Historic and contemporary materials, including films, magazines, music, etc., will be used extensively to reinforce the experience of acquiring another language and to provide students with insights into the Italian culture. Prerequisite: successful completion of Level III of Chinese, French, Latin or Spanish.

Rome: Advanced Introduction to Latin and the Augustan Age
This course is a full-year elective open to students who have completed level III of Chinese, French, or Spanish with little or no background in Latin. Students will complete an accelerated introduction to the basic grammar and syntax of Latin and move to an examination of the Augustan Age. In this period of Roman recreation, Augustus oversaw the development of a new Roman state after the period of civil wars at the end of the Republic. His efforts to develop a new Rome can be seen in literature, architecture, and government policies, including social legislation. We will develop an understanding of this important period in Roman history and its relationship to the modern world. Much of the reading for this course will be from primary sources and in Latin when possible. Prerequisite: successful completion of Level III Chinese, French, or Spanish.

## Science

The Science Department aims to cultivate students' interest in science while providing them with a solid knowledge of fundamental scientific principles. We emphasize the teaching of analytical thought, problem solving, and deductive reasoning, both on an individual basis and in group settings. At the same time, the dynamic interaction among students and faculty, and our many stimulating labs and demonstrations, add excitement to our curriculum. In all of its classes, the science department strives to engender and extend an interest in science while simultaneously providing students with an understanding of fundamental scientific principles and modes of thinking, fostering both scientifically literate citizens and future scientists.

Upper School Science Prerequisites (unless otherwise noted)
To enroll in the next standard college preparatory course, a student must earn a passing grade in each semester of her current course.

A student in an honors course who wishes to enroll in the next honors course must earn at least a B each semester and at least a B on each semester exam. In addition, the student must obtain department recommendation, which is based on the student's demonstrated interest in and engagement with the in-depth study of science, and on her demonstrated ability to independently manage the rigor and time demands of the honors curriculum.

A student in a standard college preparatory (not honors) course who wishes to move to the honors level course the next year must earn a strong $A$ each semester and at least an A- on each semester exam. In addition, the student must obtain department recommendation, which is based on the student's demonstrated interest in the indepth study of science, and work habits that indicate that she can independently manage the rigor and time demands of the honors curriculum.

## Middle School Courses

## Science 6

The sixth grade science course is based on a discovery, hands-on approach to learning. The purpose of the course is to introduce students to scientific skills through experimentation, observations, small group projects, and cooperative learning. Students learn to explore the world around them using Earth science topics such as cartography, geological time, plate tectonics, natural resources, alternative energy, air quality, and climate.

## Science 7

Seventh grade science is an introduction to life sciences with a focus on human anatomy and physiology, Mendelian genetics, and ecology. The study of the human body includes the skeletal, muscular, nervous, circulatory, reproductive, respiratory, and digestive systems. Other topics such as cellular structure and evolution will also be explored. Students will engage in laboratory experiences, simulations, exploratory activities, and group learning.

## Science 8

The course for eighth graders is a lab-oriented introduction to the atomic model of matter. Through their own investigations in the lab, students are introduced to many topics, including but not limited to characteristic properties, conservation of mass, physical and chemical changes. They are asked to think about how an "atomic" concept of matter would or would not account for the results they obtain. During the course of the year, students will engage in activities, experiments, laboratory exercises, and design challenges. Students will culminate the year with a self designed inquiry project based on what they have explored through the course of the year. This inquiry project will be shared with the school community.

## Upper School Courses

Change in Science Curriculum
Beginning in the fall of 2012, Castilleja will offer Advanced Topics in Physics, Chemistry and Biology. These courses replace AP offerings in each of the disciplines.

## Basic Lab Sciences

These courses are normally taken sequentially in the following order: Physics, Chemistry, Biology.
A science/math intensive program is available for students who would both qualify for and commit to focusing on science and math during their four years of upper school. Students in this program may take two science classes simultaneously in their junior and/or senior years, be mentored to participate in individual science research programs, and be placed in research internships.

## Physics

This hands-on introductory course covers the fundamental principles of three major areas of physics: electricity, mechanics, and light. The course emphasizes conceptual understanding above mathematical computation, although the latter is also present. Concepts are first developed through direct experimentation and class discussions; later, students use equations as ways to guide their thinking while they solve increasingly challenging problems. Prerequisite: completion of Algebra I.

## Physics Honors

This course follows the same basic outline as Physics, but with greater emphasis on mathematical challenge and rigor. The course moves at a quicker pace, with time devoted to more subtle and advanced phenomena. Because of this increased pace, students are expected to work more independently both in class and at home.
Prerequisite: teacher recommendation; eligibility for Euclidean and Analytic Geometry Honors, Algebra II or above.

Chemistry
This course provides students with a dynamic and conceptual view of matter. Important basic concepts are developed at an elementary level to give students a clear foundation in chemistry. Emphasis is placed on mastery of the material through the use of modeling and by connecting these concepts to everyday life. In addition to learning to provide detailed written explanations, students also solve mathematical problems using dimensional analysis. In the laboratory, extensive use of computer-interfaced data-collecting probes (e.g., for temperature and pressure) and graphical analysis software allows students to collect evidence with which to derive or verify theories introduced in lecture. Some of the topics covered include atomic theory, chemical reactions, kinetic theory, gas laws, bonding, solutions, acids and bases, and electrochemistry. Prerequisites: completion of, or current enrollment in, Algebra II and completion of Physics.

Chemistry Honors
With a greater emphasis placed on mathematical and quantitative interpretation, the same topics as in Chemistry are covered. Equilibrium, thermodynamics, and kinetics are introduced as well as organic chemistry and nuclear chemistry, as time permits. Lab work complements current coursework, and students are taught how to write formal lab reports. Computer-interfaced data-collecting probes (temperature, pressure) and graphical analysis software are used extensively. Prerequisites: teacher recommendation; completion of, current enrollment in, or eligibility for Algebra II Honors; semester grades of A in Physics, or semester grades of $B$ or higher in Physics Honors.

## Biology

This course assumes an understanding of the principles of physics and chemistry and develops an understanding of the principles that govern structure and function in living things. Major topics covered include biochemistry and cell biology, classical and molecular genetics, principles of evolution, classification and a survey of the diversity of life, plant biology, and principles of ecology. Students will practice scientific skills using biological data, including
observation vs. interpretation, reasoning from evidence, graphical presentation, and scientific writing. Prerequisites: completion of Physics and Chemistry.

## Biology Honors

Students in Biology Honors are expected to handle more abstract material and to work more independently than students in Biology. Students are asked to bring together concepts from multiple aspects of the course to demonstrate a complete understanding of the material. Topics covered are similar to those in Biology, but some are covered in more depth and assume a more sophisticated understanding of Chemistry. Prerequisites: teacher recommendation; completion of Physics; semester grades of $B$ or higher in Chemistry Honors, or semester grades of $A$ in Chemistry.

## Advanced Topics Courses

AT science courses are second-year, college-level courses requiring a substantial commitment from the student. They are offered each year if there is sufficient student interest.

## Advanced Topics in Biology: Genes, Development and Evolution

This second-year advanced biology course offers students a thematic approach to understanding biology. Themes such as how gene regulation and expression influence a phenotype and how natural selection acts on phenotypes will be explored to tie concepts together. While students will engage in a variety of laboratory experiments throughout the year, each semester will end with an extended experimental investigation. The first semester's experimental period is a pre-set, teacher-guided laboratory investigation. Second semester's experimental period will be student created and executed. Prerequisites: Teacher recommendation; semester grades of B or higher in Chemistry Honors, or A in Chemistry; semester grades of B or higher in Biology Honors, or $A$ in Biology.

Advanced Topics in Chemistry: Equilibrium, Kinetics and Thermodynamics
This course is designed for students who are interested in exploring in greater depth some of the topics introduced in the first-year course in chemistry as well as those topics that are traditionally part of a first-year college chemistry course such as basic concepts of thermodynamics, electrochemistry, and equilibria involving acid-base and precipitation reactions. The course will be organized around a team-based learning method where teams of 4-5 students will work together to discuss and construct an understanding of concepts. An on-line database of lectures, demonstrations, simulations and modeling software will serve as the "textbook" for the course. Students will be taught scientific organizational skills to help them think clearly and logically. Special emphasis is placed on developing proper laboratory techniques and on writing formal lab reports. Students will need to be familiar with and have facility with simple atomic structure, the rules for nomenclature, how to complete simple reaction equations, do stoichiometric calculations, and be familiar with gas laws. Prerequisites: teacher recommendation; semester grades of $B+$ or higher in Chemistry Honors or A in Chemistry.

## Advanced topics in Physics: Modern Mechanics

Modern Mechanics focuses on the atomic structure of matter and interactions between material objects. The course emphasizes the wide applicability of three fundamental principles: the Momentum Principle, the Energy Principle, and the Angular Momentum Principle. We can use these principles to explain and predict the behavior of systems as different as molecules and galaxies. Contemporary physics topics (relativity, quantum mechanics, statistical mechanics) are integrated throughout the curriculum. In addition to traditional laboratory techniques, students will use computational modeling (through the vPython programming language) as a method for analyzing physical systems. Prerequisites: Enrollment in or completion of AP Calculus AB, AP Calculus BC, or Calculus Theory II; semester grades of A in Physics, or semester grades of B+ or higher in Physics Honors; teacher recommendation.

## Electives

Science electives are one-semester courses intended for juniors and seniors. At least one elective is offered each semester so that students may complete a fourth year of science without enrolling in an AT course. Seniors not
taking a science AT course have priority in enrollment. Electives offered will vary from year to year, depending on available staffing and student interest. See pages 8 and 9 for courses offered in 2012-2013.

## The Biology and Economics of Cancer

This one-semester course will help answer the questions: What is cancer? What causes cancer? How can we prevent cancer? How can we treat cancer? What are the obstacles - medical, economic, political - to "curing" cancer? We will cover topics such as the molecular basis of tumor formation, the physiological results of tumor formation, the public health implications of epidemiological studies, and the economics behind the development of cancer treatments. Students will use diverse resources to construct their knowledge, including lecture, online sources, and popular science texts, as well as primary sources such as research journal articles and epidemiological data. Course work will include independent research, group projects, tests, quizzes, presentations, and homework. Prerequisites: Biology or Biology Honors

## Biotechnology and Bioethics

This course will increase students' understanding of the many biotechniques being applied to the fields of medicine, agriculture, forensics, and pharmacology. In the lab component of this course, we will learn about and perform DNA fingerprinting, bacterial transformations and polymerase chain reactions (PCR). Other laboratories will be included as time permits. In the bioethical component of this course, we will consider how the use of the above-mentioned lab techniques lead to the many ethical debates society presently faces. We will discuss bioethical issues involving cloning, rights to "genomic privacy," the use of DNA fingerprinting in establishing guilt or innocence, and global/environmental impact of engineering genetically modified organisms (GMOs).
Prerequisite: completion of the first semester of Biology or Biology Honors.

## Human Physiology

This one-semester elective is an in-depth investigation of the human body. Beginning with the functional organization of the body, we explore the various organ systems, emphasizing their interdependencies. This course briefly reviews the biology of each system before turning to a detailed look at the complex workings of the human body; systems to be emphasized may vary from year to year. From the genetic contribution of mitochondria to the complex workings of the cerebral cortex, we delve into human anatomy. Investigation of the human body may take place through labs, field trips, text and supplemental readings, and independent research. In addition to labs, homework, and presentations, course work includes quizzes, tests, and a group research project. Prerequisites: Chemistry or Chemistry Honors and Biology or Biology Honors.

## Introduction to Organic Chemistry and Biochemistry

This one-semester elective focuses on the chemistry of carbon-containing compounds. The first part of the course covers the chemistry of simple organic molecules, their structure and reactivity, while the second part is devoted to the study of biochemical molecules. Consisting primarily of lectures, PowerPoint presentations, and Webaccessed simulations, this course does not have a lab component. Instead, teacher-led demonstrations highlight important reactions. Nylon, aspirin, butyl acetate, and methyl salicylate (responsible for the odors of bananas and wintergreen) are synthesized. The chemistry of compounds that have been in the news in recent months is also covered. Prerequisites: Chemistry Honors, or Chemistry with teacher recommendation and completion of, or concurrent enrollment in, Biology or Biology Honors.

## Visual and Performing Arts

## The Arts Department designs and presents courses and extracurricular opportunities to challenge and encourage each student to develop her understanding of and abilities in four arts disciplines: dance, music, theater arts and visual arts.

The Middle School visual and performing arts curriculum introduces students to art, drama, dance and music through a combination of required and elective courses. Students follow a curriculum of required arts courses through sixth and seventh grade, followed by arts electives in eighth grade.

## Sixth grade

## Art 6: Explore and Create

Sixth grade art is a course that emphasizes the joys of artistic production and interdisciplinary learning in a relaxed environment conducive to creative exploration and development. Students explore the elements of art, including line, texture, color, value, and space; learn basic drawing techniques; work in two and three-dimensional forms; and experiment with diverse media, including pastel, block printing, pen and ink, and 3D sculptural materials.

## Dance 6: Move It!

Dance in the sixth grade acquaints students with a variety of dance styles including ballet, modern, jazz, and folk dance. Through improvisation, students explore the creative and expressive qualities of movement as a tool to communicate ideas and feelings. Students work in pairs, trios, and small groups with emphasis on teamwork, cooperation and problem-solving skills.

## Drama 6: Curtain!

Drama for the sixth grade is an introduction to storytelling, movement, voice, mime and character development. Students are encouraged to take risks, expand their comfort zone and rediscover their ability to play. Using improvisational techniques, the girls will explore characters, relationships, and objectives to create believable scenes and short plays.

## Music 6: Experiencing Music

Music 6 is an introduction to music performance, theory and history. All students will be placed into either a choral or instrumental section based upon current musical skills and prior experience. Emphasis will be placed on music literacy as repertoire will be analyzed in a historical and theoretical context. Proper technique and expression will be discussed and each semester will culminate with a mandatory evening concert.

## Seventh Grade

## Art 7: Exploring Form and Color

Seventh grade art introduces students to a wide range of media, including pencil, pastels, charcoal, tempera, mixed media and computer art. Technical areas of exploration include two-dimensional design, color theory, and basic drawing skills, with the special emphasis given to the study of facial features and portraiture. Short and longer-term assignments include the application of drawing and design skills, as well as the development of imaginative content.

Music 7: Discovering the Joy of Music Making
Music 7 will build on fundamentals covered in Music 6 as students continue to explore the art of music performance in either a choral or instrumental setting. The semester will include rehearsal of varied repertoire and later move into creative music applications as students experiment with Music Notation and Digital Audio software. The semester will culminate with a mandatory evening performance.

Dance 7: Dancing to the World's Beat
This course celebrates the diversity of dance styles from around the world. Students are introduced to dances from a variety of different countries including Africa, Japan, China, England, Scotland, Germany, Russia, Italy, Serbia, the Philippines and Romania, along with dances from North and South America. The customs, history and traditions of other cultures come alive through dance as an expression of the human spirit. The course builds on the foundation presented in Dance 6 and continues to focus on creativity and collaborative problem solving utilizing improvisation and beginning dance composition.

Drama 7: Creating Characters
Required for one semester of all seventh graders, Drama 7 explores movement, voice and characterization through games, activities and scene work. Students will explore the world of Kabuki theatre, Commedia dell'Arte, and modern acting styles, and will learn to command the stage and embody characters vocally and physically.

## Eighth Grade

## Art 8: Art, Fashion and Print

Eighth grade art acquaints students with a variety of media and artists. We explore landscape, the human figure through fashion and pattern. Additional drawing and design projects offer opportunities to explore other kinds of subject matter and help develop technical skills and independent visual thinking. Media for these projects include pastels, collage, batik, blockprinting, charcoal, ink, acrylic, and computer art.

## Ceramics 8: An Introduction to Hand-Built Forms

Ceramics 8 provides an introduction to the basic techniques of hand-built pottery, including coil, slab and molded pieces. Using white low-fire clay and a wide variety of non-toxic glazes, students develop the skills required to create both functional and sculptural ceramic forms through projects. Emphasis is placed on the design process, including sketchbook research.

## Dance 8: Choreography

This course concentrates on dance composition and the creation of original dances. Students take responsibility for all aspects of the choreographic process including selecting a theme, choosing music and dancers, choreographing movement, and determining costumes, sets, props, and lights. Students explore original ideas for choreography and then develop a plan for implementing their ideas into dance. The course culminates in a performance of original dance works choreographed and performed by the class.

## Drama 8: Original One Act

Drama 8 covers every aspect of theatre, with units on playwriting, directing, set design, costume design, lighting, stage management, sound, make-up and acting. Students will receive hands-on, practical training as well as guest lectures by professionals in the theatre world. The course culminates in the creation and performance of a one-act play written, directed, designed, and acted by the class.

## Movietime 8: Lights! Camera! Action!

This eighth grade course offers students the opportunity to learn how to create films. Through a series of handson projects, we learn the basic components of film, including camera angles, editing, storyboarding, screenwriting and film directing. In addition, students will be exposed to classic movies and the directors behind them. The class will culminate in the creation of a five to seven minute short film, written, directed, edited and performed entirely by the students.

## Music 8: Instrumental Chamber Music

This semester-long course provides the unique opportunity for instrumentalists to perform, arrange, compose, and improvise a wide variety of repertoire in chamber music settings. Chamber ensembles may include, but are not limited to, classical, jazz, folk, rock, and bluegrass. Students will be placed in ensembles according to skill level and instrument type. In addition, students will utilize the Bourn Lab throughout the semester to make and perform
on homemade instruments. There will be one mandatory evening performance and dress rehearsal. Beginning to advance students are welcome.

## Music 8: Show Choir

Show Choir is a vocal ensemble that combines singing with movement to perform literature from various selected eras of musical history. In addition to techniques of rehearsal and performance, students will arrange, improvise and analyze the music performed in a theoretical and historical context. Attending and participating in live performances (both in school and out) are an expectation of this course.

## Upper School Required Course

## Core Arts

Core Arts immerses all ninth graders in a year-long study of the disciplines of dance, drama, music, art, photo, film, and design. By looking at, listening to, analyzing and creating art in its multiple forms, students increase their understanding and appreciation of the necessary role of the arts in diverse cultures. Shared historical, critical, and studio practices are used to guide students in their encounter with predominant art forms from the West, India, China, Japan, Africa and the Middle East. This global curriculum gives students opportunities to explore traditional materials alongside media such as Photoshop, iMovie, Illustrator, Sibelius and the Web. This interdisciplinary course helps students to make links across the curriculum with their English, Fitness and Wellness, History, and Mathematics classes. Students learn to become literate consumers as well as producers of culture. Throughout the course, students are given opportunities to be risk-takers and makers of meaning through individual and collaborative artistic production. Taught by teachers in all of the Arts disciplines, this ninth grade course is a lively combination of academic and studio approaches to learning and is required for all ninth graders.

## Upper School Electives

## Not all electives are offered every year. See pages 8 and 9 for courses offered in 2012-2013.

Note: Students who have completed their VPA requirements (Core Arts and one full year art elective) may take a VPA elective for Credit/No Credit. Students must speak with their teacher and the Registrar by the mid-semester grading period if they plan to use this option. Students seeking to enter the elective mid-year may do so with teacher approval.

## Dance

## Dance Production Workshop I

This class is designed for the motivated student interested in learning about the role of a producer. The course gives students hands-on experience and introduces them to the elements of technical theater specific to a dance production. Student producers will be directly involved in the process of producing the full-length theatrical show Arts with a Heart. The course covers the fundamentals of choreography, lighting and costume design; sound/music/video recording-editing and other multi-media devices; and basic elements of production management such as scheduling, marketing and fundraising. DPW fulfills an Arts requirement. This course will be offered in A-Block.

## Dance Production Workshop II

Dance Production Workshop II builds on the concepts and skills introduced in Dance Production Workshop I. The semester begins working in full production mode, culminating with the performances of Arts with a Heart. After the show has closed, students will analyze their production and reflect on what improvements and/or changes they would like to make for the following year's show. The emphasis of the course is on pre-production for the next show. Student producers will create an initial concept and theme, conduct research and finalize a production plan and schedule. The class will also explore current trends in theater, dance and technology in hopes of bringing innovative ideas to the Castilleja stage. DPW fulfills an Arts requirement. Prerequisite: Dance Production Workshop I. This course will be offered in A-Block.

Advanced Dance Production Workshop
Students continue their exploration into the field of dance production. In Advanced DPW, rather than specializing in one area of production they will become adept in all areas of production from choreography to ticket sales, they will learn how all of the 'pieces' of a production fit together, and they will use their knowledge to create a successful show. Advanced DPW allows students to analyze and view performances with a critical eye. Students will reflect on performances and answer questions on what makes a show or a performance a success. Using critical thinking and problem solving, students will come up with recommendations and a plan for improvement. They will also explore current trends in theater, dance and technology and develop a plan on how to practically implement those ideas on stage. Advanced DPW fulfills an Arts requirement. Prerequisite: Dance Production Workshop I and II. This course will be offered in A-Block.

## Music

Instrumental Chamber Music I
This semester-long course provides the unique opportunity for instrumentalists to perform, arrange, compose, and improvise a wide variety of repertoire in chamber music settings. Chamber ensembles may include, but are not limited to, classical (orchestra), jazz, folk, rock, and bluegrass. Students in Music I will develop performance skills through tonic-dominant chord progressions and begining theoretical concepts. Students will be placed in ensembles according to skill level and instrument type. Ensembles will perform on campus and also organize offcampus performances. This course is open to grades 10-12; no previous music experience is necessary.

## Instrumental Chamber Music II

This semester-long class builds upon understanding and skills covered in the first semester. Students in Music II will develop performance skills through tonic-dominant-subdominant harmonies, blues progressions, modal chord progressions, and theoretical concepts. Students will be placed in ensembles according to skill level and instrument type. Ensembles will perform on campus and also organize off-campus performances. This course is open to grades 10-12 who have taken Instrumental Chamber Music I.

## Advanced Instrumental Chamber Music

This semester-long elective builds upon skills introduced in Instrumental Chamber Music I \& II. Students will develop performance skills through advanced chord progressions, music theory, aural skills, and music history. Students will also develop independent and collaborative musicianship skills through performance projects. Students will be placed in ensembles according to skill level and instrument type. Ensembles will perform on campus and also organize off-campus performances. This course is open to juniors and seniors who have successfully completed Instrumental Chamber Music I \& II or pass the entrance exam and audition. Students may enter the course in any semester (fall or spring) and the course may be repeated for credit.

Vocal Music Workshop I
This semester-long elective is designed to give students a foundation in proper vocal technique and production as well as expanding upon guitar skills learned in the required freshman Core Arts course. Students will rehearse, perform, analyze, and listen to music from all genres and time periods, yet performances will emphasize contemporary music styles such as jazz, popular, musical theater, rock, and other music from around the world. Ensemble settings will vary from choral to small ensemble and solo. One mandatory evening performance and dress rehearsal will take place; several performance opportunities both in and out of school will be offered. This course is open to grades 10-12; no previous music experience is necessary.

Vocal Music Workshop II
This semester-long elective builds upon concepts and skills covered in the first semester. Students will learn more challenging theoretical concepts, and skills will expand to include arranging, composition, and improvisation. Opportunities for small ensemble performance will increase as students develop greater musical independence. Similar to first semester, repertoire will continue to cover a variety of genres; one mandatory evening performance will take place. This course is open to students in grades 10-12 who have taken Vocal Music Workshop I.

## Advanced Vocal Music Workshop

This semester-long elective builds upon vocal fundamentals introduced in Vocal Music Workshop I \& II. Repertoire will expand to include four-part harmony and a cappella music. In addition to the vocal performance assignments and activities, students will learn piano keyboard skills intended to provide vocalists with greater independent musicianship skills. Keyboard activities will be assigned according to each student's individual skill level and prior experience. One mandatory evening performance and dress rehearsal will be required each semester, yet several performance opportunities both in and out of school will be offered. This course is open to juniors and seniors who have successfully completed Vocal Music Workshop I \& II or pass the entrance exam and audition. Students may enter the course in any semester (fall or spring) and the course may be repeated for credit.

## Honors Vocal Music

This advanced, semester-long elective is for the highly motivated vocal music student interested in an individualized and challenging music repertoire project. In addition to the large and small group vocal rehearsals and performances with the Vocal Music Workshop courses, students will complete a project that demonstrates the culmination of musical skills and research in a specified area of interest. Examples of an appropriate project include produce, perform and record an EP according to a proposed style, topic, or music period; compose and perform a vocal work or collection of pieces; prepare repertoire that could be used for a college music entrance audition. This course is open to seniors who have successfully completed Vocal Music Workshop I \& II and Advanced Vocal Workshop or who pass the entrance exam and audition. Students may enter the course in any semester (fall or spring) and the course may be repeated for credit.

## Theater Arts

## Drama I

A course for students curious about Acting and Theatre (as well as those who have studied it before), Drama I focuses on exercises, improvisation, and scene study which help students to be creative and take risks, while also discovering the basic concepts and skills of "Realist" acting. Students learn concentration, emotional memory, and character development while gaining greater physical and vocal agility as they study (and perform from) a variety of texts, including Uta Hagen's Respect for Acting, Williams's The Glass Menagerie, Ibsen's A Doll's House, Pinter's Betrayal, Strindberg's Miss Julie, and Shanley's Doubt.

## Drama II

Drama II continues on the fundamental work begun in Drama I, moving beyond "Realism" to aspects of "Naturalist" acting. Drama II continues with the work of Uta Hagen while studying the more recent plays: Auburn's Proof, Mamet's Oleanna, and Shaffer Equus. By the end of the year, "non-Naturalist" styles of Acting (and heightened language) are explored in Euripides' The Trojan Women, and Shakespeare's Twelfth Night and Beckett's Waiting for Godot. Prerequisite: Drama I

## Upper School Productions: see page 51

## Visual Art

Ceramics: History and Making I
Ceramics I is an introduction to both the making of ceramics and the understanding of the importance of the global and historical context of the medium. Through a series of shorter projects, students learn to research, design, and develop ideas around a variety of themes. A combination of different hand building, wheel thrown, and decorative techniques will be employed. The course enables students to become clay makers, placing an emphasis on historical context, creative thinking, and critique.

Ceramics: History and Making II
Ceramics II builds upon the shorter projects studied in semester one, allowing students to create larger, more complex pieces of ceramic art. Students will delve into the chemistry behind the process, researching and making their own glazes and experimenting with "self-dug" clay. We will also explore different firing methods; e.g., using a Romano-British kiln, a raku kiln, as well as an electric kiln. All of these projects will be introduced and supported by placing the methods in comparative and historical context. Prerequisite: Ceramics: History and Making I

Design and Sculpture I
Design and Sculpture I provides an introduction to the elements of both two dimensional and three dimensional design. Through a series of projects, students learn to research and develop ideas around a variety of themes. All projects explore art, design and sculpture from around the world. Assignments will be completed using collage materials, photography, Illustrator, clay, wire, paint, and printmaking. This course enables students to learn how to be designers and makers, placing emphasis on creative thinking and a willingness to experiment.

## Design and Sculpture II

Design and Sculpture II continues the exploration of the elements and principles of two-dimensional and threedimensional design begun in Design and Sculpture I. There will be a series of longer-term, larger-scale projects. Again, work will be sketchbook initiated with a strong link to art and design from around the world. Students will experiment with abstract, representational and expressive approaches to composition and sculpture. Media and techniques explored will be computer software, including Illustrator, acrylic, wood, and collage. Prerequisite:
Design and Sculpture I.
Drawing and Painting I
In Drawing and Painting I students are introduced to the basics of mark making, including line, tonal drawing, 2 point perspective and portrait. Using a variety of media, students explore the essentials of representational and expressive drawing, painting, and collage. Composition, color theory, and value are introduced. The first part of the course uses right brain drawing techniques to help students develop their ability to "see" accurately, and then builds on these skills to do more imaginative work. The course invites all students to learn to draw, irrespective of so-called innate ability. Students keep an ongoing journal that uses conceptual exercises or prompts that may be thought of as a visual diary. Journal work is informed by class critique and discussions.

Drawing and Painting II
Drawing and Painting II builds upon the concepts and skills developed in the first semester to create technically and conceptually more complex works. Students apply their understanding of color, value, form, perspective and design to the exploration of more personal works that reflect student interest and research. Skill development continues with still life, Surrealism, portrait, figure, and narrative painting. Abstraction may be explored. Students learn to use palette knives and layering techniques as well as overlay and printmaking. Journaling continues. Prerequisite: Drawing and Painting I.

Film I
Film I introduces students to the terminology and concepts of film, how to discuss and write about film, and the roles of different people in film-making. Students make connections between these aspects of film study and their own hands-on film-making, as they write screenplays, create an "In-Camera" film, PSA's, Music Videos, complete short narrative films, and even create a "Work-for-Hire" project. Besides studying Barsam and Monahan's Looking at Movies, in the first term the class closely examines (and presents and writes about) Roman Holiday, Citizen Kane, Singing in the Rain, Keaton's The General, A Hard Day's Night, and Paths of Glory.

Film II
In the second semester, students build on their technical skills to create more in-depth and technically challenging films, with each student gaining more opportunities to take on different film-making roles, including writing, directing, cinematography, sound, and editing. Film 2 also analyzes (and writes about) films such as Rashomon, High Noon, His Girl Friday, Sunset Boulevard, Rear Window, Chinatown, and 2001: A Space Odyssey. The
course culminates with students creating an in-depth analysis of a film of their own choosing. Prerequisite: Film I

## Photography I

Photography I introduces students to the mechanics of single lens reflex cameras. Using either digital or traditional cameras, students engage in historical, critical, and studio practices of photography. Studio assignments focus on form and framing, composition and lighting, motion, portrait, and landscape. Students keep a journal that represents an ongoing investigation of photomontage and collage through the use of Photoshop and historical research. Historical and critical analysis in the course provides a framework for the study of major Western photographers such as Julia Margaret Cameron, Daguerre, Fox Talbot, Edward Weston, and Margaret Bourke White, as well as contemporary photographers such as Martin Parr and Annie Leibovitz. This course is open to highly motivated, independent learners. Requirement: students are expected to have a camera that can be operated manually, rather than a point and shoot device.

## Photography II

Photography II continues studio, historical, and critical work. Assignments focus on narrative and storytelling. Students research and analyze the work of photographers from India, China, Japan, Cuba, South America and South Africa. In the final quarter, students analyze photo books and investigate a theme of personal interest. Using online software, this course culminates in the production of a unique photo book that demonstrates an in-depth investigation of a visual concept, documentation or idea. Students need to be highly motivated, independent learners. This course may be taken as a prerequisite to AP Design with a special focus on Photography. Prerequisite: Photography I.

## Advanced Visual Art

Open to juniors and seniors who have completed Drawing and Painting, Photo, Design and Sculpture, or Ceramics, this course offers students the opportunity to experiment and to develop their unique interests in the Visual Arts through individual projects designed by students in consultation with the instructor. Students may work in Photography, Design, Drawing and Painting, or Mixed Media. All students will have access to both Photoshop and to the new tools in the Bourn Lab. Students need to be highly motivated and be able to work independently. Art historical research will be necessary for students in this elective. This course may be repeated for credit. Prerequisite: listed electives or by permission of the instructor. Letter grade is not required.

## AP Studio Art

This course is open to highly motivated visual art students who wish to pursue in depth, individualized, advanced topics in art. Student projects should represent growth over time in working toward the completion of an AP art portfolio or a pre-college art portfolio. Individual work may be in Drawing and Painting, Design, Photography, and/or Mixed Media. College Credit for AP Studio requires the creation of a three-part portfolio that includes: 12 works for Breadth; 12 Concentration works; and 5 Quality works. Open to students who have completed a full year art's elective or by permission of the instructor. The course is highly recommended for students who want to create an art supplement for college admission.

## Interdisciplinary Electives

## Not all electives are offered every year. See pages 8 and 9 for courses offered in 2012-2013.

## Computer Science: Algorithms and Design

This course is an introduction to the field of Computer Science, with two central aims: to give students the tools to take a computational problem through the process of design, implementation, documentation, and testing; and to introduce students to the breadth of Computer Science as a discipline. The course introduces students to different paradigms in the field of Computer Science through four modules: Functional Programming, Hardware Design, Imperative Programming, and Basic Computer Theory. The course is a subset of topics from CS5 - Introduction to Computer Science taught at Harvey Mudd College. Prerequisites: successful completion of Algebra II and Trigonometry

## Contemporary American Culture

This is an interdisciplinary course in the culture of America today. Taking 'culture' in its broadest sense to mean a society's way of life as well as its symbolic expressions (from high art to popular culture, from minimalist poetry to hip hop), we draw upon a variety of writings to try to understand the varied culture - or cultures - in which we live. Questions we consider include: Is America a society of individualists or conformists? Has American culture passed from modernism into post-modernism, and what do those concepts mean? Have we become a nation of narcissists? What is the fate of nature and our spiritual relation to it? If culture is defined by values, what do Americans really value, and are we one culture or many cultures? The course is conducted as a 'community of scholars' seminar. In the last phase of the course, students present original papers on some aspect of contemporary culture. Open to juniors and seniors.

## Engineering Sustainable Solutions

This is a project-based, student-driven course offered to those interested in taking steps to solve some of the environmental issues the global community presently faces. Students will work together to research an issue, come to a consensus on how to address the issue, and research, design and/or construct a solution. In addition to the instructor, outside mentors will be available to assist students with their chosen project. Project choices can range from the construction of a straw bale building to researching the trail of trash to isolating organisms helpful in bioremediation and more. Open to juniors and seniors.

## Introduction to Engineering, Programming and Robotics

Largely project-based, this course revolves around three major topics: Programming, Mechanics and Electrical systems. Using the Lego NXT modules, students learn to program in Java. The mechanical module covers degrees of freedom, mechanics and joints as well as fasteners, gears and power trains. The electrical module covers DC motors, steppers and servo motors. The course culminates in a project that requires students to apply all three modules taught in the course. Open to juniors and seniors; offered in A-Block.

## Introduction to Philosophy

What is truth? reality? goodness? These are the fundamental questions posed by philosophy, or rather, these are the questions addressed by philosophy and posed by life. Philosophy is thus a foundational discipline, meditating upon the issues of knowledge, reality and value that underlie all other disciplines. This one-semester course introduces students to philosophy by surveying some of the seminal thinkers of the Western tradition. The survey is historic and dialectical, emphasizing how each thinker overturns and goes beyond the inherited philosophic tradition. Philosophers studied include Plato, Descartes, Hume, Kant, Hegel, Marx, Nietzsche, Freud, and Sartre. Open to juniors and seniors.

## Shakespeare: Stage and Page

This course combines performance and literary analysis of four plays by Shakespeare that represent a range of genres (tragedy, history, comedy, and problem play). This year we will study Hamlet, Henry V, Much Ado About Nothing, and The Merchant of Venice. Class time will be evenly divided between textual interpretation, discussion, and performative scene work, and course assessments will be a combination of performance based projects and
short analytical written work. The class will provide exposure to Shakespeare that allows students to approach the plays as both literature and as dramatic texts, to offer them the experience of exploring the meaning of the plays through performance while undergoing a rigorous examination of language, imagery and structure as well. As indicated, this course joins the page and the stage in a rich, interdisciplinary experience, including (depending on availability) class field trips to local Shakespeare performances. Open to juniors and seniors.

## Independent Study

Occasionally, a junior or senior may wish to pursue studies in an area beyond the most advanced class offered at Castilleja, or she may wish to explore an area of interest outside the range of our normal course offerings. This student could consider a semester of independent study. The process for proposing independent study should begin in the preceding semester. The student must seek a faculty member who is willing and qualified to supervise the independent study project. She should write a formal, detailed proposal outlining the full scope of the independent study. The faculty advisor and the student should determine the meeting times and should agree upon the assessment instrument. The student then submits the proposal to the Department Head and Head of Upper School for possible approval. If the independent study is approved, the Head of Upper School will consult the Department Head and determine the amount of credit to be given and will notify the Registrar. When the independent study is completed, the faculty advisor will inform the Head of Upper School and Registrar. Students may take no more than one independent study course in any given semester. Typically, an independent study would not count as part of a student's minimum course load of four solids. Upperclassmen may have a maximum of six classes

## ACE Center Programs

The ability to recognize one's responsibility and connection to the community at large represents a vital ingredient of a Castilleja education. Castilleja's ACE center provides "Awareness, Compassion and Engagement" in issues beyond Castilleja, affirming our community's commitment to public purpose and responsible leadership both within and without the Circle. The ACE center supports student initiatives, classroom experiences, and teachers with a library of educational resources, as well as houses information on summer opportunities, both local and abroad. Students gain confidence in their ability to solve problems and effect change.

## Community Action

All students, with guidance from teachers, advisors and the ACE Center, are expected to engage themselves in community action activities. Throughout the year, students choose activities that complement their talents and interests and reflect developmentally appropriate curriculum goals. The range and breadth of community action clubs represent student ownership of local, global and national problems.

## Global Programs

Throughout the year classes explore issues around a chosen global theme, culminating in the annual Global Week, where students develop in-depth grade-level projects on and off campus. All juniors participate in a schoolsponsored Global Investigators trip. Destinations include China, India, and Guatemala.

Internships
Castilleja's internship program creates authentic opportunities for students to explore their passions in a realworld setting. Partnerships with science labs offer students hands-on experience in a research lab, working in a nurturing and supportive environment that cultivates their interest in science. Other internship opportunities exist in the arts, social sciences, technology and local non-profit organizations.

## Leadership

Castilleja students formally learn leadership skills through a variety of ACE-sponsored workshops and through conscious skill building across the curriculum. They have a variety of opportunities to exercise their leadership skills. These include Peer Tutoring, Bridge Tutors, Peer Advisors, ACE Fellows, ACE Org Leaders, elected leadership positions and the mentors in Castilleja's Young Women Leaders Program. Students assist and lead other students (both inside and outside Castilleja). Mentoring promotes healthy bonds and strong bridges between community participants and different grades between the girls. The leadership experience culminates with the Senior Seminars and an opt-in culminating Senior Leadership Experience that highlights a student's specific commitment to leading an initiative.

Seniors spend time programming activities for Senior Seminars in May to prepare them for the issues they may encounter following graduation. These seminars are planned by the seniors and focus on such topics as communication and healthy relationships, women's health, nutrition and exercise, looking ahead to work, personal finance, and the rights and responsibilities of 18 -year-olds.

The ACE Center manages the process through which students engage in many Castilleja-sponsored cocurricular opportunities. These opportunities are identified in a "Journey Application." The purpose of this application process is to ensure that every Castilleja student successfully explores ideas and opportunities that interest her deeply and learns from the experience. These opportunities are now intentionally tied to dedicated time slots like EOP.

## Cocurricular Opportunities


#### Abstract

Athletics Athletics are a fundamental part of the overall educational experience at Castilleja. The athletic program strives to teach students physical and mental skills, self-discipline, and sportsmanship, while motivating athletes to strive for excellence. The value of participation in sports is broad and life-long, developing teamwork, organizational and leadership skills. Castilleja athletes are a source of pride and unity for the school community.


## Middle School

At the Middle School level, the athletic program is designed to give access to all interested students through a nocut policy. A broad offering of sports is provided for various levels of abilities and competition. The program is designed to develop skills, encourage personal responsibility, and increase confidence in physical abilities while fostering social and emotional development through teamwork, commitment, and fun.

Castilleja offers nine sports during the school year:

| Fall | Cross Country | Spring | Tennis |
| :--- | :--- | :--- | :--- |
|  | Softball |  | Volleyball |
|  | Swimming |  | Water Polo |
| Winter 1 | Soccer | Track |  |
| Winter 2 | Basketball |  |  |

## Upper School

Athletics in the Upper School are competitive, and the level of commitment required increases accordingly. At the varsity level in particular, the most capable and committed athletes constitute teams that strive to excel in competitions. Because Castilleja is a college preparatory school with significant academic demands, student athletes must have self-discipline and organizational skills to manage their individual schedules. Eleven Varsity and Junior Varsity interscholastic sports are offered during the school year. Sports are offered as follows:

| Fall | Cross Country | Spring |
| :--- | :--- | :--- |
|  | Tennis | Softball |
|  | Volleyball | Swimming |
|  | Water Polo | Track and Field |
|  | Golf | Lacrosse |
|  |  |  |
|  | Basketball |  |
|  | Soccer |  |

## School Clubs

There are many active school sponsored clubs to address the various academic, service, and social interests of the girls. The more academic clubs include all publications as well as the more competitive such as Debate, Robotics, Model UN, Glee, Junior State of America, and FOMF among. ACE.Orgs are the community action clubs such as the Diversity Club, Free the Children, Rainbow Alliance, the Anti Human Trafficking Club and Music for the Community. Social Clubs such as the Puzzle Club or the Beatles Club tend change more from year to year depending on student interest.

These clubs are open for membership at a Club Fayre in mid September. Proposals for academic and social clubs should be made in early September to the Head of the Upper School. Proposals for ACE.Orgs should be made to the ACE Director. In order to keep our club program vital and to prevent student overload, we encourage each student to limit her participation in school clubs with the intention that she make a full commitment to any club she does join.

## Student Government

Castilleja values and supports the strong voices of its student leaders. Each semester students participate in leadership. During the year they are given many opportunities to contribute to all facets of school life, including leading weekly school meetings, participating on faculty/student committees, and planning and implementing school-wide events.

The Middle School Student government represents the Middle School in the student leadership at Castilleja. The MSSG Executive Board consists of the President, Secretary/Treasurer, Social Representative, Athletic Representative, Community Action liaison, Arts Representative, and two Class Senators per grade. This group plans activities for the Middle School each semester and leads Middle School meetings. New officers are elected each semester. New officers are elected each semester.

The ASB Government represents the Upper School in student leadership at Castilleja. The Council of Presidents consists of four presidents of grades 9-12, and the seven officers elected by the Upper School: the All Student Body President, the President of the Judicial Committee, the Activities Coordinator, the Athletic Coordinator, the Arts Coordinator, the Community Action Coordinator, and the Secretary/Treasurer. ASB and the Council of Presidents meets weekly with the Head of Upper School to discuss issues relevant to the school body and to plan the agenda for the weekly Student Government meetings. In addition to the President, each grade level is represented in the class government by its Vice-President, Secretary, Treasurer, Arts Coordinator, Athletic Coordinator, and two-person Social and Community Service Committees. These class officers meet weekly with the Class Dean to direct the business of their class. ASB officers serve for the full year.

## Visual and Performing Arts

Many arts opportunities are available through the Clubs Program, including the Middle and Upper School Orchestras, The Glee Club, The Drama club, and the Castilleja Film Society. The Middle School Drama Department mounts one after-school musical per year. All students are welcome, and all who audition are guaranteed a role in the production. Past shows include Guys and Dolls, Annie, Honk and Once Upon a Mattress. Upper School students are also involved as assistant directors, designers and tech crew. The Performing Arts Department mounts two full-scale Upper School theatrical productions each year: a play and a musical. Recent plays have included Top Girls, As You Like It, Twelfth Night, The House of Bernarda Alba, and She Stoops to Conquer. Recent musicals have included Little Shop of Horrors, Urinetown, Dames at Sea, The Sound of Music, Oliver!, Kiss Me Kate, Quilters, and Grease. Open to all Upper School students, these productions are extracurricular. Students have opportunities not only to act, sing, and dance, but also to learn all aspects of backstage work: stage managing, props, costumes, sets, lights, and sound. In addition, Castilleja's Arts Department produces an all-school show, Arts with a Heart, with an emphasis on dance and music, featuring more than 100 motivated Castilleja students in all aspects of the production.

## College Planning

## College Entrance Tests and Curricular Choices in the College Search Process

The following information is designed to assist you in planning your educational journey, in terms of meeting or exceeding your graduation requirements and laying the foundation for a strong application to college, and in terms of preparing for and scheduling your college entrance exams.

Depending on the college, admission is determined by a number of factors, but most important in almost all cases is how you challenge yourself within the curriculum offered and how you do day-in and day-out in the classroom. These guidelines are simply that; nothing is prescriptive, and all curricular and cocurricular choices should be made in conversation with your parents, teachers, advisor, and Castilleja college counselor.

While the formal college search process at Castilleja begins second semester of the junior year, students and parents are invited to contact the College Counseling Office whenever they have questions about course selection, standardized tests, and college admission. Students who engage fully in the academic, social and cocurricular life of Castilleja during their four years in Upper School will develop interests for which they have a passion and emerge well-prepared academically and socially for success in challenging undergraduate programs.

The PSAT: The Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) measures the skills students have developed over time, including critical reading skills, math problem-solving skills, and writing skills, mirroring the areas tested on the SAT. The PSAT/NMSQT is the best preparation for the SAT. Students at Castilleja take the PSAT twice: in October of tenth grade and October of eleventh grade, in order to gain important standardized test-taking skills that will serve them well in the college application process. PSAT scores are not sent to the colleges and do not factor in the college admission decision whatsoever. Scores from the eleventh grade test are used to determine eligibility for the National Merit Scholarship Program. The PSAT is scored on a scale of 20-80, with 50 set as the national median.

The SAT: The SAT (formerly the SAT Reasoning Test and the SAT I) is a standardized assessment of the critical reading, mathematical reasoning, and writing skills students have developed over time. The SAT is offered seven times a year and consists of ten separately timed sections. It takes three hours and 45 minutes, with three sections in critical reading ( 70 minutes total); three sections in mathematics ( 70 minutes total), three sections in writing (60 minutes total), and one variable (unscored) section in critical reading, mathematics, or writing (25 minutes total). The test includes three kinds of questions: multiple-choice, student-produced responses (mathematics only), and essay. The test is machine-scored, except for the essay, and is scored on a scale of 200800 , with 500 set as the national median.
$>$ Usually the SAT is taken not earlier than March of the junior year, in order to capitalize on as much of the English and math curriculum as possible, and to further develop critical thinking skills. Many students will not take the SAT until May or June of the junior year, and then take it again in the fall of the senior year. Consult your Castilleja college counselor before registering for the SAT or the ACT.

Subject Tests: Students take the Subject Tests (formerly the SAT II and Achievement Tests) to demonstrate their mastery of specific subjects. The content of each test is not based on any one approach or curriculum but rather reflects current trends in high school course work. Tests are offered in Literature, U.S. History, World History, Mathematics Level 1, Mathematics Level 2, Biology-Ecological or Biology-Molecular (one test, but the student selects which "track" to take during the test itself), Chemistry, Physics, Chinese with Listening, French, French with Listening, German, German with Listening, Modern Hebrew, Italian, Japanese, Japanese with Listening, Korean, Korean with Listening, Latin, Spanish, and Spanish with Listening. Most Subject Tests are offered six times a year and students can take one, two, or three tests on a single test date. Each Subject Test takes one hour and consists of multiple-choice questions, but some have unique features or formats. Subject

Tests are machine scored, using a scale of 200-800, the same as the SAT. Students may not take the SAT and the Subject Tests on the same day, so you need to plan carefully with your Castilleja college counselor in determining test dates and college application deadlines. Colleges that require Subject Tests ask for a minimum of two. If you are thinking of applying to engineering programs, you should plan on taking Math Level 2 and either Chemistry or Physics. (You would need to study on your own for the Physics Subject Test, as our $9^{\text {th }}$ grade course does not prepare you for the Subject Test, and our advanced Physics course is typically not taken until the senior year, which is too late for submitting to colleges.) NOTE: Although the UC system no longer requires Subject Tests for admission, many programs of study within the UC system do; students must check with specific departments and majors.
> Subject Tests should be taken upon completion of the course that best prepares students for a given test, as these tests are content-driven and not tied to a specific year in high school. Review the "Castilleja Courses and the SAT Subject Test" information below before you register for and take any college entrance tests.

The ACT: The ACT assesses general educational development and specific subject knowledge. Offered six times a year, the ACT is a multiple-choice test that covers four skill areas: English, mathematics, reading, and science. The ACT Plus Writing measures the same four areas plus has a section that measures skill in planning and writing a short essay. Castilleja students who choose to take the ACT in addition to or in lieu of the SAT should take the ACT Plus Writing. Each section of the ACT is scored on a scale of $1-36$, with the national average composite score (the average of all 4 sections) in 2010 of 21.0 . College accept the ACT equal to the SAT.

AP Exams: AP (Advanced Placement) exams enable students to demonstrate their competence in college-level AP courses through three-hour exams in May. Offered in some 30 subjects, these tests contain objective and written sections, and in the case of foreign languages, a listening and speaking portion as well. These tests are scored on a scale of $1-5$, with 5 being the highest. Students with scores of 4 and 5 (in some cases 3 ) may be granted a higher course placement in college and/or some college credit, but credit is always awarded at the discretion of the college the student attends and according to that college's AP policy. AP exams were not designed for college admission purposes, although scores of 4 and 5 earned in the junior year can strengthen an applicant's file in terms of academic profile. AP exams in the courses we offer are given in May at Castilleja; students should consult their AP teachers about eligibility and test dates. AP is a product of the College Board

Freshman Year: Usually no tests are necessary, although you could consider taking the SAT Subject Test in a foreign language upon completion of level III of the language, unless you intend to continue to a higher level in that language. Consult your Castilleja college counselor if you are considering ending the formal study of a language after level III, as doing so may affect your college choices.

Sophomore Year: All sophomores take the PSAT at Castilleja in October as practice; usually no other standardized tests are necessary, although you should consider taking the Subject Test in a foreign language upon completion of level IV of the language, unless you intend to continue to a higher level in that language; or the Math Level 2 Subject Test upon completion of the first semester of Introductory Calculus AB or BC, or upon completion of the full year of Precalculus with Applications. Some students may also want to take the Chemistry Subject Test if they have done well in honors-level Chemistry and do not intend to take the advanced course in Chemistry in the junior year. NOTE: Most engineering programs require Subject Tests in Math and either Chemistry or Physics. Consult your Castilleja college counselor before registering for any college entrance tests.

Junior Year: All juniors take the PSAT at Castilleja in October; you should take the SAT in March, May or June of the junior year or the ACT Plus Writing in April or June; January is usually too early, especially right after the Junior Global Trip, and the fall of junior year is not recommended at all; consider taking the Subject Test in a foreign language upon completion of at least level IV of the language; or the Math Level 2 Subject Test upon completion of the first semester of Introductory Calculus AB or BC or the full year of Precalculus with Applications; or the Biology $\mathrm{E} / \mathrm{M}$ Subject Test upon completion of Biology (if you earned an A or B in the course) or Biology

Honors; or the Subject Test in Literature at the end of the junior year if you have earned As in your English courses and have scored at least 65 in the Critical Reading section of the PSAT or 650 in the Critical Reading section of the SAT; or the Subject Test in US History upon completion of US History Honors or AP US History; or the Chemistry Subject Test if you have taken the Advanced Topics in Chemistry class in the junior year. NOTE: Most engineering programs require Subject Tests in Math and either Chemistry or Physics. (May and June test dates qualify as "completed" if you are currently in those courses.) Consult your Castilleja college counselor before registering for any college entrance tests.

Senior Year: You should re-take the SAT or the ACT Plus Writing in the fall of the senior year, preferably in October, if you are not satisfied with your junior-year scores; take additional Subject Tests in the fall as needed (see "Junior Year" above and the "Castilleja Courses and the Subject Tests" grid below); keep college application deadlines in mind when registering for these tests, as in most cases the November test dates will not arrive in time for any early applications with deadlines in November or early December. We recommend taking the SAT or ACT Plus Writing twice, and three times at most. We recommend that students not exercise the Score Choice option now available to them with both the SAT and the ACT, as many colleges are requiring full disclosure of all test scores. Most colleges will give you the benefit of "best test" when evaluating your application. There are fulllength practice tests available to students desiring additional experience without having to take the actual tests on a Saturday morning. Consult your Castilleja college counselor before registering for any college entrance tests.

Test Preparation: You will find comprehensive study materials and advice on the CollegeBoard and/or ACT web sites, including sample questions, timed practice tests and test scoring. Paper versions of sample tests are available in the College Counseling Office as well. Additionally, the CollegeBoard offers an online, self-directed test prep program at a nominal cost. Many other college search websites provide free test preparation as well. Test prep books are available in the College Counseling Office and at most bookstores. Your Castilleja teachers are also good resources. Take your PSAT test booklet and score report to your English and Math teachers, and ask them to go over the questions you missed. Seek their advice, and that of your Castilleja college counselor, on when to take the tests. The value of test prep courses offered by for-profit companies and tutors depends upon the motivation and receptiveness of the student, learning style, tutor, time available, parent support, and so on. Most test prep courses and tutors are expensive and require a great amount of time, which can affect the student's ability to participate in cocurricular activities, complete homework, and earn good grades, and can place more emphasis on a score than is warranted. NOTE: See the Castilleja College Counseling Handbook located on the Castilleja website for helpful information on how to evaluate test prep companies and tutors.
> Continuous reading of good literature, attentiveness in class, retention of material learned in school, and plenty of rest are, in the end, the best preparation!

## Castilleja Courses and the SAT Subject Tests

Because Subject Tests are based on knowledge of course content, it is better to take these tests according to course completion rather than year in school. While we recommend that students take the three-part SAT (Critical Reading, Math, and Writing) no earlier than March of the junior year, we recommend that students take Subject Tests according to the following course completion guidelines. In general, colleges that require Subject Tests usually require only two, but students are responsible for knowing the requirements of the colleges to which they intend to apply. (In some instances those colleges that require Subject tests will accept the ACT Plus Writing in lieu of Subject Tests.) Remember that colleges need official test scores submitted by December of the senior year, earlier if a student is applying under an early program. Go to http://www.collegeboard.com and http://www.act.org to learn about test dates and registration deadlines, and direct any questions to the College Counseling Office.

| SAT Subject Test | Castilleja Course (minimum course/semester completion) |
| :--- | :--- |
| Biology E/M* | Biology with grades of A or B, or Biology Honors, and with extra preparation |
| Chemistry* | Chemistry Honors with grades of A or B, or Advanced Topics in Chemistry if taken in the <br> junior year, and with extra preparation |
| Physics* | Not recommended, though a student who takes Advanced Topics in Physics in the junior <br> year and is committed to additional independent study could take this test, and with extra <br> preparation |
| Literature | No earlier than the end of the junior year with English grades of B+ to A and an SAT Critical <br> Reading score of 650 or above or a PSAT Critical Reading Score of 65 or above |
| US History | US History Honors or AP US History; this is, in general, and excellent test choice for <br> Castilleja students |
| Math Level 2 | Semester 1 of Introductory Calculus AB or BC, or the full year of Precalculus with <br> Applications; strongly recommended for any student considering a college major in the <br> sciences or math; NOTE: we do not recommend taking Math Level 1 |
| Foreign Languages | Minimum: Level III; Preferred: Level IV or highest level completed by end of junior year; <br> NOTE: Not all languages are offered on all test dates, and the test in Reading and <br> Listening, as compared to Reading only, is offered only in November; we do not <br> recommend the November date |

[^2]
## University of California "a-g" Subject Requirements for Admission*

To satisfy the University of California minimum course requirements, students must complete the "a-g" high school courses listed below and that are included on Castilleja's UC-certified course list. At least 11 of the 15 courses must be completed by the end of the junior year. Note that these are the minimum requirements; courses taken that exceed these minimum requirements better prepare students for success at the college level and place the applicant in a stronger position for admission to the UC system. NOTE: In some instances Math and Language courses taken in grades 7 and 8 will count toward the "a-g" UC requirements

## a. History/Social Science; 2 years required

Two years of history/social science, including one year or two semesters of world history, cultures and geography; and one year of U.S. History or one-half year of U.S. History plus one-half year of civics or American government.

## b. English; 4 years required

Four years of college preparatory English that include frequent and regular writing and reading of classic and modern literature. No more than one year of ESL-type courses can be used to meet this requirement.

## c. Mathematics; 3 years required, 4 recommended

Three years of college-preparatory mathematics that include the topics covered in elementary and advanced algebra and two- and three-dimensional geometry. Approved integrated math courses may be used to fulfill part or all of this requirement, as may math courses taken in the seventh and eighth grades that your high school accepts as equivalent to its own math courses.

## d. Laboratory Science; 2 years required; 3 recommended

Two years of laboratory science providing fundamental knowledge in at least two of these three foundational subjects: biology, chemistry and physics. Advanced laboratory science classes that have biology, chemistry or physics as prerequisites and offer substantial additional material may be used to fulfill this requirement, as may the final two years of an approved three-year integrated science program that provides rigorous coverage of at least two of the three foundational subjects.

## e. Language Other Than English; 2 years required, 3 recommended

Two years of the same language other than English. Courses should emphasize speaking and understanding, and include instruction in grammar, vocabulary, reading, composition and culture. Courses in languages other than English taken in the seventh and eighth grades may be used to fulfill part of this requirement if your high school accepts them as equivalent to its own courses. American Sign Language and classical languages, such as Latin and Greek, are acceptable.

## f. Visual and Performing Arts; 1 year required

A year-long approved arts course from a single arts discipline: dance, drama/theater, music or visual art.

## g. College Preparatory Electives; 1 year required

One year (two semesters), in addition to those required in "a-f" above, chosen from the following areas: visual and performing arts (non-introductory level courses), history, social science, English, advanced mathematics, laboratory science and language other than English (a third year in the language used for the "e" requirement or two years of another language).
*Subject to change; students are advised to consult with the College Counseling Office for the most recent and accurate requirements

## Overview of Minimum Requirements for Castilleja Graduation, UC-System Admission, and College Admission in General

Note: These college admission course suggestions are based on stated admission requirements and recommendations from colleges across the country. Meeting or exceeding these guidelines does not guarantee admission to any specific college, nor does following a different curricular pattern preclude admission to college. Students are advised to review the admission requirements for individual colleges in which they have an interest, and to consult with their teachers, advisors, and Castilleja college counselor when selecting, adding, or dropping courses.

|  | Castilleja Graduation Requirements* | UC System Minimum Course Requirements* | Non-UC System Suggested Course Requirements** |
| :---: | :---: | :---: | :---: |
| English | 4 years | 4 years* | 4 years |
| History | 3 years, including Cultures and Civilizations, The American Political System and The Individual and Society, and US History | 2 years* | 3-4 years |
| Mathematics | 3 years, through Algebra II, for the Class 2013 <br> OR <br> Geometry, Algebra II, and one additional year for the Class of 2014 and beyond | 3 years required, <br> 4 years <br> recommended* | 3-4 years, taken in grades 912, through Precalculus or Calculus |
| Modern and Classical Languages | Through Level III | 2 years required, 3 years recommended, through Level III | 3-4 years of the same language, taken in grades 9-12 |
| Science | 3 years lab science, including physics, chemistry, and biology | 2 years of a lab <br> science required, <br> 3 years <br> recommended* | 3-4 years of a lab science |
| Fitness and Wellness | 2 years | - | - |
| Visual and Performing Arts | Core Arts and 1 year in a single arts discipline | 1 full-year course in a single arts discipline* | 1-2 years or more, according to interest |
| Electives | Available in all areas, not required; additional courses strengthen an application | 1 year ( 2 semesters) in "a-f" subject areas required*; additional courses strengthen an application | Take according to interest and schedule in any of the above areas; additional courses strengthen an application |
| Senior Talk | Yes | - | - |

*See "a-g" subject requirements for the UC system.
**Please direct questions about your particular academic and cocurricular interests and how they relate to college admission to the Castilleja College Counseling staff.

## Four-Year Course Planner

Use this planner to map out your Upper School curriculum and chart your preparation for college, being sure to meet or exceed the Castilleja graduation requirements, the UC eligibility requirements, and the recommended courses for college admission. Include all of your cocurricular activities in order to gauge accurately the amount of time you are committing to your academics and your outside activities. Consult with your advisor and your Castilleja college counselor when selecting and changing your academic program

| Subject Area | Grade 9 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Eall Semester | Spring Semester | Grade 10 <br> Fall Semester | Spring Semester |  |
| English | English I | English II | English II |  |
| History | Cultures and <br> Civilizations | Cultures and <br> Civilizations | The Individual and <br> Society | The American <br> Political System |
| Mathematics |  |  |  |  |
| Modern and <br> Classical <br> Languages |  | Physics or Physics | Chemistry or <br> Chemistry Honors | Chemistry or <br> Chemistry Honors |
| Science | Physics or Physics |  |  |  |
| Honors |  |  |  |  |


|  | Grade 11 |  | Grade 12 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fall Semester | Spring Semester | Fall Semester | Spring Semester |
| English | AP English: American Voices | AP English: American Voices | AP English Literature Elective | AP English Literature Elective |
| History | AP or Honors US History | AP or Honors US History |  |  |
| Mathematics |  |  |  |  |
| Modern and Classical Languages |  |  |  |  |
| Science | Biology or Biology Honors | Biology or Biology Honors |  |  |
| Visual and Performing Arts |  |  |  |  |
| Open Period (one is required) |  |  |  |  |
| Open Period |  |  |  |  |
| Cocurricular Activities |  |  |  |  |
| Family Time and Obligations |  |  |  |  |
| Relaxation and Sleep |  |  |  |  |
| College Applications |  | Small group seminars and individual appointments | Small group seminars, individual appointments, and applications |  |


[^0]:    *one-semester course
    \# not offered in 2012-2013

[^1]:    *one-semester course
    \#not offered in 2012-2013

[^2]:    * The Science Department recommends the Biology Test for those students needing to take a Subject Test in the Sciences, though students applying to engineering programs MUST, in almost all cases, take a Subject Test in either Chemistry or Physics AND Math Level 2.

