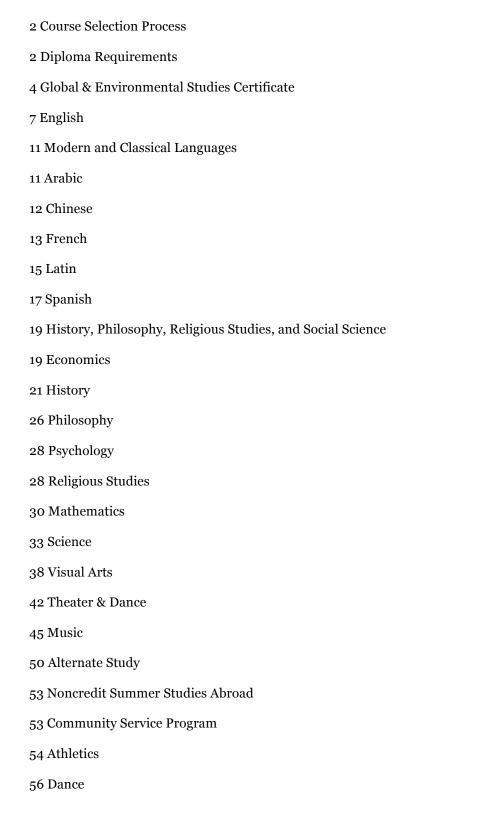




Course Offerings & Descriptions

2017-18

## Loomis Chaffee Course Offerings 2017–18



Loomis Chaffee reserves the right to withdraw, change, or add courses and to offer courses in terms other than those designated in the listing.

## **Course Selection Process**

The Loomis Chaffee curriculum offers students a wide range of course choices in subjects suitable to secondary school study. Departmental requirements, designed to satisfy entrance requirements at the most selective colleges, may be met through a variety of courses within each discipline. The total program of studies provides sufficient flexibility for students to pursue individual interests in depth.

All of our courses are college preparatory. Courses that move at an accelerated pace, go beyond normal curricular requirements and often require longer homework assignments are designated as "advanced." Our most advanced offerings — those equivalent to college-level courses and/or those that are at or beyond the Advanced Placement (AP) level — are designated as "CL" for "College Level."

#### The School Calendar and Schedule

The school divides the academic year into three approximately equal terms. A full course (one credit) meets four times every seven days. A term course (one-third credit) meets as a full course for one term; three term courses are equivalent to one full course. A half course (one-half credit) meets half as often as a full course and receives one-half credit.

#### **Course Selections**

Returning students meet with advisors in the winter to review course selections for the coming year. Effective planning includes an outline of the four-year program, as well as specific course preferences for the coming year. Students discuss course selections with their parents, and the directors of studies also review each student's program. New students receive registration information directly from the directors of studies, who confer with them and determine appropriate course selections.

While the Academic Office makes every effort to schedule students in appropriately selected courses, no master schedule can accommodate all potential requests; therefore, the master schedule may prohibit some course combinations. Course selections are tentative and must be approved by the directors of studies. Student schedules become official and are available to students and parents at the opening of school in September. Changes in course sections to accommodate a student's teacher preference are not permitted. Generally no credit is awarded for any course dropped before its completion. Specific procedures for adding and dropping courses after the start of school are outlined in the *Student Handbook*.

#### **Diploma Requirements**

To complete an academic year and be invited to return, a student must earn a total of at least four year-end credits, not including half-course credits. To receive a diploma, a student must earn a minimum of 16 credits (full-course equivalents) between grades nine and 12, although most Loomis Chaffee students earn between 19 and 20 credits in those four years. In addition, students are required to be in attendance through their senior year, either on campus or through a Loomis Chaffee sponsored academic program (eg. School Year Abroad or The Mountain School).

In general, a student may not elect more than five full-credit courses or their equivalent for the academic year. Exceptions to this limitation are made for half courses, the departmental independent study courses, the music performance courses, and some art and theater courses. Any student who wishes to elect more than the recommended number of credits must secure the permission of the director of studies.

The Review Committee and the Diploma Committee, in conjunction with the head of school, make final decisions about a student's academic standing and success in meeting graduation requirements. A student who violates school rules may forfeit his or her right to a diploma.

#### **Transfer Students and Postgraduates**

After granting credits to transfer students for courses taken at previous schools, the directors of studies determine the balance of courses each new student needs to fulfill graduation requirements.

Postgraduates apply for either diploma or certificate status. To be a candidate for a diploma, the postgraduate student must, in addition to being awarded appropriate credits at admission, satisfy all Loomis Chaffee diploma requirements. To be a certificate candidate, a postgraduate student must pass English each term and earn at least four full credits for the year. All postgraduates must elect English IV: Short Story; in addition, they are encouraged to elect mathematics at an appropriate level.

#### **Course Load for Seniors and Postgraduates**

All seniors and postgraduates must establish their course load for spring term prior to the start of winter break. While the specific spring term electives may change through winter term, the number of courses may not decrease after winter break.

## Departmental Requirements for a Loomis Chaffee Diploma

English — each term

**Foreign Language** — third-level proficiency in one language

History, Philosophy, Religious Studies, and Social Science

**History** — two years: a world history course during either the freshman or sophomore year, and one year of United States history preferably during the junior year

**Philosophy, Psychology, and Religious Studies** — two term courses, at least one of which must be taken in the junior or senior year

**Mathematics** — three years: the first two years of algebra and geometry

**Science** – two years of laboratory science: one in the physical sciences and one in the life sciences

**The Arts** — for students who enter in the freshman year: three courses, to be chosen from any visual art, music or theater arts offering. For students who enter after the freshman year: two courses, to be chosen from any visual art, music, or theater arts offering

## Noncredit Diploma Requirements

Freshman Seminar – Freshmen (yearlong, one meeting per week)

**Peer Counseling Freshman Activity** – Freshmen (yearlong, one meeting per month)

Fitness and Wellness — Sophomores (term course)

**Physical Education** — All students (every term)

#### **Diploma Requirement Waiver**

In special or unusual circumstances, a student may request a diploma requirement waiver.

If such a waiver is desired, the student's family initiates procedures with the director of studies, the director of learning support, and the advisor.

#### **Test-Taking Preparation**

The College Guidance Office believes the intensive learning that goes on in the classrooms of Loomis Chaffee is the best preparation for standardized tests. That said, we also believe that test preparation is worthwhile. Because each student's learning style and motivation varies, so too does the most appropriate form of standardized test preparation for each student. For some, an intensive course in the summer is best; others thrive in the one-on-one setting of individualized tutoring; many are able to accomplish a great deal working by themselves with practice books or online with Khan Academy (SAT) or Method Test Prep (ACT), to which Loomis Chaffee students have free access beginning in junior year.

Loomis Chaffee also offers, and therefore encourages participation in, a standardized testing overview program in the late winter and early spring of junior year. This overview is conducted by Summit Educational Group at reduced cost and structured so as not to interfere with the academic work of Loomis Chaffee. By the end of junior year, students have two PSAT results, Summit diagnostic test results, and official ACT and SAT results to help them decide if further test preparation is warranted during the summer before senior year, and if so, the type that will work best for them in consult with their college counselor.

Further information regarding standardized testing can be found in the corresponding College Guidance grade level portals or by calling the College Guidance Office.

#### **Computer Proficiency**

Academic assignments across the curriculum require students to attain basic proficiency in word processing, Internet and email use, spreadsheets, data processing, and graphic presentation of data. The school uses both Macintosh and PC computers in instructional and public areas so that students feel comfortable using either platform.

#### Global & Environmental Studies Certificate

A Loomis Chaffee student whose passion and interest lie in acquiring and exploring a greater understanding of the world may pursue a course of study that culminates in the awarding of the Global & Environmental Studies Certificate. The GESC recognizes academic, extracurricular, and experiential studies focused on fulfilling the mission of the school in educating "its students for service in the nation and in today's global civilization" and the mission of the Alvord Center "to promote global and environmental literacy, sustainability, and engagement."

#### **Requirements:**

A minimum of six courses (including a world history course) to be selected from the GESC list of approved courses, taken from at least two different departments, in addition to language study through the fourth level (students pursuing two languages should speak with the Director of the Center regarding credit towards the certificate. All such courses are denoted in each departmental section of the course book with the designation *GESC*, and are listed below.

- Foreign Language study through the fourth level.
- Successful completion of the required core GESC Senior Seminar, a series of five evening events, to be scheduled and announced each year by the Director.
- A two-week or longer experiential education program focused on international, multicultural, or environmental issues. This experience will be crafted and organized by the student with the approval of the center. The center's International Education Programs are designed to fulfill this requirement though students may, with approval, complete the requirement with third-party programs or

independently, either internationally or domestically.

- Elective: Completion of one of the following, at the discretion of the student and with the approval of the Director
  - a) Additional Coursework (a seventh course)
  - b) Additional Foreign Language Study (a fifth level course)
  - c) Additional Experiential Education
  - d) Gilchrist Environmental Fellowship
  - e) Norton Special Project
  - f) Agriculture Proctor
  - g) Model UN participation
  - h) World Bulletin
  - i) Debate
  - j) Community Service (80 hours)
  - k) Commitment to other related activities with the approval of the Director

In order to successfully meet these requirements, students who wish to pursue the GESC should identify themselves to their advisor and to the Director of the center as early in their LC career as possible, but no later than the beginning of winter term of their junior year. The center, along with a student's advisor and the director of studies, will assist students in completing a plan for meeting the above requirements.

#### **Commendation:**

The Global & Environmental Studies Certificate will be awarded at the time of Commencement and noted on a student's transcript.

#### Loomis Chaffee courses that qualify towards earning the GESC:

English

English IV: Graphic Novel

English IV: Literature and the Environment

English IV: Race, Roles, and Religion

English IV: Voices of Dissent

CL English IV: Contemporary Literature

Languages

CL Chinese V

CL Chinese VI: Modern China through Literature CL Chinese VI: Contemporary Issues in China

French V: The Francophone World

French V: Modern Writers

French V: Cinema CL French V

CL French VI

Latin IV/V: Augustan Poets (this and the following Latin term courses count as additional GESC courses

when taken after CL courses)
Latin IV/V: Roman Comedy
Latin IV/V: Roman Satire
Latin IV/V: Historians at Rome

Latin IV/V: Cicero Latin IV/V: Catullus

Spanish V: Latin American Civilization Spanish V: Latin American Short Story

Spanish V: Cinema CL Spanish Literature V History, Philosophy, Religious Studies, and Social Science

Economics: Macroeconomics Economics: Applied Economics

**CL Economics** 

World History: The Making of Our Modern World

History from the Inside Out: Uncovering the Roots and Legacies of the Early Modern World

Global Human Rights: Protection and Abuse

**CL** European History

Area Studies: Arab Culture Today: Youth Uprising

Area Studies: China: Past and Present Area Studies: Germany and the Holocaust

Area Studies: Modern African History: The Roots of Today's Africa

Area Studies: Modern South Asia Area Studies: Russian History Area Studies: The World at War Environmental History

Environmental History History of Sport in Society International Relations

CL History Seminar: Globalization

**CL Comparative Government and Politics** 

Ancient Philosophy Topics in Ethical Theory Developmental Psychology

Religious Diversity in Contemporary America

Philosophy of Nonviolence

Children of Abraham: Moses, Jesus and Mohammed

Hinduism and Buddhism

Mathematics Statistics

Advanced Statistics: Global Issues

Science

**CL Environmental Science** 

**Ecology** 

Human Populations: Impact and Sustainability Sustainability: Soil, Water and Agriculture

Visual Arts

Cultural Encounters in the History of Art and Architecture

Renaissance and Baroque Art

Ceramics I

Theater

Acting: Shakespeare

Masks in Culture and History

Music

World Music Concert Choir Chamber Singers

**World Percussion Class** 

### **ENGLISH**

The Loomis Chaffee English Department offers required yearlong courses for freshmen, sophomores, and juniors. With departmental guidance, seniors may select a year of discrete English term courses or the yearlong CL Senior Seminar in Literature. Throughout all the courses, students work to develop the skills they need to become proficient readers, independent thinkers, and effective writers.

In the freshman year, students investigate four basic genres: short story, drama, novel, and poetry. Sophomores focus primarily on American literature; juniors explore the literary traditions of tragedy and focus increasingly on the writer's craft in all genres. All students read a Shakespearean play in each of their first three years. Whether seniors choose the term electives or the CL Senior Seminar in Literature, the department offers a wide range of readings appropriate for college-bound students.

Since writing clear, logical, and persuasive prose is critical to academic achievement and to successful communication, the department teaches writing throughout the program. To accustom students to expressing themselves precisely, to teach proper usage and diction, and to foster creative sentence patterns and the use of figurative language, the freshmen work on personal narratives and short interpretive compositions. With the help of the Writing Workshop program, sophomores focus on expository and analytical writing based usually on required readings. Juniors continue to develop their expository writing, and in preparation for senior electives, they devote much of the year to writing analytical and personal essays that require substantial reading and deeper literary analysis.

The English Department expects students to accept increasing responsibility for their education and to participate actively in creating a classroom atmosphere in which they and their classmates will develop as scholars and independent thinkers.

To demonstrate their skills in reading, writing, and mechanics, all students take the English Department Proficiency Test. The test consists of two parts: reading/writing and mechanics. Juniors and seniors who have passed both parts of the test may, with departmental approval, choose respectively the CL English III Seminar or the CL senior electives, including the CL Senior Seminar in Literature. Most students in CL English III Seminar take the AP Language and Composition examination, while those in the CL Senior Seminar in Literature take the AP Literature and Composition examination. Students who do not successfully complete both sections of the Proficiency Test in the sophomore year continue to work to meet departmental standards that will help them perform better academically both at Loomis Chaffee and in college.

For information on courses designated *GESC*, please refer to pages 5–6.

#### **English I**

freshmen

English I develops a student's ability to read perceptively and to write accurately and effectively. Organized around genres, this course allows students to study short stories, dramas, novels, and poetry. Writing progresses from the construction of single paragraphs to multi-paragraph compositions, developing students' skills in crafting both interpretive essays and personal narratives. Throughout the year the course emphasizes vocabulary, grammar, and punctuation. Representative readings include Homer, *The Odyssey*; a Shakespearean play; poetry; short stories; classic and contemporary fiction.

#### **English II**

sophomores

The literature studied in this course covers a wide range, primarily of American authors. The writing instruction emphasizes close reading, encouraging students to work toward establishing and developing a clear, carefully focused thesis and toward achieving greater maturity in style. This course reviews the skills taught in English I and continues the emphasis on vocabulary, grammar and punctuation. Representative readings include Shakespeare, *Macbeth*; Hawthorne, *The Scarlet Letter*; Alexie, *Reservation Blues*; poetry; and short stories.

#### **Writing Workshop**

fall, winter and spring/not open to freshmen

As part of their work in English, sophomores take Writing Workshop, which meets once a week through the year. New juniors are enrolled for the fall term and may continue as needed in the winter and spring. The workshop program includes organized instruction in writing and a systematic review of grammar before students take the required English Proficiency Test.

#### **English III**

juniors

As they read more complex texts, juniors review, develop, and extend the skills taught in the first two years. Students work on close reading and sustained analysis, considering a variety of literary techniques and themes. Writing assignments include both literary analysis and personal essays. Representative readings include Shakespeare, *Hamlet*; Fitzgerald, *The Great Gatsby*; Baldwin, *Go Tell It on the Mountain*; Sophocles, *Oedipus Rex* and *Antigone*; poetry; short stories; essays.

#### **CL English III Seminar**

juniors

This course requires students to read major works of literature and to develop their skills for writing both analytical and personal essays. Benefitting students whose greater experience with language and literature allows them to succeed with more challenging reading and writing assignments, this course assumes significant student participation in class discussion. Readings include those listed for English III and additional works by Shakespeare, Hardy, or Austen, and other authors selected by the instructors. This course prepares students for the AP Language and Composition examination. Prerequisite: permission of the department and successful completion of the Proficiency Test

## **Elective English Courses**

The English curriculum offers a variety of elective term courses that engage students in more specialized literary studies and continued development of verbal skills. Sophomores and juniors have the option to supplement the required English curriculum with elective coursework in creative writing. In their senior year, students choose from a variety of elective term courses to construct an interest-based course sequence for their final year. All courses stress substantial reading and writing.

English teachers help students to select senior term courses appropriate to interests and abilities. For the fall term, the department determines the placement of seniors who have not successfully completed the English Proficiency Test. New seniors and postgraduates are placed in English IV: Short Story in the fall and elect term courses for the winter and spring; they may attend the Writing Workshop.

#### **Term Course for Sophomores and Juniors**

#### **Introduction to Creative Writing**

Introduction to Creative Writing is an elective in which sophomores and juniors practice writing fiction, poetry, and creative nonfiction in pursuit of artistic self-expression. The course follows a creative writing workshop model. Students will read and discuss the work of contemporary fiction writers and poets as examples, but they will spend most of their class time honing specific skills with creative exercises, working on long-term projects, and workshopping the writing of their peers. This elective encourages curious students to experiment with writing as an art form and supports them as they practice their craft. Representative texts include Steering the Craft by Ursula K. Le Guin and selected short stories and poems to be determined (possible inclusions: Margaret Atwood, Kelly Link, George Saunders, Kurt Vonnegut). This term-length elective does not count toward the English graduation requirement; the class is therefore an additional elective for students who are passionate (or passionately curious) about creative writing.

#### **Term and Yearlong Courses for Seniors**

#### **English IV: Short Story**

By reading various kinds of short stories, students increase their understanding of the craft of the short story writer.

Students review reading and writing skills and study different narrative techniques. Texts may include *Story and Structure*, *The Norton Anthology of Short Fiction*, *The Palace Thief*, or *The Things They Carried*.

#### **English IV: Graphic Novel** (GESC)

Since the ground-breaking publication of Art Spiegelman's *Maus* in 1993, graphic novels have entered the global cultural and academic mainstream, inspiring complex interdisciplinary and multicultural analyses. In this course students will survey the current field and read works of fiction (*Watchmen*), autobiography (*Maus, Persepolis, Fun Home*), and journalism (*Safe Area Gorazade*). In order to understand these works and the cultures that produced them, students will write essays using interpretive lenses focusing on history, gender, psychology, and class. Students will also explore the relationship between text and image in analyses as well as short sequential art sequences of their own.

#### **English IV: Notes from the Combat Zone Stories of War**

One of the unfortunate realities of human history is our species' tendency toward conflict. This course will eschew the historical and political causes of war in an attempt to understand the mythological, symbolic, literary, and psychological perspective of the individual soldier. Sub themes might include the transformative power of combat and violence, the brotherhood forged between fellow soldiers, the social ramifications on the homefront, or the cultural shifts in societies embroiled in war. Readings will focus on fictionalized accounts of wartime experience in combination with literary nonfiction produced by combat veterans and journalists. Students will be expected to grapple with the conflicting ideals of duty, honor, patriotism, exhilaration, fear, shame, regret, confusion, and betrayal. Potential texts include works by Ernest Hemingway, Sebastian Junger, Kristen Hannah, Uzodinma Iweala and others. This course will deal with mature subject matter, so students will need to be prepared for potential emotional triggers and must be sensitive to the issues at hand.

#### **English IV: Literature and the Environment** (GESC)

How does place shape identity? Is the natural world a physical resource to be exploited or conserved, a challenge to be conquered, or a sacred space to be preserved and revered? Should human interests trump non-human interests? In more literary terms, what is the relationship between a story and its setting? Exploring the connections between literary texts and the history of environmental thought, this course will focus on the cultural, metaphorical, and symbolic values of the non-human world, while also investigating its ecological significance. From wilderness to the worked landscape, from suburban to urban environments, students will examine the ways that the language of literature, film, and popular media construct our awareness and appreciation of the non-human world. Potential texts include works by Henry David Thoreau, Leslie Marmon Silko, Wendell Berry, Octavia Butler, and others. In addition to analytical writing, students will write creatively about their own experiences in and with the natural world.

#### **English IV: Literature of the Sea**

In this course students consider various perspectives on the mysterious, beautiful, and threatening nature of the sea. Beginning with *The Rime of the Ancient Mariner* and continuing with readings selected from the works of Melville, Conrad, Hemingway, Crane, and Kipling, the course also involves contemporary works by Junger, Proulx, and Casey. Students deepen their understanding of literature of the sea as they consider both artistic and musical renderings.

#### English IV: Race, Roles, and Religion (GESC)

In our increasingly interconnected world, literature can provide insight into the broadest palate of human experiences. Exploring the fiction, poetry, essays, and drama of writers beyond the traditional Western canon, this senior elective will examine boundaries: race, age, ethnicity, gender, nation, physical ability, sexuality, religion. Topics will focus on questions of culture and identity from global and literary perspectives. Students will read and respond to a rich diversity in experience and traditions. Authors will vary according to the term and may include the works of Chinua Achebe, Aravind Adiga, Sherman Alexie, James Baldwin, Kate Chopin, Countee Cullen, Edwidge Danticat, Jonathan Safran Foer, Rebecca Gilman, Langston Hughes, Jhumpa Lahiri, Nella Larsen, Jonathan Lethem, Toni Morrison, Alice Munro, Téa Obreht, Maggie O'Farrell, Grace Paley, Ann Patchett, Amy Tan, Gene Toomer, Alice Walker, Wendy Wasserstein, Virginia Woolf, and Richard Wright.

#### **English IV: Voices of Dissent** (GESC)

Historically, one of the most powerful driving forces of change is the act of rebellion. This senior elective will explore literature representing previously marginalized voices that speak out against and ultimately impact the dominant society. Close literary analysis will help students enhance their understanding of the social and cultural forces at work in both the production and reception of such revolutionary literature. By way of short stories, poems, plays and novels, this course will cover a range of topics: apartheid in South Africa (*Waiting for the Barbarians* by J.M. Coetzee), youth rebellion in the United States (*Catcher in the Rye* by J.D. Salinger), modern Japanese teen rebellion (*Crystal Buddha* by Jason Webb), rural Caribbean life (poetry by Claude McKay), conflicted modern Africa (*Redemption Road* by Elma

Shaw), anti-Vietnam war sentiment, Civil Rights and Women's Rights Movements, among others.

#### **English IV: The American Dream**

America traditionally has been regarded as a land of opportunity, a place where one can begin anew and create both an ideal personal life and a perfect society, free of the errors of older nations. As the country has developed, however, the dreams have taken many forms and have met with varying degrees of fulfillment. Students examine the progression of these dreams in the works of such authors as Albee, Cather, Hansberry, Hawthorne, Irving, Miller, Millhauser, and Stegner.

#### **CL English IV: Creative Writing**

This course gives students the opportunity to study the techniques and styles of professional writers; to study the work of other students; and to practice writing personal essays, short stories, parodies, narratives, and poetry. Substantial readings include essays by E.B. White and fiction by a variety of authors, both contemporary and traditional. Prerequisite: permission of the department and successful completion of the Proficiency Test

#### **CL English IV: Contemporary Literature** (GESC)

This course offers a study of a variety of contemporary novels, short stories, plays, poems, essays, and articles. The course focuses on understanding the values and attitudes expressed by contemporary writers, including those who write about social issues and science. Representative readings include works of Aubura, Whitehead, Hoffman, Ndibe, contemporary short story writers, and essayists. Prerequisite: permission of the department

#### **CL English IV: Satire**

As a literary genre, satire has been around as long as writers have had the audacity to address the foibles of humanity. Juvenal, the Roman satirist, once said, "It's hard not to write satire," suggesting that targets abound for those willing to poke fun at their fellow human beings and their many institutions. Focusing primarily on satirical novels, this course explores both how and why satire works, considering in the process the role of humor, irony, hyperbole, mockery, derision, and other tools of the trade. Students read works by authors such as Burgess, Heller, Lewis, Swift, Twain, Voltaire, Vonnegut, and Waugh. Prerequisite: permission of the department

#### CL English IV: Shakespeare

This course provides an intensive study of selected plays and sonnets of William Shakespeare. The plays are considered both as they were presented and received in Shakespeare's time and as they might be interpreted and produced for a modern audience. While attention is given to the conventions of the Elizabethan and Jacobean theater and of our own, the course emphasizes close textual analysis. At least one play of each type and of each period of Shakespeare's development is included. Readings may include *Henry IV*, *Henry V*, *Much Ado About Nothing*, *King Lear*, *The Tempest*, and *The Merchant of Venice*. Prerequisite: permission of the department

#### **CL Senior Seminar in Literature**

This course offers the student a full year's study of important authors and significant works of literature as they relate historically, thematically, or artistically. The Senior Seminar is designed for students whose greater experience with language and literature enables them to succeed with more challenging reading and writing assignments. Assignments are rigorous, including analytical essays, creative writing, and personal essays. Readings include the work of Albee, Conrad, Ellison, Heaney, Plath, Proulx, Shakespeare, Stegner, Stoppard, Warren, White, and Yeats. Prerequisite: permission of the department and successful completion of the English Proficiency Test

#### **Independent Studies in English**

 $term\ course$ 

A student who wishes to undertake an Independent Study Project (ISP) in English must arrange for a project advisor from within the department, **submit a written proposal**, and obtain approval from the academic advisor, project advisor, department head, and dean of faculty. The ISP must be carried as a second English elective.

## MODERN AND CLASSICAL LANGUAGES

All language study is a necessarily interdisciplinary enterprise, affording students exposure to meaningful discussions of history, culture, the social sciences, literature, philosophy, and contemporary society. The department seeks to furnish our students the opportunity to immerse themselves in a culture not their own and, by doing so, encourages them to develop a global perspective that is both reflective and passionate.

In addition to instruction in Classical Latin, the department offers instruction in four modern languages: French, Spanish, Chinese, and Arabic. The communicative approach serves as the core method of this instruction, with the broad aims of understanding, speaking, reading, and writing in the target language. Listening and speaking skills are fostered through conversation, oral and aural exercises, and a variety of methods focused on active student participation. Students begin writing in the target language in the first level and complete assignments ranging from composition of poetry to analytical papers.

Course texts and materials are selected in order to present an authentic cultural and literary experience. At the third and fourth levels, works are studied with attention to literary and human values, with the aim of acquainting the student with the ethos of another people. The Language Learning Center provides students with opportunities in an exploratory setting to practice and record their own communication, sample an ever-increasing array of media, polish linguistic skills, and explore foreign literature and culture online and through a variety of specially designed software.

For information on courses designated GESC, please refer to pages 5–6.

## Arabic

#### Arabic I

This yearlong course introduces the basics of Modern Standard Arabic (MSA), with an introduction to Levantine Colloquial Arabic (from the region including Lebanon, Syria, Jordan, and the Palestinian Territories). Emphasis during the first term will be on mastering the 28-letter alphabet of the Arabic script and pronouncing its sounds, with introductory vocabulary and cultural expressions. The second and third terms will begin to build vocabulary in Levantine and MSA and teach introductory grammar. This course is taught using the *Alif Baa* and *Arabiyyat Al-Naas* with accompanying DVDs. Students practice their writing, reading, listening, and speaking skills in both the classroom and independently. This course is not open to native speakers of Arabic.

#### Arabic II

This yearlong course continues the development of the grammar and vocabulary of Modern Standard Arabic (MSA), and spoken Levantine Colloquial Arabic (from the region including Lebanon, Syria, Jordan, and the Palestinian Territories). The course continues where students left off in Arabic I in *Arabiyyat Al-Naas*, using specially designed video segments with characters and plot to gain exposure to task-based vocabulary and grammatical structures. Emphasis is placed on reading and writing in MSA, in addition to using Arabic for communication with native speakers. Students practice their writing, reading, listening, and speaking skills in both the classroom and independently. Prerequisite: Arabic I or permission of the department

#### Arabic III

This yearlong course continues the development of the grammar and vocabulary of Modern Standard Arabic (MSA), and spoken Levantine Colloquial Arabic (from the region including Lebanon, Syria, Jordan, and the Palestinian Territories). The course prepares students for advanced Arabic by guiding them through the *Al-Kitaab* textbook series widely used at the university level. Emphasis is placed on reading and writing in MSA, in addition to using Arabic for communication with native speakers. Students practice their writing, reading, listening, and speaking skills both in the classroom and independently. Prerequisite: Arabic II or permission of the department

#### Arabic IV

This yearlong course continues the development of the grammar and vocabulary of Modern Standard Arabic (MSA) and Levantine Colloquial Arabic (from the region including Lebanon, Syria, Jordan, and the Palestinian Territories). The course continues where students left off in Arabic III in the *Al-Kitaab* series and uses primary sources in media, history, literature, and film, according to student interest. Emphasis is placed on reading, writing, and speaking in MSA, as the students develop their abilities to engage with more sophisticated topics. Students practice their writing, reading,

listening, and speaking skills both in the classroom and independently. Prerequisite: Arabic III or permission of the department

## Chinese

#### Chinese I

This course introduces the basic structures of Mandarin Chinese. Emphasis is placed on pronouncing Chinese sounds, developing listening comprehension, learning Chinese characters, and mastering the fundamentals of Chinese grammar, along with an introduction to Chinese culture. This course is taught using the "pinyin" (Beijing) phonetic system and simplified characters. The course is not open to native speakers of Chinese.

#### Chinese II

This course further develops mastery of all fundamentals, with emphasis on oral and written skills, along with some attention to social and cultural issues. This class includes frequent written and oral practice and use of the Language Learning Center.

#### **Advanced Chinese II**

This course continues the development of both written and oral skills in the target language with additional emphasis on acquiring more Chinese characters and improving self-expression on familiar and personal topics. Students will study additional readings and selections of poetry at an accelerated pace that will afford extensive exposure to key cultural topics. Open to students who have performed well in Chinese I or the equivalent. Prerequisite: permission of the department.

#### Chinese III

Students continue to expand their base of vocabulary and sentence patterns, and they focus on developing fluency in the language. There is heavy emphasis on practicing both conversational and written Chinese. The course exposes students to colloquial and common idiomatic expressions and other nuances of spoken Chinese. Students also practice writing letters and essays on reading topics.

#### **Advanced Chinese III**

Designed for students who have clearly demonstrated strong proficiency in speaking and writing with a mastery of fundamental grammar, this intermediate course further develops the students' ability to write effectively in the target language and to discuss topics centered on daily life. Students develop a functional, working vocabulary at an accelerated pace. In addition, the study of Chinese history and culture form an increasingly critical role in the curriculum. Open to students who have successfully completed Advanced Chinese II or the equivalent. Prerequisite: permission of the department.

#### **Chinese IV**

This course allows students to extend their mastery of the Chinese language. The syllabus includes readings and class discussions on topics relevant to contemporary life in China, Taiwan, and other Chinese communities. Composition writing and oral presentations are also required. Students should expect weekly conversation exercises with the instructor.

#### **Advanced Chinese IV**

This advanced course emphasizes composition and discussion in Chinese. The textbook provides the structure and framework for students to understand further the idiosyncrasies and details of Chinese language and culture. Additionally, the course covers a rich variety of topics, including Chinese customs, social phenomena, Chinese proverbs, the role of women, and human rights issues. The study of China's history as well as contemporary China in the larger global context will play a critical role. Class is conducted exclusively in Chinese. Prerequisite: permission of the department.

#### **CL Chinese V** (GESC)

This course is designed in accordance with the College Board guidelines to prepare students for the AP exam in Chinese. Students must develop a deeper appreciation and understanding of the Chinese language and culture. Through intensive reading, writing, speaking, and listening practices, this course aims to elevate students' level of Chinese proficiency across the three communicative modes (interpersonal, interpretive, and presentational) and the five goal areas (communicative, cultures, connections, comparisons, and communities). Students are encouraged to take the AP Chinese exam upon completion of the course. Class is conducted exclusively in Chinese. Prerequisite:

permission of the department.

#### **CL Chinese VI: Modern China through Literature** (GESC)

half course/not offered 2017-18

This course explores the work of a few well-known Chinese authors after the Mao era (1976–present). Through readings and discussions of essays, short stories, and novels, students learn the fundamental changes that Chinese people have lived through during the last 30 years (1980–2012). These social, political, and economic changes have affected longheld traditional values, Chinese society, and culture. Prerequisite: completion of CL Chinese V or departmental approval.

#### **CL Chinese VI: Contemporary Issues in China**(GESC)

half course

Through selected newspaper articles and essays, this course explores the evolution of Chinese society over the past several decades - a period of time during which we've witnessed a departure from many traditional Chinese ideals. From the astronomical prices of housing and university studies to the "one child" policy, students will tackle difficult topics and gain a better understanding of contemporary issues in the "New China." Pre-requisite: permission of the department

#### **Independent Studies in Chinese**

term course

A student who is highly proficient in a foreign language may propose an Independent Study Project (ISP). The student has to have exhausted all curricular offerings in order to be considered for an ISP. The student must arrange for a project advisor from within the department, **submit a written proposal**, and obtain approval from the academic advisor, project advisor, department head, and dean of faculty for any ISP. All discussion and all writing submitted must be in Chinese.

#### School Year Abroad in China

Please see Alternate Study beginning on page 50.

## French

Many French classes will participate in the National French Exam in the winter term. The "Grand Concours" tests, developed annually by the American Association of Teachers of French, is a motivational, extracurricular contest for students of French.

#### French I

This course introduces the basic structures of the French language, stressing communication skills: understanding, speaking, reading, and writing. Students practice listening comprehension as well as speaking in the classroom and in the Language Learning Center.

#### French II

This course continues the development of communication skills, with increasing emphasis on oral communication in French. Intermediate-level readings are introduced to reinforce both written and oral skills and to explore the Francophone world, with particular attention to the French-speaking African nations.

#### **Advanced French II**

In this class, introductory literary readings accompany extensive oral and aural training as well as exercises focused on form. In the classroom, students speak French almost exclusively, honing their pronunciation and communication skills. In-depth analysis of French language films and song lyrics round out the activities through the spring. Enrollment is restricted to students who have excelled in French I or whose preparation qualifies them for the work at an accelerated pace. Prerequisite: permission of the department

#### French III

In addition to reviewing basic grammar, this course emphasizes a conversational approach to acquiring all linguistic skills necessary for communication in French. Students practice writing and speaking and discuss short stories and films. Aspects of French culture and history are also introduced.

#### **Advanced French III**

This course is an enrichment of French III, offered to students who have performed well in Advanced French II or in an equivalent course at another school. In addition to promoting mastery of grammatical structures and the acquisition of vocabulary, the course presents topics in French and Francophone culture, as well as a variety of reading materials. Students practice their communication skills, written and oral, through a variety of activities. Successful completion of this course may qualify a student to continue in the CL French language IV course. Prerequisite: permission of the department

#### French IV

This course provides continued development of all linguistic skills: listening, speaking, reading, writing and cultural competency. It includes review and further study of grammatical structures, and conversational language taught in context. Francophone culture and literature are explored through reading selections and films representing a variety of genres and topics.

#### **CL French Language IV**

This comprehensive, full-year course is designed to consolidate the mastery of linguistic skills, including listening and reading comprehension, conversation, and composition. Students develop their literary skills by reading, discussing and writing about works by modern authors and articles from the French and Francophone press. Students may achieve the mastery necessary to sit for the Advanced Placement examination. Successful completion of this course may qualify students to pursue Advanced French V. Prerequisite: permission of the department

#### French V

At the fifth level of language study, students may elect term courses, taken either separately or as a three-term sequence. Prerequisite: French IV or permission of the department

#### French V: The Francophone World (GESC)

fall term

This course considers a number of current issues related to social justice in the French-speaking world. Students strengthen their command of the language through readings, discussions and presentations on topics ranging from the causes and effects of poverty to health care and civil rights. Readings include selections from French daily newspapers and monthly magazines, while audio and video clips are used from online French-speaking websites.

#### French V: Modern Writers (GESC)

winter term

This course explores the work of French authors in a framework defined by the artists, painters, musicians, and filmmakers who influenced their work and the art their writings later inspired. Through discussions of poetry, short stories, and novels, the course will demonstrate the reach of these masterpieces across genres and beyond, considering an array of media, the possibilities of a global perspective, and the works' timeless significance. Short analytical essays and creative writing pieces are assigned to develop written skills. In-class discussions aim to promote oral self-expression.

#### French V: Cinema (GESC)

spring term

In this course, selected films by well-known French directors are viewed and discussed. Films range in genre from comedy to contemporary classics to Nouvelle Vague. Students analyze characters and themes, and complete oral work and scene preparation in order to enhance the cinematographic experience.

#### CL French V (GESC)

year course

This full-year course provides an in-depth study of literary, philosophical, cultural, and social works by authors such as Voltaire, Hugo, Sartre, Vercors, Azouz Begag, or Yazmine Reza. In this stage in their studies, students are able to lead discussions solely in the target language as well as fine tune their analytical writing skills. Prerequisite: permission of the department

#### **CL French VI** (GESC)

half course

This course is offered to students who have successfully completed the Advanced French V course (or its equivalent at another school) or who have returned from the SYA program in Rennes, France. The course concentrates on readings of all genres, from literature to newspaper articles to historical texts. The goal of the course is to acquaint the highly advanced French student with topics from the French-speaking world. The course is taught entirely in French, seminar style and requires active class participation and debate as well as an ability to make cross-cultural and comparative literature analyses. Prerequisite: permission of the department

#### **Independent Studies in French**

term course

A student who is highly proficient in a foreign language may propose an Independent Study Project (ISP). The student has to have exhausted all curricular offerings in order to be considered for an ISP. The student must arrange for a project advisor from within the department, **submit a written proposal**, and obtain approval from the academic advisor, project advisor, department head, and dean of faculty for any ISP. All discussion and all writing submitted must be in French.

#### **School Year Abroad in France**

Please see Alternate Study beginning on page 50.

## **Classical Latin**

The study of classical Latin immerses its students among the influences and consequences of the Roman Republic and Empire. While comprehensive study of the language's grammar guides early lessons, exposure to cultural and historical elements are of prime importance, and further coursework leads students to a robust and nuanced understanding of the ancient Mediterranean.

The aim is to produce students who can read and enjoy Latin; therefore, the focus is on the comprehension of Latin poetry and prose and the careful comprehension of this material in the context of the English idiom. Readings are chosen from a select range of primary sources; within the first three levels, a student gains some acquaintance with the principal writers of the late Republic and the Augustan ages as well as the grammatical and linguistic skills needed for advanced study.

#### Latin I

This course introduces the fundamental vocabulary and grammar required for mastery of classical Latin. By providing both intensive study of basic linguistic elements and practice in reading Latin, this course prepares students for the varied reading program in Latin II. Students focus on mythology as they begin their cultural study of Roman civilization.

#### Latin II

This course begins with a study of grammar and vocabulary, and proceeds with selections from several classical Roman authors. As students work to build Latin vocabulary, they study the Latin roots, prefixes, and suffixes that enrich English vocabulary. Students also continue their cultural and historical study of the Roman world.

#### **Advanced Latin II**

This fast-paced course begins with an intensive study of grammar and vocabulary, and proceeds with selections from several classical Roman authors. As students work to build Latin vocabulary, they study the Latin roots, prefixes, and suffixes that enrich English vocabulary. Students also continue their cultural and historical study of the Roman world. Prerequisite: permission of the department.

#### Latin III

The third level is structured around the reading and interpretation of various Latin authors from the Republic to the late empire, as well as selected pieces by Medieval and Renaissance authors. In addition to nightly readings, students analyze texts in class discussion and written assignments. Instruction includes the study of the development of Latin culture: the arts, socio-political themes, and history. The fall term includes an intensive grammar review necessary for

the assigned readings.

#### **Advanced Latin III**

Like Latin III, this course provides students the opportunity to develop reading skills. Beginning with a comprehensive review of the second-year material, the third-year student learns all the grammatical forms and constructions and many of the literary terms and concepts necessary for reading all Latin literature. The proximate goal is to read an extended selection of Cicero, but the ultimate goal is to develop and solidify all the skills needed to be lifelong readers of the Latin language.

#### **Upper-level Latin**

After completing the equivalent of Latin III, a student may enroll in a fourth, fifth, and even a sixth level of Latin by selecting any combination of the two cycles of term electives and the CL Latin course.

#### **Latin IV/V: Roman Comedy (GESC)**

fall term/not offered in 2017-18

This course examines a play by either Plautus or Terence. In addition to an interpretation of the social aspects of the play, the technical and linguistic workings of a Roman comedy are examined.

#### **Latin IV/V: Augustan Poets** (GESC)

winter term/not offered in 2017-18

Students read selections from the works of Horace, Vergil, and Ovid in Latin and in English translation. Special attention is given to the various ways in which these poets reflected upon Augustus' rise to power and the imperial regime he inaugurated.

#### **Latin IV/V: Roman Satire** (GESC)

spring term/not offered in 2017-18

Excerpts from Juvenal and the *Satyricon* of Petronius are presented. Through the reading, the students gain insights into both the personality of these authors and the Roman society that influenced them.

#### **Latin IV/V: Historians at Rome** (GESC)

fall term

The nature of the process of writing history from the Romans' viewpoint, in addition to the actual historical situations themselves, forms the focus of this course. Excerpts from the writings of Nepos, Caesar, Livy, Tacitus, and others are examined and compared.

#### **Latin IV/V: Cicero** (GESC)

winter term

Selections from Cicero's public orations and private correspondences are read. Pertinent modern political speeches are discussed and compared with Cicero's speech. The political situation in Rome during the late Republic is also covered.

#### Latin IV/V: Catullus (GESC)

spring term

This course examines in detail a major portion of the poetry of Catullus, which traces the development of his unique personality. The importance of the author as a linguistic innovator in Rome is considered.

#### **CL Latin**

year course

The objective of this course is to hone the student's skills in reading, translating, understanding, analyzing, and interpreting original Latin texts in preparation for the Advanced Placement examination. The syllabus of the course centers on Vergil's *Aeneid* and Caesar's *Gallic War*, including the study of the cultural, social, and political context of these works. Assignments include analytical essays, comprehensive exams, and oral presentations in class. Prerequisite: permission of the department.

#### **Independent Studies in Latin**

term course

A student who is highly proficient in a foreign language may propose an Independent Study Project (ISP). The student has to have exhausted all curricular offerings in order to be considered for an ISP. The student must arrange for a project advisor from within the department, **submit a written proposal**, and obtain approval from the academic

advisor, project advisor, department head, and dean of faculty for any ISP.

## Spanish

#### Spanish I

This course serves as an introduction to the language and cultures of the Spanish-speaking world. The communicative approach provides students with opportunities to use the target language to express themselves in both speech and writing. Authentic texts and videos in Spanish encourage students to make cultural comparisons and use the target cultures as a lens for reflecting on their own beliefs and practices. This course introduces students to the basic structures of the Spanish language, and is appropriate for novice Spanish students as well as those who need to strengthen their basic skills.

#### Spanish II

This course continues the development of the essential components of Spanish. There is increased emphasis on reading, writing, and oral proficiency.

#### Advanced Spanish II

This class stresses oral and written proficiency. Additional readings and poetry may be included. Enrollment is restricted to students who have performed well in Spanish I and those whose preparation qualifies them for work at an accelerated pace. Prerequisite: permission of the department

#### **Spanish III**

This course builds on the skills honed in Spanish II, and, through the study of authentic texts and cultural practices, continues to broaden students' knowledge and appreciation of the Spanish-speaking world. Students read short stories, write compositions and begin to express more complex thoughts in speech.

#### **Advanced Spanish III**

Intended for students who have clearly demonstrated proficiency in the language and mastery of the details of grammar and its usage, this class attends to the study of literary texts, in addition to grammar review and increased mastery of linguistic skills. Students who have performed well in Advanced Spanish II may enroll in this course. Prerequisite: permission of the department

#### Spanish IV

This course deals with the evolving culture and civilization of Spain. It is designed to acquaint students with the important historical events and fundamental figures from the fields of literature, art, and politics that have contributed significantly to the shaping of modern Spain. Readings are selected from authors including Casona, Buero-Vallejo, and Sender.

#### **CL Spanish Language IV**

This comprehensive course helps consolidate the mastery of both literary and linguistic skills, including listening and reading comprehension, conversation, and composition. Throughout the year, students explore the culture of the Spanish-speaking world in both contemporary and historical contexts. Students may achieve the mastery necessary to sit for the Advanced Placement examination. Prerequisite: permission of the department

#### Spanish V

At the fifth level of language study students may elect term courses, taken either separately or as a three-term sequence. Prerequisite: Spanish IV or permission of the department

#### **Spanish V: Latin American Civilization** (GESC)

fall term

Through readings and discussion, students gain a better understanding of the historical, social, and cultural characteristics of Latin America and are prepared for further literary studies. Students' fluency increases as they discuss and write in Spanish about the topics covered through an exploration of civilization, culture, current events, and literature of selected Latin American countries.

#### Spanish V: Latin American Short Story (GESC)

winter term

This course focuses primarily on short stories of Latin America. By reading representative works, students study the nature of a short story, its development and literary devices, and they gain a better understanding of Latin-American

culture. Reading, speaking, and writing are carefully integrated with an emphasis on creative expression. Readings are selected from authors including Borges, García Márquez, Allende, and Castellanos.

#### Spanish V: Cinema (GESC)

spring term

In this course, selected films from the Spanish-speaking world are presented. The selections cover a variety of genres, topics, time periods and styles. Each film is preceded by an introductory work to provide background, and followed by different forms of assessments, including essays, oral presentations and sketches. Students participate in discussions before, during and after each movie.

#### **CL Spanish Literature V** (GESC)

This full-year advanced course in Spanish literature provides a comprehensive survey of literary works in a variety of genres, both from Spain and Latin America. This course also explores the historical contexts for many of those works. As they analyze literature in detail, students write critical essays and make oral presentations. Prerequisite: permission of the department

#### **Independent Studies in Spanish**

term course

A student who is highly proficient in a foreign language may propose an Independent Study Project (ISP). The student has to have exhausted all curricular offerings in order to be considered for an ISP. The student must arrange for a project advisor from within the department, **submit a written proposal**, and obtain approval from the academic advisor, project advisor, department head, and dean of faculty for any ISP. All discussion and all writing submitted must be in Spanish.

#### **School Year Abroad in Spain**

Please see Alternate Study beginning on page 50.

**Please note**: In rare cases, the school may deem that educational testing makes a language course waiver appropriate and necessary. In those cases, the student will meet graduation requirements in modern and classical language by taking humanities courses that provide insight into foreign cultures. The chair of the Modern and Classical Language Department maintains a list of suitable courses.

# HISTORY, PHILOSOPHY, RELIGIOUS STUDIES, and SOCIAL SCIENCE

The History, Philosophy, Religious Studies, and Social Science curriculum has several objectives: 1) to develop an appreciation of the past through multiple perspectives; 2) to inculcate an understanding of the past as an important component of our present society; 3) to increase knowledge of our interdependent and complex world, 4) to teach students the value of engaging in open-minded dialogue and discussion in pursuit of the foundational terms and ideas defining philosophy, psychology, and religion so that our students are prepared to do substantive work presently, at college, and beyond; and 5) to provide a means of growth toward self-understanding and toward comprehension of the general human condition through study in various fields of social science. With these objectives in mind, the department offers a variety of required courses and electives in history, religious studies, philosophy, and social science. In addition to recognizing the importance of content, the department provides training in the skills necessary for using the vast amount of information in these disciplines effectively. These skills include the ability to manipulate data drawn from a variety of sources; the ability to construct a logical argument in both oral and written form; the skills of comparison, criticism, interpretation, imaginative and intuitive thought, and synthesis; collaborative small group work; and the ability to make effective use of library materials and the internet. Current events are integrated into each of the history and social science courses.

One of the most important goals of the History, Philosophy, Religious Studies, and Social Science Department is the development of actively engaged learners in the classroom. Students find themselves at the absolute center of the action in class discussions. The department distinguishes between oral participation and intellectual engagement. While the former represents mere talking, the latter signifies the interaction, written at times, but especially oral, of students' minds and experiences with the materials at hand. Among many examples of high-level engagement are a student's raising specific questions about a source, citing evidence from various sources, creating connections between ideas, and responding to classmates.

The department requires one full credit of world history (this can be fulfilled with either World History: The Making of Our Modern World or History from the Inside Out: Uncovering the Roots and Legacies of the Early Modern World), to be earned in the freshman or sophomore year, and one full credit of United States history, to be earned in either the junior or senior year. (The department strongly recommends that students earn this credit in their junior year. Students may petition the department chair, in consultation with the director of studies, to delay taking U.S. history until their senior year.)

The department also requires that all students take two courses in Philosophy, Psychology, or Religious Studies. At least one of these must be taken during junior or senior year.

For information on courses designated GESC, please refer to pages 5-6

## **Economics**

## **Economics Elective for Sophomores**

#### **Economics: Contemporary Economic Perspectives**

 $term\ course/sophomores$ 

This term course will expose students to current issues as viewed through the economic perspective. By taking a theme-based approach to relevant global topics, students will critically analyze the world around them while studying the economic foundations underlying the problems. The subject matter will purposefully vary from year to year to incorporate contemporary issues; likely topics include: social policies and policy-making, public choice theory (economic analysis of elections and voting), international trade and development, and business and finance (including

the stock market). Regardless of the specific issues, the course will intentionally examine, discuss, and debate multiple perspectives to help students learn and understand the complexities of real-world decision-making. With some additional study, following this course, students may take a placement test to place out of Introduction to Economics. Prerequisite/Co-requisites: World History or Early Modern World History

#### **Economics Electives for Juniors and Seniors**

#### **Economics: Introduction to Economics**

fall term/juniors and seniors

All citizens face an essential problem: There are not enough resources to satisfy all our wants and needs. Such scarcity requires difficult choices in the United States and the world, and this course examines the mechanisms for making these choices and their consequences. For example, students are introduced to personal finance and the use of budgets to illustrate these dynamics. After an introduction to the basic principles of economic thinking, the course examines real and complex problems in the United States and throughout the world. In looking at the characteristics of the market system, supply and demand (What is it really?), successes and failures of markets, and the role of government in the marketplace, students will to learn how to analyze, think critically about, and debate these issues from an economist's perspective in order to better understand current economic decisions. Of special interest to those interested in history, politics, and public affairs, this course emphasizes discussion and debate, and welcomes students of all mathematical abilities. Prerequisite/Co-requisite: United States History or CL United States History

#### **Economics: Microeconomics**

winter term/juniors and seniors

Citizens, businesses, and government all face choices of how to distribute scarce resources among competing demands. This term course will extend the analysis of the introductory course to study the decision-making process of households and firms at the individual market level. Expanding on the basic principles of demand and supply, this course will study a variety of market models from competitive to monopolistic. It also will look at topics, such as market equilibrium, consumer behavior, production costs, resource demand, wage determination, income inequality, and the principal-agent problem. This course is taught with the use of real case studies and places emphasis on critical thinking, discussion, debate, and welcomes students of all mathematical abilities. Students end the term by taking on the role of a Wall Street research analyst, writing and presenting a research report about a publicly traded company of their choice. Prerequisite: Introduction to Economics; and Prerequisite/Co-requisite: United States History or CL United States History

#### **Economics: Macroeconomics** (GESC)

spring term/juniors and seniors

This term course will extend the analysis of the introductory course to look at economic growth in the long run as well as the major macroeconomic problems of inflation and unemployment in the short-run. In asking questions about the powers and limits of government, students will examine both fiscal and monetary policy to ultimately comprehend and analyze current economic struggles and events. The macroeconomics of both the U.S. and developing countries will be highlighted, and real data will be used throughout the term to enhance understanding. This course is taught with the use of real case studies and places emphasis on critical thinking, discussion, debate and welcomes students of all mathematical abilities. Students end the term by taking on the role of a company's country manager and presenting a macroeconomic analysis of that country. Prerequisite: Introduction to Economics; and Prerequisite/Co-requisite: United States History or CL United States History

#### **Economics: Applied Economics** (GESC)

term course/juniors and seniors

Through a variety of experiential learning projects, students will apply concepts learned in the Introduction to Economics course to real world issues. They will experience the perspective and develop the analytical skills of varied professional roles, such as finance or management consulting analysts, investors, business executives, and public policy makers. Examples of projects include taking on the role of a stock market portfolio manager and analyzing the size, market share, and customer satisfaction of Loomis students with local restaurants; other projects will evolve based on timely economic issues and student interest. This course places great emphasis on discussion, debate, critical thinking, and decision-making, and welcomes students of all mathematical abilities. Prerequisite: Introduction to Economics; and Prerequisite/Co-requisite: United States History or CL United States History

#### **CL Economics** (GESC)

year course/juniors and seniors

The first half of this course focuses on microeconomics and aims to give students a thorough understanding of the principles of economics that apply to individual decision makers within a larger economic system. Significant emphasis will be placed on the nature and functions of product markets but will also include the study of factor markets and the

role of the government in the economy. The second half of the course will focus on macroeconomics and examines economic systems as a whole. Emphasis in this half will be on national income and price determination and incorporates economic performance measures, growth, and international economics. The course will stress graphical models and data interpretation. It will explore topics in great depth with significantly greater rigor than the economics term series. Students who have done strong work in honors-level U.S. history and have a strong interest in public affairs should enroll in CL Economics. Note: this course will prepare students to take the AP Macroeconomics Exam and will mostly prepare students to take the AP Microeconomics Exam, but some additional preparation on the part of the student will be necessary. Prerequisites/Co-requisites: United States History or CL United States History; Advanced Precalculus; permission of the department

## History

## **Required Courses**

Both of the following courses satisfy the world history requirement. Students preferring a more traditional approach should request World History: The Making of Our Modern World. Students preferring a less conventional, discovery-based approach should request History from the Inside Out: Uncovering the Roots and Legacies of the Early Modern World.

#### World History: The Making of Our Modern World (GESC)

year course/freshmen and sophomores

In this traditional world history course, students engage with important questions of modernity and perspective while confronting complex historical phenomena such as, but not limited to, the global expansion and encounter of diverse peoples, the Age of Revolutions and its legacy, international conflicts and their origins, the emergence and development of new nations, and recent challenges to democracy and human rights. In addition to developing and applying distinct historical skills, students will also be introduced to a variety of concepts and proficiencies within the larger field of the humanities and social sciences, including human geography, sociology, civics, and economics. This survey course challenges students to think objectively and globally, evaluate primary documents and secondary sources, and utilize a variety of textual, visual, statistical, physical, and online materials to understand and explain the past and its role in the making of our modern world. The course satisfies the World History diploma requirement and counts toward the Global & Environmental Studies Certificate.

## **History from the Inside Out: Uncovering the Roots and Legacies of the Early Modern World** (GESC) year course/freshmen and sophomores

This exploration into the human past is for students looking for an alternative to a traditional world history survey. In this course student curiosity and the questions that emerge as a result guide investigations into the way people of the distant past, both the famous and the unknown, have shaped the world in which we live. Students engage in reenactments of historical events, games that simulate the economic and social environment in which people once lived, role plays, and in-depth detective work involving old documents, ancient objects, artwork, and other fragments of the distant past (including those in Loomis Chaffee's archives) in order to piece together the human experience and bring it to life. The course focuses closely on the period between 1400 and 1750 when key transitions to the modern world were developing and also delves deeply into previous ages to discover the background to those transitions, all the while keeping track of important happenings around the globe today. The subject matter can range from events that affected millions such as the crisis in the late Ming Dynasty to a little known witch scare in the Connecticut River Valley. The course satisfies the World History diploma requirement, and counts toward the Global & Environmental Studies Certificate.

Each of the following courses satisfies the U.S. history requirement. CL United States History is available to students by departmental permission. Both options in U.S. History require summer reading as well as an original research paper.

#### **United States History: Colonial America-Present**

year course/juniors

The course begins with a brief overview of Colonial America and surveys American history chronologically from the Revolutionary War through 9/11. Students approach the history of the United States by concentrating on five key themes: Identity; Immigration & Migration; Government, Civics & Politics; Foreign Policy; and Economics. Throughout the course students are engaged with the nature of history and employ the tools of analysis used by historians. Students complete an independent, scholarly research and writing project on a topic of their choice. Prerequisite: World History or Early Modern World History

#### **CL United States History**

year course/juniors

This course is designed for students who have a strong interest in history. The expectations of this course are set at a standard freshman-college survey course in American history, with more reading and writing than in United States History: Colonial America—Present. Students will engage in seminar-style discussions, work with a variety of primary and secondary sources, write an independent historical research paper, and display a high level of sophistication in all other areas of the course. The course chronology is comprised of all of American history from Colonial America to the present. Prerequisite: World History or Early Modern World History; permission of the department

### **History Electives for Sophomores**

#### Global Human Rights: Protection and Abuse (GESC)

term course/sophomores

This course seeks to examine the historical basis for various infringements upon basic human rights around the globe and what actions are being taken in order to bring abuses to a halt. Students investigate the definition of "human rights" and whether a singular standard, which would be applicable across varying international and cultural traditions, can be reached. From the mistreatment of native peoples and the denial of women's rights, to apartheid, slavery and genocide, the world has seen many cases of people being denied their human rights. Students explore the background history of these abuses, the framework within which both governmental and nongovernmental agencies are attempting to address these issues, as well as the role of international law and economic sanctions in the process of ending human rights violations and spreading political, social and economic justice throughout the world. Prerequisite/Co-requisite: World History or Early Modern World History

#### CL European History (GESC)

year course/sophomores

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which we live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of CL European History are to develop (1) an understanding of some of the principal themes in modern European cultural, political, economic, and social history; (2) an ability to analyze historical evidence and historical interpretation; and (3) an ability to express historical understanding in writing. This course covers the majority, but not the entirety, of the AP European History curriculum; those students interested in sitting for the AP European History exam in May will need to complete some independent work to prepare for that exam and should consult with the instructor to identify those additional topics. Prerequisite: World History or Early Modern World History; permission of the department

## History Electives for Sophomores, Juniors, and Seniors

#### Area Studies: Arab Culture Today: Youth Uprising (GESC)

term course/juniors and seniors; sophomores with permission of the department

Veiled women and Muslim extremists are the images often conjured by the concept "Arab culture," even though the majority of Muslims are not Arab, and these images often come from non-Arab countries in the Middle East, like Afghanistan. This course examines the culture(s) of countries where Arabic is spoken today, extending from Morocco to Yemen, many of which are in the process of undergoing major political changes led by the "Facebook Generation." While Arabic is spoken in countries, dialects vary from village to village. What unifies these groups? What differentiates the individual cultures from each other? In the first part of the course, students will get an overview of the history and geography of the Arab world. In the second part of the course, students will look at the Arab world from a cultural perspective, reading academic and news articles, literature, and poetry, and seeing films from Algeria, Egypt, Lebanon, and the Palestinian Territories. Questions raised will relate to women, religion, politics, music, language, and youth. Throughout the course, students will consider the relationship between the Arab world and the West, culminating in an examination of literature and film by Arabs living in Europe and America. Prerequisite: World History or Early Modern World History

#### **Area Studies: China: Past and Present (GESC)**

term course/juniors and seniors; sophomores with permission of the department

China has always seen itself in the "center" of the globe, and today more than ever it remains a pivotal player in the world's affairs. One fourth of the globe's humanity resides in the People's Republic of China, and at 4,000 years and counting, China constitutes the world's longest continuous civilization. But where is China headed? What do the Chinese think is best for China? In order to wrestle with these questions, students investigate through a variety of sources — written, visual, and aural — the weight of the Chinese cultural tradition, cultural continuity and change in the face of foreign invasions, the impact of Mao Zedong and the Communist Revolution, Deng Xiaoping and the Chinese democracy movement, and the significant role China now plays in the global community as it modernizes at breakneck speed. Prerequisite: World History or Early Modern World History

#### **Area Studies: Germany and the Holocaust** (GESC)

term course/juniors and seniors; sophomores with permission of the department
This course investigates the rise of Adolf Hitler and the Nazi state, the implementation of the Holocaust and its
aftermath. To understand the roots of anti-Semitism, the course begins with a brief look at Europe's Jewish population
over the past five centuries and continues with a serious examination of the political, social, and economic factors
following World War I that made Hitler's rise to power possible. The course analyzes Nazi racial and political policies,
Germany's involvement in World War II, and the mass annihilation of Jews and others. Students examine the role of
bystanders and rescuers, resistance movements, the aftermath at Nuremberg, and the lasting legacies of the Holocaust
today. The term concludes with a look at examples of modern hatred and genocide in the 20th and 21st centuries.
Prerequisite: a world history course

#### Area Studies: Modern African History: The Roots of Today's Africa (GESC)

term course/juniors and seniors; sophomores with permission of the department/not offered 2017-18 Modern African History introduces students to central topics, themes, theories, and debates in African history since 1800, focusing chiefly on current events and their causes. European colonization and decolonization, national independence movements, Cold-War allegiances, ethnic and national identity and conflict, public health issues, human rights, economic development, and pan-Africanism will be studied and discussed. Students explore regional, national, or topical case studies based on their own interests. Prerequisite: World History or Early Modern World History

#### **Area Studies: Modern South Asia** (GESC)

term course/juniors and seniors; sophomores with permission of the department
South Asia (a region that includes Afghanistan, Bangladesh, Bhutan, India, Pakistan, the Maldives, Nepal, and Sri
Lanka) is inhabited by a fifth of humanity and is the home of both the "world's largest democracy" and the "most
dangerous country." This course will provide students with the historical and political background needed to
understand this religiously and linguistically diverse region filled with social, economic, political, and technological
contradictions. Focusing on India, Pakistan, and Bangladesh, students will use primary and secondary texts, images,
film, and current news sources to debate, role play, and discuss how the region has changed since the advent of the
Mughal Empire in the sixteenth century, and how these changes have shaped the region today. Prerequisite: World
History or Early Modern World History

#### **Area Studies: Native American History**

term course/juniors and seniors; sophomores with permission of the department/not offered 2017-18

As there are over 500 federally recognized tribes in the United States alone, this course will pay particular attention to the interrelations between Native Americans, Americans, and Canadians, and, in turn, the enormous impact these interactions have had on Natives and others. After a brief introduction of the history of Native Americans pre-contact, during contact, and post-contact, students will investigate oral histories and other primary sources that demonstrate the rich diversity of Native American cultures. Other topics covered in the course will be European and American perspectives on Native Americans, the role Native Americans played in both world wars, the legal disputes over Native American sovereignty, the question of reservation lands and Native American citizenship, and contemporary controversies such as the names of professional and college mascots that reference Native Americans. Prerequisite: World History or Early Modern World History

#### Area Studies: Russian History (GESC)

term course/juniors and seniors; sophomores with permission of the department/not offered 2017-18 Winston Churchill once referred to Russia as "a riddle, wrapped in a mystery, inside an enigma." Students in this course will investigate the contemporary history of this unique and complicated country, and its role as a major world power during the 20th century. Topics include Marxist-Leninist ideology, the Bolshevik Revolution, Stalin's totalitarian regime, and World War II. Particular emphasis is placed on a study of the Cold War and the collapse of communism during the Gorbachev years, concluding with an examination of the post-Soviet policies of Yeltsin and Putin. Prerequisite: World History or Early Modern World History

#### **Area Studies: The World at War** (GESC)

term course/juniors and seniors; sophomores with permission of the department

The First and Second World Wars transformed the political, economic, and social structure of our modern world. The course examines the origins and causes of each war, the conflicts themselves, and lasting effects that are still felt today. Particular emphasis is placed on historical preconceptions of these conflicts and introducing regions and peoples that are often overlooked in traditional narratives of these engagements. Topics and themes discussed in this course will include wartime occupation, collaboration, and resistance, as well as the influence of the world wars on modern revolutionary movements in these distinctively non-Western countries. Students will read a mix of primary and secondary sources material. Prerequisite: World History or Early Modern World History

#### **Environmental History** (GESC)

term course/juniors and seniors; sophomores with permission of the department/not offered 2017-18

The trajectory of the human species has always been inevitably intertwined with humanity's ability, or lack thereof, to sustainably interact with its surroundings. Beginning with the early civilizations in Mesopotamia, the Americas, China, and the Mediterranean, this course examines the history of human experience and its evolving relationship with the natural order. Topics to be addressed include defining and understanding environmental history as a young academic discipline, humankind's changing perceptions of nature over time, the astonishing impact of the transfer of plants, animals, and diseases between the hemispheres after 1492, the effect of modern industrialization and urbanization, environmental crises of the 20th century, environmental changes and warfare, and the future of the planet we as a species collectively share. Prerequisite: World History or Early Modern World History

#### **Women in Politics: The American Experience**

term course/juniors and seniors; sophomores with permission of the department/not offered 2017-18 This term course will explore the changing role of women in American politics from the colonial period to the present day. The course will begin with a study of women's involvement in politics today and then look back to the historical antecedents that made that level of involvement possible. Materials will include primary source documents such as personal letters and journals highlighting women's engagement in politics long before it was accepted by society at large. Prerequisite: World History or Early Modern World History

## History Electives for Juniors and Seniors

#### **History of Sport in Society** (GESC)

term course/seniors

This course is designed to allow students to examine their own perceptions of the role of sport and athletic competition in their own lives, as well as throughout history, through the examination of events from ancient Greece to the WWI Silent Night soccer truce in 1914, to the Cold War-based "Miracle on Ice" in 1980. Athletic competitions have served as a backdrop for larger global issues, and the inspiration for myriad diverse works of literature and poetry, and thus short stories, poetry, personal narratives, and longer works will be read and analyzed. They will also be investigated in a manner that allows students to grapple with the significance athletics have come to play for both the individual as well as for culture, humanity, and civilizations through the lenses of race and gender. Students will be asked to try a sport that they have not played before and write a personal narrative on their own experience. Each student will also conduct an independent research project.

#### **International Relations** (GESC)

term course/juniors and seniors

"How does the world really work?" "How can I practically and positively affect the real world?" While providing an academic background on global issues and diplomacy, this course puts students in the seats of public policy makers and other non-profit, corporate, and social movement decision-makers as they struggle with the many different international relations issues and perspectives they would need to synthesize before coming to a negotiation, debate or actual decision. The students are exposed to, but do not need previous study of, economics, sociology, political science, history, environmental science and security studies. The course develops valued critical thinking, writing and debating skills in asking good questions about complex global problems (like trade, security, environment, healthcare, energy, food) to develop and debate options, make decisions and deal with consequences of those decisions. Prerequisite/Corequisite: United States History or CL United States History

#### Jurisprudence: American Legal History

term course/juniors and seniors

Using historical works, case law, and recent articles, this course introduces the legal system in the United States. Students explore the background of international systems, the Constitutional framework for the judicial branch of the government, and the Bill of Rights to learn how legal systems have evolved from the teachings of Hammurabi to present day cases. Issues in both constitutional and criminal law are considered. Prerequisite/Co-requisite: United States History

#### The Model T and the American Industrial Revolution

term course/seniors

This course delves into America's Industrial Revolution, Edison, Ford, and the invention and manufacture of the Model T. New England was the birthplace of America's Industrial Revolution, and we explore this history, in readings and in field trips to early and modern mining and manufacturing sites. Both the history and actual workings of pumps, mills, steam engines, electricity, manufacturing and processing techniques, the internal combustion engine, and the Ford Rouge plant are studied. Theory is mixed thoroughly with hands-on investigation, and the course culminates with disand re-assembly of a genuine Ford Model T engine, along with driving lessons.

## Advanced History Seminar: Instruction Assistant: Teaching and Learning in History term course/seniors

In this course, each senior student is paired with an experienced teacher of World History for the dual purpose of learning while teaching and sharing with younger students the understandings and skills he or she has developed in studying history at Loomis Chaffee. The senior does all the reading of the course, as well as additional reading on teaching and learning in history. Under the teacher's supervision, the senior reads and comments on first drafts of student papers, helps students to develop study skills, and facilitates small-group work. The senior also engages in discussion with the teacher and does some reflective writing on both new historical understanding and the experience of teaching. This course may be elected only for one term. Prerequisite: World History or Early Modern World History; and Prerequisites: United States History or CL United States History; permission of the department

#### **CL History Seminar: Globalization** (GESC)

term course/juniors and seniors

Free trade and globalization can be viewed either as opportunities for growth or as threats to jobs, living standards, human rights, and the environment. American and Mexican trade pacts, for example, seem to offer benefits in terms of reduced tariffs and manufacturing costs ("specialization and comparative advantage") and reductions in the cost of living for purchasers of trade goods. Workers in the industries that move production from one country to another, however, may see it simply as losing jobs. Using such case studies, this course considers the history and functioning of globalization: pros and cons, winners and losers, and alternative solutions. In the final analysis, students consider fundamental questions of culture, politics, and economics in the global community. Prerequisites/Co-requisites: United States History or CL United States History; permission of the department

#### CL History Seminar: The American Civil War

term course/juniors and seniors

The American Civil War was a defining moment in American history. This course examines the causes of the conflict, the war itself, the period of Reconstruction up to 1877, as well as the meaning of the conflict today. Topics discussed in the course include the political developments in both the North and the South, the question of race and slavery, emancipation, the participation of African Americans in the war, and military developments. Students will read a mix of primary and secondary source material. Prerequisites: United States History or CL United States History; permission of the department

## CL History Seminar: American Mosaic: Immigration and Ethnicity in the United States term course/juniors and seniors

What does it mean to be an American? This question has played an intriguing and pivotal role in the shaping of American identity from the nation's founding to the present day. This course provides a detailed examination of both the immigrant experience and the reception of the immigrant in the United States since the 19th century. It will consider the causes of immigration, the social, cultural and economic adaptation of various groups, the development of ethnic group identities, and changing American policy and attitudes towards immigrants and ethnic groups. Areas of studies may include, but are not limited to, the journeys of the following groups: Irish, Italians, Jews, Asians, Latinos/as, and Muslims. Class readings and research of micro-history will investigate the personal experiences of these various ethnicities. Prerequisites: United States History or CL United States History; permission of the department

#### CL History Seminar: American Mosaic: Deconstructing Race in America

term course/juniors and seniors

The goals of this course are to examine the origins of the concept of race, and to understand how various definitions of race throughout American history influenced thoughts, actions, identities, and experiences of people living in the United States. Concepts and themes such as racism, nativism, colorism, and whiteness will be examined and explored in addition to America's racialized 19th century social, economic, and political systems. The course will trace the

evolution of those systems and examine their continued impact today on the government, society, and individuals. Ultimately, this course will empower students to analyze the historical construction of race as a concept in American society, and assess the extent to which progress has been made in dismantling racialized institutions. Prerequisites: United States History or CL United States History; permission of the department

#### CL History Seminar: The U.S. Presidential Election

fall term/juniors and seniors (offered in presidential election years only)

How are our leaders elected? Does the election process produce the best candidates and the most desirable ends? Why do so few eligible voters exercise their right on Election Day? Do the American people really have a voice? What roles does money play? How does the news media affect the election process? While addressing these questions, this course explores the major domestic and foreign policy issues of the campaign and the candidates' positions on each. Students engage in extensive campaign research and take an integral part in the mock election process that envelops Loomis Chaffee every four years. They also undertake thorough analyses of the election results. Prerequisites: United States History; permission of the department

#### **CL Guided Humanities Research Seminar**

winter term/seniors only

This course provides students with the structure and flexibility needed to complete an undergraduate-level research project in the humanities. Students will engage in sustained, significant, mentored research that draws on their work in previous academic courses such as United States History as well as their involvement in various on-campus initiatives such as the Norton Family Center for the Common Good and the Alvord Center for Global & Environmental Studies. Possible topics may include: race and democracy in South Africa; sociology and politics of mass incarceration; history of the American college; food deserts in the United States; and gender in contemporary African American fiction. After an intensive period of independent research and writing, students will conclude the course by collaborating on an in-house interdisciplinary humanities journal. All students will complete archival research of some kind. Though a specific prospectus is not required at the outset, students should have a good sense of the research topics they would like to pursue before the term begins. Prerequisites: United States History or CL United States History; permission of the department based on the submission of a completed junior-year research paper

#### CL Comparative Government and Politics (GESC)

year course/seniors only

After a brief review of government and politics in the United States, students are introduced to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of countries. The course aims to illustrate the rich diversity of political life around the world, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political, historic, and economic changes. While a comparative study of six nations — Great Britain, Russia, China, Nigeria, Mexico, and Iran — serves as the core for this course, relevant parallels to U.S. politics are also integrated. This course will prepare students to take the AP Comparative Government and Politics exam. Prerequisites: United States History or CL United States History; permission of the department

## Philosophy

Any of the following may be taken toward fulfilling the two-course philosophy, psychology, and/or religious studies requirement. At least one course must be taken in the junior or senior year.

## Philosophy Electives for Freshmen and Sophomores

#### **Introduction to Ethical Issues**

term course/freshmen and sophomores

Students in this class examine a variety of moral issues and dilemmas, and by studying ethical theories and logical thinking, learn to approach and solve these dilemmas rationally. Rather than telling students what to believe, teachers provide students with a system for examining their own values and behavior as well as the behavior of others. Group discussions are a vital component of the class. Students complete a term paper investigating two sides of a public moral issue before arriving at a reasoned conclusion. The course concludes with a debate on a topic of the class' choosing.

#### **Introduction to Philosophy**

term course/freshmen and sophomores

This course investigates the nature of philosophy by examining traditional philosophical problems: the ultimate nature of reality (metaphysics), the limits of human knowledge (epistemology), and the nature of the True, the Good, and the Beautiful (axiology). The course seeks to develop within students critical and inquisitive minds that understand

philosophy not as a purely academic venture but as practical and indeed necessary for the development of meaningful and authentic lives.

## Philosophy Electives for Juniors and Seniors

#### **Ancient Philosophy** (GESC)

term course/juniors and seniors

Facilitating the revolutionary transition from a mythological to a rational worldview, ancient philosophers were the first to ask important questions about the nature of reality and the way in which human beings experience the world. Many of these questions are still being asked today. After surveying the metaphysical and epistemological musings of the pre-Socratic philosophers, students hear Socrates defend himself before an Athenian court against charges of religious heterodoxy and corrupting the minds of the young, watch while Plato constructs an ideal society based on reason, and consider with Aristotle the most rational approach to the good life. While discussing these primary texts, students also address other topics including the nature of reality; the sources and limitations of human knowledge; the nature of the True, the Good, and the Beautiful; social contracts; the nature of government; and piety, justice, and virtue.

#### Philosophy and Literature

term course/juniors and seniors

The writing of literature and the writing of philosophy are usually very different enterprises. This course is unique insofar as it seeks to examine a species of literature, a hybrid, whose purposes are plainly philosophical though its forms are plainly narrative. What are we to make of such a philosophical literature or of such a literary philosophy? What are its strengths? What are its weaknesses? What are we to learn from it both philosophically and literarily? And why is reading it and talking about it such fun? These are just some of the questions we will explore in this course. Texts may include but are not limited to a selection from the following: *The Persian Letters*, by Montesquieu; *Rameau's Nephew*, by Denis Diderot; *Hard Times*, by Charles Dickens; *Adam Bede*, by George Eliot; *Crime and Punishment*, by Fyodor Dostoyevsky; *The Moon is Down*, by John Steinbeck; and *Under the Net*, by Iris Murdoch.

#### Theory of Knowledge

term course/iuniors and seniors

This course offers a philosophical investigation of the problems of knowledge and mind: What do we know? What can we know? To what extent is our knowledge determined and/or limited by the constitution of our mind or brain? The course confronts early on (as did modern epistemology) the radical skeptic's challenge that we can never be justified in our claims to know an external world, and then examines possible foundational principles of evidence and reasoning proposed to overcome that challenge. Some of the following topics are considered: the nature of scientific method, the problem of induction, the nature and justification of causal claims, principles of justification assumed in inferences from sense experience to reports about physical objects, philosophical theories of perception, the nature of consciousness, the mind-body problem, and the impact of modern neurological research and the challenge to knowledge posed by the problem of implicit bias. Text: Noah Lemos, *Introduction to the Theory of Knowledge*. In addition, passages from the following are discussed in some detail: Descartes, Hume, Kant, Russell, Chisholm, Putnam, Dennett, Kornblith, and Eagleman.

#### **Topics in Ethical Theory** (GESC)

term course/juniors and seniors

Some of the earliest and most important questions to engage philosophers dealt with the moral nature of human behavior. What is the basis of moral judgment? What makes right actions right and wrong ones wrong? Does diversity among different cultures permit any absolute moral values and behavioral norms, or are they necessarily relative and particularistic? Using a collection of readings from both ancient and modern philosophers, as well as various secondary sources, this course familiarizes students with the terms of this discussion and introduces them to a number of ethical theories including ethical relativism, divine command theory, ethical egoism, utilitarianism, and Kantian ethics.

#### **Topics in Logic**

term course/juniors and seniors

To make explicit our implicit principles of reasoning, this course introduces modern deductive and inductive logic, including propositional and predicate logic and techniques of formal proof. Students examine principles of logic and evidence, the foundations of our systems of knowledge. They come to understand the distinctions between validity and truth; between the actual, the logically possible, and the logically necessary; and between inductive versus deductive logic. Finally, students learn some of the traditional informal fallacies of relevance, ambiguity, and insufficient evidence. The course includes a brief introduction to key issues and readings in the theory of knowledge in order to give the proper philosophical setting and significance to the foundational logical principles.

## Psychology

Any of the following may be taken toward fulfilling the two-course philosophy, psychology, and/or religious studies requirement. At least one course must be taken in the junior or senior year.

### Psychology Electives for Juniors and Seniors

#### Developmental Psychology (GESC)

term course/juniors and seniors

This course focuses on human development from infancy through childhood, adolescence, and adulthood, with particular emphasis on adolescent development. Students consider the physical, cognitive, social, emotional, sexual, moral, and spiritual dimensions in which development takes place, and the role that gender plays within each dimension. Readings include excerpts from Erikson, Gilligan, Kohlberg, Piaget, Pipher, Thompson, and Hammerschlag and articles describing current psychological research on adolescent development.

#### Neuropsychology

term course/juniors and seniors

How is it possible that the human brain, a three-pound physical organ in our body, can be responsible for all our behavior and cognition? While the question has been explored and studied for many years, only recently have we begun to make some headway into the workings and functional processes of the brain, and yet still so much remains an enigma — most prominently, the problem of consciousness. In this course, we will explore the field of neuropsychology by focusing on the major influences of the relationship between the brain, cognition, and behavior. At the foundational core, we will highlight the structure and function of the brain as they relate to the psychological processes of learning, remembering, communicating, temperament, emotions, and relationships. We will also delve into the principles of brain organization while underscoring an appreciation of individual differences. Emphasis will be on discussions of case examples and commonly used assessment tools to illustrate variations in neuropsychological development.

#### **Psychology of Loss**

term course/juniors and seniors

This course provides students with a better understanding not only of death and dying, but also of life and living. Some of the topics considered are the feelings of the terminally ill, grief, cultural attitudes concerning mortality, funeral customs, euthanasia, suicide, and near-death experiences. Through readings, films, field trips, and class discussions, students examine both the intellectual and emotional aspects of death and dying and their effect on the meaning of life. Readings include works by Kubler-Ross, Gilbert, Bonanno, and Byock and supplementary articles.

#### Social Psychology

term course/juniors and seniors

Social psychology studies human beings in relation to others. Men and women formulate personal and communal identity through social interactions, and this course focuses closely on those interactions. Throughout the term, students examine many of the important and compelling theories, ideas, and research topics in the field of social psychology through selected readings, Internet research, projects, papers, and films. The course encourages students to integrate the information learned with their experiences and communities.

## **Religious Studies**

Any of the following may be taken toward fulfilling the two-course philosophy, psychology, and/or religious studies requirement. At least one course must be taken in the junior or senior year.

## Religious Studies Elective for Freshmen and Sophomores

#### Religious Diversity in Contemporary America (GESC)

term course/freshmen and sophomores

In 1955 the Jewish sociologist Will Herberg published an essay celebrating the triumph of religious diversity in America. He argued that America had become a nation where one could be a Protestant, a Catholic, or a Jew and still be

considered an American citizen. Though Herberg's essay is regarded as a classic discussion of religion in America, its value has become more historical than descriptive. Today, in addition to large numbers of Americans who are members of the three religious traditions Herberg described, the United States includes rapidly growing populations of Muslims, Buddhists, and Hindus, as well as secular or non-religious groups. Making sense of what Diana Eck of the Harvard Pluralism Project calls "the world's most religiously diverse nation" and understanding its implications for American social, cultural, and political realities constitute the focus of this course.

#### Religious Studies Elective for Sophomores, Juniors, and Seniors

#### Philosophy of Nonviolence (GESC)

term course/sophomores, juniors, seniors

Despite a universal desire for peace, it is not often that human beings beat their swords into ploughshares. History appears to be a tedious tale of hatred, greed, enmity, and violence between one group of human beings and another. Fortunately, the better angels of our nature prevail on occasion and advocates appear who bear witness to another way of satisfying basic human needs. This course will explore the development of nonviolence in the philosophy of Mahavira, the Buddha, Socrates, and Jesus and in the courageous social activism of Mohandas Gandhi and Martin Luther King. Students will consider the implications of *ahimsa*, the emergence of conscience and the relativization of obedience to the state, and the moral imperative of conducting principled dissent from a position of humility and peace in case one is mistaken.

### Religious Studies Electives for Juniors and Seniors

#### Children of Abraham: Moses, Jesus, and Mohammed (GESC)

term course/juniors and seniors

One of the extraordinary claims linking Moses, Jesus, and Mohammed is that they are all descendants of the biblical patriarch Abraham. This assumption of a common ancestry anticipates both the profound similarities and the striking differences existing between this family of religious traditions. Using both primary sources and a variety of secondary materials, students will examine the lives and teachings of Moses, Jesus, and Mohammed, asking fundamental questions about their understanding of the universe (cosmology), their experience of the sacred (theology), their understanding of themselves and others (anthropology), and their beliefs about liberation and redemption (soteriology).

#### Hinduism and Buddhism (GESC)

term course/juniors and seniors

With roots reaching back into the ancient civilization of the Indus Valley, and developing through the Brahmanical, Shramana, and Classical Periods, Hinduism evolved into an artful synthesis of ritual action, yogic meditation, and devotional piety. This course is an introduction to Hinduism and to its key concepts like reincarnation, dharma and karma; the gods and goddesses of the Hindu pantheon; and to selections from both *shruti* and *smriti* Scriptures (the Upanishads, the Bhagavad Gita, the Ramayana). Students will also explore the complex relationship that emerged between Hinduism and a new spirituality advocated by Siddhartha Gautama that focused on asceticism, mindfulness, and compassion, later to be called Buddhism, and which spread northeast into the cultures and lands of Asia.

#### The Literature of the Bible

term course/juniors and seniors

Mark Twain once humorously characterized a classic as a book everybody talks about but nobody reads. Twain would undoubtedly be surprised to learn that the Bible has become such a book. As American society has grown more secular and diverse, biblical literacy among Americans has plummeted. When so much of American history, politics, and culture is predicated upon a familiarity with the literature of the Bible, knowing little or nothing about it can be a real liability. The purpose of this course is to address this deficiency. Students will read generous portions of the literature of the Bible, develop an appreciation for its artistry, and explore the way it has been used to enrich the narrative world of American rhetoric, poetry, drama, and fiction.

#### Skeptics and Believers: Faith and Religion in a Secular World

term course/juniors and seniors

The April 8, 1966 *Time* magazine cover famously asked, "Is God Dead?" Written by an urban intellectual elite enchanted with science and technology and almost blind to the central role religion was currently playing in the Civil Rights Movement, the article that followed offered a provisional "yes." The world, it was thought, was on the cusp of a new secular era. The death of God and the end of religion was just a matter of time. It is not often that bright, educated people read the signs of the times so poorly. Today, religion continues to play an important role in every country and in almost every area of human experience from economics and politics to culture and morality. This course will explore the reasons for its continuing relevance and the various ways it is being challenged by philosophy and science.

## Independent Studies in Economics, History, Philosophy, Psychology, and/or Religious Studies term course/seniors

Students who have fulfilled both their history and philosophy, psychology and/or religious studies diploma requirements may undertake an Independent Study Project. The student must arrange for a project advisor from within the department, **submit a written proposal**, and obtain approval from the academic advisor, project advisor, department head, and dean of faculty.

## **MATHEMATICS**

The following courses present a sequential program by which students can gain an understanding of the style and content of mathematics, become adept in its fundamental skills, and explore the subject for the beauty of its abstractions and the variety of its applications. Aware of the increasing use of mathematics in both new and traditional fields, the department encourages students to continue their mathematical electives beyond the required courses in Algebra I, II and Geometry.

For information on courses designated *GESC*, please refer to pages 5–6.

Please note: All courses require a TI-83 or TI-84 graphing calculator. Any version of these calculators is acceptable; the TI-85 and TI-81 are not. Students who do not currently own one of these calculators should buy the TI-84.

#### Algebra I

This course is for freshmen who have had less than a full year of algebra. It covers properties of the real number system, linear and quadratic equations, and properties of exponents and radicals. Throughout the course there is a strong emphasis on word problems and non-traditional problem solving. Students develop competence with the graphs of linear, quadratic, and exponential equations, and master a number of techniques for solving equations and simplifying algebraic expressions. While the course emphasizes the development of algebraic skills, it also introduces students to some of the numerical and graphical solutions to problems made possible with the TI-84 calculators.

#### Geometry

This standard mathematics course for sophomores deals with Euclidean geometry of two and three dimensions. Construction with straight-edge and compass and an introduction to right-triangle trigonometry are included. When appropriate, students utilize technology to enhance the learning process. The course's emphasis on rigorous deductive reasoning develops the skills needed to communicate more complex ideas effectively. Prerequisite: Algebra I

#### **Advanced Geometry**

This course is for able students who have had two full years of algebra. It covers the same topics as Geometry but at a faster pace and in greater depth. It also includes a more thorough study of trigonometry and coordinate geometry. Prerequisite: Algebra II and permission of the department

#### Algebra II

This course reviews and further develops the concepts of linear and quadratic equations and inequalities. It then explores functions involving radical expressions and rational polynomials and finally considers logarithmic and exponential functions and their applications. Beyond traditional algebraic techniques, students learn numerical and graphical solution techniques with the guided use of the TI-84 graphing calculators. Work with matrices, trigonometry, complex numbers, and sequences and series is introduced along the way. Prerequisite: Algebra I

#### Advanced Algebra II

This course is for interested and able students who have done well in a full-year, in-depth, first-year algebra course. It covers at a faster pace and in more detail the same material as Algebra II, as well as conic sections, rational functions, and trigonometry. The TI-84 graphing calculator is used extensively in class. Placement for new students will be determined by the department. Prerequisite: Algebra I and permission of the department

#### **Precalculus**

The Precalculus course is intended for students who have completed both Algebra II and Geometry and who aspire to take Calculus or one of the statistics offerings in the following year. Students study the properties, graphs, and applications of a variety of different families of functions including linear, quadratic, polynomial, exponential, logarithmic, and trigonometric functions. These functions are explored graphically, algebraically, and numerically. The analysis of the functions is aided by the guided use of technology. While students have exposure to all the classic functions of high school math, the course is not intended for those who wish to move into the CL Calculus program. The course includes nearly ten weeks of work in discrete math topics: sequences, series, combinatorics, and

introductions to probability and statistics.

#### **Advanced Precalculus**

This course is for students who have a strong background in Algebra and Geometry and who plan on taking the CL Calculus AB course or possibly CL Statistics. Students study the properties, graphs, and applications of a variety of different families of functions including linear, quadratic, polynomial, rational, exponential, logarithmic, and trigonometric functions and also study sequences and series in considerable detail. The various functions, as well as the work with sequences and series, are explored algebraically, graphically, and numerically and are aided by the guided use of technology. In Advanced Precalculus there is less emphasis on the discrete topics of probability and statistics than in the regular Precalculus course; however, the trigonometric functions and their inverses, as well as the notion of limit, are covered in much more depth and detail since these topics are critical for success in the CL Calculus program.

#### **Advanced Precalculus with Differential Calculus**

This course is for students who have an exceptional background in Algebra and Geometry and who plan on taking the CL Calculus BC course. The course moves at an accelerated pace and thoroughly covers all the concepts of the Advanced Precalculus class during the fall and winter trimesters. The spring trimester is devoted to a rigorous introduction to differential calculus — a prerequisite for entry into the CL Calculus BC course. Some students may opt to study CL Statistics in addition to, or instead of, CL Calculus after this course.

#### **Topics in Discrete Mathematics**

fall term

This course explores a number of real-life mathematical applications and the theory behind them. Topics include Voting/Election Theory, the mathematics of power (The Benzhaf and Shapley-Shubik Power Indices), the mathematics of fair division, and the mathematics of apportionment pertaining to government bodies. The course is designed for both those who intend to take statistics in the winter and spring terms and those who have an interest in an elective mathematics course strongly based in theory and in different real-world applications. Prerequisite: Algebra II

#### Statistics I (GESC) (winter)

#### Statistics II (GESC) (spring)

two-term course/winter only or winter and spring

This course offers a less in-depth approach to the material presented in CL Statistics. The course emphasizes problem-solving, student-generated studies, and group work. Students analyze a significant global issue while completing culminating projects in which they utilize the techniques learned throughout the course. These projects will have components of both written and public presentation. Throughout the course, students are introduced to the TI-84 graphing calculator, spreadsheet software, like MS Excel, and web-based data analysis packages, like Gapminder. Students may elect either the first term or both terms of the course. Prerequisite: Algebra II

#### **Advanced Statistics: Global Issues** (GESC)

term course/fall or winter/not offered 2017-18

This term course incorporates learning designs for data collection and experiments with learning techniques for drawing conclusions from data with application to global issues. The student is expected to read current issues from different sources and analyze the statistical techniques used to gain a deeper understanding of these important issues. The student will also be required to research different datasets available on specific global topics and generate their own conclusions using fundamental statistical techniques. The course emphasizes reading, analyzing, and communicating statistical information accurately in real-world situations. Computers and TI-84 calculators are important tools for manipulating data for analysis. Prerequisite: Advanced Precalculus or Precalculus with permission of the department

#### **CL Statistics**

yearlong course

Equivalent to a one-semester, introductory, non-calculus-based college statistics course, this course incorporates four themes: exploring data, learning designs for data collection and experiments, anticipating patterns in advance, and drawing conclusions from data. Computers and the TI-84 calculator are important tools for completing data analysis and understanding more sophisticated statistical concepts. This data-based approach involves group activities and student-generated studies. The course emphasizes reading and communicating statistical information accurately in real-world situations. Prerequisite: Advanced Precalculus with Differential Calculus or Advanced Precalculus and

#### Calculus

This course introduces students to most of the theories, techniques, and applications of a first-year calculus course. By mixing theory and application and by using both discrete and continuous examples, the course offers students a solid foundation of the basic techniques of differential and integral calculus and explores the utility of calculus in a variety of fields. Although not covering trigonometric functions, among other topics in the AP program, this course prepares students for a rigorous first-year calculus course in college and enables them to use calculus concepts in other disciplines. Prerequisite: Precalculus

#### **CL Calculus AB**

Following the Advanced Placement AB Calculus syllabus, this course introduces differential and integral calculus. Rules of differentiation for most of the common algebraic and transcendental functions are introduced, and students learn applications of the derivative in graph theory, motion problems, related rates of change, and optimization problems. The course introduces definite and indefinite integrals along with the most common techniques of integration and applications to area, volume, motion, and growth and decay. The calculus topics are explored algebraically, numerically, verbally, and graphically with the aid of the TI-84 calculator. Prerequisite: Advanced Precalculus or Advanced Precalculus with Differential Calculus

#### **CL Calculus BC**

Following the Advanced Placement BC Calculus syllabus, this course offers a rigorous, college-level introduction to differential and integral calculus. Topics include the theory and applications of derivatives and integrals of common algebraic and transcendental functions offered in Calculus AB. Beyond the topics from **CL Calculus AB**, students work with the calculus concepts as they apply to vector functions, parametrically defined functions and polar functions, and also do significant work with sequences and series. The calculus topics are explored algebraically, numerically, verbally, and graphically with the aid of the TI-84 calculator. Prerequisite: Advanced Precalculus with Differential Calculus and permission of the department

#### **CL Statistics Accelerated**

half course

This course is intended for extremely able math students who have excelled in a CL Calculus class. The class moves quickly covering the full Advanced Placement Statistics curriculum (see course description for CL Statistics) while meeting half as often as full courses. Unlike CL Statistics, this accelerated course will also include some work with statistics that is calculus based. While the course develops the tools necessary to analyze data and make projections in a variety of real-world situations, students should also come to appreciate the logical principles underlying the inferences. Students will use some of the powerful statistical tools of the TI-84 calculator to organize data and help make appropriate inferences. Prerequisite: A- or higher in BC Calculus or A or higher in AB Calculus and departmental approval

#### **CL Multivariable Calculus**

For able students who have completed CL Calculus BC, this course extends the work of calculus to two-and three-dimensional vector functions and functions of several variables. Topics include vectors, partial derivatives, double and triple integrals, line integrals, Green's theorem, Stokes's theorem, and the Divergence theorem. Prerequisite: permission of the department

#### **CL Linear Algebra**

Linear Algebra is for students who have shown exceptional promise in their study of mathematics. During the first half of the year, Linear Algebra covers the theory and applications of systems of equations, matrices and matrix algebra, row reduction, invertibility, and determinants. The second half of the course veers sharply towards the abstract. Topics such as vector spaces and linear transformations serve as an introduction to conceptual mathematical systems that will later create the foundation of abstract algebra. Throughout the course, emphasis is placed on learning the structure of formal mathematical proof writing. Prerequisite/Co-requisite: Multivariable Calculus and permission of the department

#### **Independent Studies in Mathematics**

term course

A student who has exhausted the offerings of the Mathematics Department or who desires to study a math-related topic not offered as a course may propose an Independent Study Project for credit. The student must arrange for a project advisor from within the department, **submit a written proposal**, and obtain approvals from the academic advisor, project advisor, department head, and dean of faculty.

### Foundations of Computing for Science and Engineering

fall term

This course serves as a first experience in computing for students who have never programmed before. Students will be exposed to a survey of tools and ideas central to computer science. Through projects focused on data analysis, organization, and visualization, students will explore the impact of computing in society and the application of computing across the science and engineering fields. With an emphasis on problem solving and big ideas, students will be able to answer the question "how does my computer do all this?" This course culminates with students taking raw, real-world data to create web-based interactive displays and simulations. This course prepares students to take CL Principles and Practice of Computer Science.

#### **CL Principles and Practice of Computer Science**

two-term course/winter and spring

This course offers a language-independent approach to learning the underlying principles of computing. Students will explore the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts as a way to solve problems relevant to a number of scientific disciplines. Students will use Python as a primary tool due to the simplicity of its syntax but will be exposed to a variety of languages due to the often-changing demand of the industry. Projects in this course will teach students how to think abstractly and develop efficient algorithms through techniques such as decomposition, iteration, and recursion. The overarching goal is to foster creativity and collaboration while teaching the skills necessary to choose a programming language best suited for solving a particular problem, even one students have never seen before. This course covers the majority, but not the entirety, of the AP Computer Science curriculum; those students interested in sitting for the AP Computer Science exam in May will need to complete some independent work to prepare for that exam and should consult with the instructor to identify those additional topics. Prerequisite: Computing Principles for Science and Engineering and permission of the department

#### **Topics in Logic**

term course/juniors and seniors

Please see description under Philosophy, Psychology and Religion offerings. Students interested in logical foundations of mathematics and in greater sophistication in methods of proof may consider this course. Prerequisite: Geometry

## **SCIENCE**

Through a broad and deep range of course offerings, the Science Department seeks to address the needs and interests of all students. Laboratory experiments, hands-on activities, and computer simulations challenge students to problem solve, analyze, discover, and understand the fundamental principles of nature. This understanding empowers them to live in and contribute to an increasingly technological society while gaining confidence in their own abilities.

The department requires two years of laboratory science, one in the life sciences and one in the physical sciences. The majority of students, however, take additional courses of particular interest.

For information on courses designated *GESC*, please refer to pages 5–6.

#### **Biology I**

freshmen and sophomores

This course introduces students to the study of living organisms. It covers a broad range of topics, beginning with evolution and including cell and molecular biology, and human anatomy and physiology, and ecology and environmental issues. Within this study of biology, students learn to think critically about how living organisms evolve and survive and are encouraged to make connections to all biological processes within the natural world. In the lab, students learn how to design well-controlled experiments and to analyze the data that is collected. In addition, students become familiar with many of the techniques used in research laboratories today.

#### **Advanced Biology I**

sophomores, juniors, seniors

This course is an introductory biology class for students who have had a full year of chemistry. It covers the same topics as Biology I but emphasizes the biochemical processes in greater depth and detail. As with Biology I, students learn to think critically about how living organisms evolve and survive and are encouraged to make connections to all biological processes within the natural world. In the lab, students learn how to design well-controlled experiments and often create their own protocols for the experiments. While practicing many of the techniques used in research laboratories today, data is collected and analyzed by the students, allowing for in-depth discussions about current research topics. Prerequisites: Chemistry and permission of the department

#### Chemistry I

Students in this introductory class gain an understanding of basic chemical methods and principles through demonstrations and laboratory investigations. Topics include atomic theory, chemical reactions and bonding, stoichiometry, energy, solutions, equilibrium, acids and bases and electrochemistry. Prerequisite: Algebra I. Corequisite: Concurrent enrollment in Algebra II or permission of the department

#### Advanced Chemistry I

This course is designed for those students with strong quantitative ability and who also possess an avid interest and proven achievement in science. Through this rigorous and fast-paced course, students will come to an understanding of the methods and principles of modern chemical theory. The development of scientific writing and analytical problem solving skills are emphasized. Topics draw from the basic principles of inorganic chemistry: electronic structure of the atom, periodicity of elements, stoichiometry, chemical bonding, molecular structure, gas laws and kinetic molecular theory, equilibrium, kinetics, acids and bases, oxidation-reduction and electrochemistry. Throughout the course students are involved in an extensive laboratory curriculum. Advanced Chemistry I will help to prepare students for the SAT Subject Test in Chemistry. Prerequisite: permission of the department; Co-requisite: Algebra II with Advanced Algebra II recommended

#### Physics I

sophomores, juniors, seniors

This course introduces students to Newtonian physics and a variety of problem-solving techniques. Through laboratory investigation and class discussion, students explore kinematics, dynamics, energy, waves, the nature of light, electricity, and magnetism. This course emphasizes a practical approach to conceptual learning using familiar objects and everyday situations. Co-requisite: Advanced Precalculus or Precalculus with permission of the department

#### **Advanced Physics I**

juniors and seniors

Challenging laboratory explorations, engaging classroom derivations and demonstrations, and intimate small group investigations form the core learning experience in Advanced Physics I. Students work together to develop the conceptual understanding, analytical skills and self-confidence needed to master a wide array of physics topics. The major area of emphasis in the fall term is Newtonian mechanics. In the winter term students explore electrostatics and circuits. In the spring the focus shifts to studies of magnetism, optics, and wave interactions for sound and light. The course stresses problem solving with a heavy emphasis on graphical interpretation and vector mathematics. It is appropriate for students with good aptitude and proven achievement in both science and mathematics. With extra preparation, students are very well prepared for the SAT Subject Test in Physics. Prerequisite: one previous science course and permission of the department; Co-requisite: Advanced Precalculus with Differential Calculus or Advanced Precalculus with permission of department

#### **CL Chemistry II**

This course continues the study of chemical principles and theory at a level consistent with that of a first year college offering. It covers all of the topics of the first level course, but at a deeper level and at a faster pace. Inquiry-based laboratory experiments follow the suggestions of the AP curriculum and support the concepts studied in class. Lab work helps students develop proficiency with basic analytical laboratory techniques, and they are frequently asked to design their own protocols to solve problems. This course prepares students for the Advanced Placement examination. Prerequisite: Advanced Chemistry I; Co-requisite: Physics and permission of the department

#### **CL Physics II**

This problem-solving intensive course pushes students to consider more deeply the topics introduced in Advanced Physics I and to investigate challenging questions incorporating calculus techniques. Dynamic classroom discussions and developments, extensive small group investigations and laboratory work centered on experimental design enable students to develop confidence and a strong conceptual mastery. The first half of the course focuses on mechanics —

covering Newton's laws, conservation of energy and momentum, rotational dynamics, simple harmonic motion, and universal gravitation. The second half explores electricity and magnetism — delving deeply into Coulomb's Law, Gauss's Law, Ampere's Law, Faraday's Law, and circuits involving capacitors and inductors. This course fully prepares students for Advanced Placement examinations in both Mechanics and Electricity & Magnetism. Prerequisite: Advanced Physics I; Co-requisite: CL Calculus BC or CL Calculus AB with permission of department

#### **CL Environmental Science** (*GESC*)

This course provides students with the scientific concepts and methodologies to understand the interrelationships within the natural world. Through on-campus field trips and hands-on activities, students will come to a solid understanding of the core ecological principles. In addition, they will learn to identify and analyze environmental problems within the natural world; relative risks will be evaluated and alternative solutions to problems will be examined. Topics covered include ecological foundations and principles, introduction to plant science, energy, climate change, human population and demographics, toxicology, pollution and pandemics, fresh water resources, water quality, and global water issues. Students learn to observe environmental systems critically and to develop and conduct well-designed experiments with the goal of making positive changes to the local Loomis Chaffee campus and surrounding ecosystem and in the spirit of environmental stewardship and sustainability. This course covers the majority, but not the entirety, of the AP Environmental Science curriculum; those students interested in sitting for the AP Environmental Science exam in May will need to complete some independent work to prepare for that exam and should consult with the instructor to identify those additional topics. Prerequisites: biology, chemistry and permission of the department

#### **Integrated Earth and Physical Sciences**

juniors and seniors

This course exposes students to an array of real-life, science-based situations from both the past and present, and pushes students to read critically and think independently to improve their understanding of the world around them. The course focuses on developing a scientific worldview by examining the underpinnings of modern scientific thought and by encouraging the use of problem-solving and data analysis skills to analyze and interpret important scientific concepts. Students will improve their scientific design and data analysis skills through a variety of laboratory exercises and projects. Topics include the history of scientific thought, astronomy, Newton's dynamics and kinematics, electricity and magnetism, light and optics, atomic structure, radioactivity and nuclear power, geology, meteorology and climate. Corequisite: Algebra II

#### **Elective Term Courses**

#### Astronomy I: Introduction to Astronomy and the Solar System

term course/juniors and seniors

The fall term introduces students to observational astronomy and methods for measuring distances in the solar system and universe. Students gain an understanding of the foundations of astronomical evidence for our place in the universe by studying the historical development of astronomy from the ancient Greeks to Kepler and Newton as well as modern techniques for studying planets and stars. The course also provides an overview of our solar system. Students will have the opportunity to view the night sky with the school's telescope and make use of the O'Brien Planetarium. Prerequisite: chemistry or physics

#### **Astronomy II: Observing the Universe**

two-term course/juniors and seniors/winter and spring

This course will focus on stars, galaxies, and cosmology. Major topics include the structure and evolution of stars; stellar explosions and the formation of neutron stars and black holes; the creation of galaxies; relativity and theories about the origin and fate of the universe, with emphasis on the Big Bang; and current questions about the role of dark matter and dark energy. Students will also explore astrobiology, recent space missions, and the possibility of locating habitable planets outside our own solar system. Prerequisite: chemistry or physics

#### **Comparative Anatomy**

term course/juniors and seniors

This course will investigate the anatomy of several different vertebrate organisms including humans. Systems such as the muscular system, nervous system, and skeletal system will be compared between a variety of organisms. In addition, students will learn about how chemistry and physics principles are integrated into different biological functions. The class will include many hands-on activities with a heavy emphasis on dissection; potential organisms for dissection will include fetal pig, chicken, cat, and fish. These lab activities will focus on comparing anatomical structure and function and will lead to a greater understanding of evolution and common ancestry among vertebrates.

Students interested in this course do not need a deep background in the biology field but should be interested in animal body systems and function. Prerequisites: biology and chemistry

#### Genetics

term course/juniors and seniors

This course will explore some of the most recent advances in the study of genetics. It will begin with a review of the structure and function of DNA in addition to the basics of Mendelian genetics. Further exploration of the topics will lead to a deeper understanding of genetic diseases, cancer, evolution and the new field of epigenetics. In addition, this course will investigate methods of genetic engineering and gene therapy in humans. A significant portion of this course will include work in the lab with a variety of techniques. Prerequisites: biology and chemistry

#### **Forensic Science**

term course/juniors and seniors

This course will focus on the application of various science techniques used to solve crimes including: testing for presence of blood, blood typing, fingerprinting, stomach content testing, handwriting analysis, DNA analysis, arson, and blood spatter analysis. Students will combine their knowledge of biology and chemistry in order to solve multiple crime scenes. Not only will students apply their scientific knowledge and logic to piece together evidence, but they will also learn how to interview suspects and gather evidence not physically found in crime scenes. As students work through each crime scene, they will organize and present their findings and conclusions to the entire class. Prerequisite: biology and chemistry

# **CL Biology II: Microbiology**

fall term/juniors and seniors

This laboratory-intensive course focuses on the study of bacteria. Topics covered by laboratory investigations include bacterial metabolism and morphology, transformation, conjugation, and antibiotic resistance. The course deepens the students' understanding of cellular structure and function, as well as the genetics of bacteria. Prerequisites: biology, chemistry, and permission of the department

## CL Biology II: Molecular Biology (winter) CL Biology II: Molecular Biology (spring)

one or two-term course/juniors and seniors/winter only or winter and spring

The winter term of this laboratory-intensive course begins with a review of basic biochemistry and goes on to focus on the molecular structure and function of proteins. Laboratory experiments in spectrophotometry, gel electrophoresis, Western blotting, and column chromatography reinforce these concepts. The spring term explores the topics of DNA structure and function, protein synthesis, recombinant DNA, and genetic engineering. The laboratory portion focuses on recombinant DNA techniques for the isolation of plasmids, insertion of genes into plasmids, and transformation of host cells. Prerequisites: biology, chemistry, and permission of the department *Note: The spring term of Molecular Biology may only be taken when following the winter term of Molecular Biology.* 

# **CL Biology II: Genetics**

fall term/juniors and seniors

This rigorous course studies the profound implications of recent advances in genetics. Topics include the discovery, structure, and function of DNA Mendelian and non-Mendelian patterns of inheritance; intricacies of gene expression and the new field of epigenetics. The course considers methods of detecting genetic defects and genetic engineering, and includes discussions of the ethical implications of both. Students will conduct a term long authentic research project in molecular genetics during which they will create a genetic knockout and ascertain the consequence of genetic manipulation. In the Laboratory, students will gain experience isolating, amplifying and transforming DNA. In addition, they will learn to design and conduct phenotypic assays. Prerequisites: biology, chemistry, and permission of the department

## CL Biology II: Cell Biology I (winter) CL Biology II: Cell Biology II (spring)

One- or two-term course/juniors and seniors/winter only or winter and spring

Cells are the smallest living thing that can perform the functions of life, and understanding how cells work is fundamental to all biological science. In this course, particular emphasis is placed on the study of enzymes and their control of cells, eukaryotic organelles, cell interaction with the environment (cell signaling), cell division (understanding

cancer), and programmed cell death (apoptosis). Students will spend a great deal of time in the lab exploring cell culture and the staining of mammalian cells. Other lab investigations include the study of intracellular trafficking mechanisms, the movement of proteins, and fluorescent microscopy. Prerequisites: biology, chemistry, and permission of the department *Note: The spring term of Cell Biology may only be taken when following the winter term of Cell Biology as a two-term sequence.* 

#### **CL Organic Chemistry**

term course/iuniors and seniors

The goal of this course is to give students an introduction to and strong foundation in organic chemistry. Topics covered will include chemical structure and bonding, molecular representations, nomenclature, and physical and chemical properties of alkanes, alkenes, alkynes, alkyl halides, alcohols, carboxylic acids and amides. This course will also provide students with a brief introduction to modern analytical methods such as thin layer chromatography (TLC), infrared (IR) spectroscopy, mass spectrometry, and proton nuclear magnetic resonance (NMR) spectroscopy. Students will have the opportunity to hone their laboratory skills through practical work that involves investigations such as determining the boiling point and melting point of organic substances, extraction of caffeine, simple and fractional distillation and the classical synthesis of esters. Prerequisites: Chemistry Advanced or CL Chemistry; co-requisite of physics or permission of the department

#### Ecology (GESC)

fall term/juniors and seniors

This course focuses on the sustainable use of our natural resources, using local forests as representative ecosystems. By exploring the interactions among organisms and between organisms and their environment, students will begin to understand the key ecosystem services provided by natural ecosystems. Students will learn about energy flow in food webs, biotic and abiotic factors, and the cycles of matter (water, nutrients, etc.) in the ecosystem. Local soil ecosystems will be investigated, including the soil and compost from the Loomis Chaffee gardens and surrounding forested areas. An in-depth look at fire ecology and succession rounds out the term. Biology and chemistry are strongly recommended.

### **Human Populations: Impact and Sustainability** (GESC)

winter term/juniors and seniors

This course explores the impact of human population upon the earth, beginning with a study of the complicated issues surrounding the growing human population. Students in this course will study the effects of population growth, with a focus on energy use and climate change. Students will study conventional energy sources in addition to the use of and growth in alternative energy sources; the impact on air quality and climate change will be a focus of these studies. Throughout the term, research-based projects and laboratory studies will enable students to more fully understand these concepts. Prerequisite: Ecology

#### Sustainability: Soil, Water and Agriculture (GESC)

spring term/juniors and seniors

This hands-on, project-based course will investigate both local and global sustainable agricultural practices with a focus on water use in those practices. Current water issues, including water pollution, drinking water concerns and the question of access to clean water will be addressed. Further studies will investigate the specific impact of both traditional and sustainable agriculture on soil health, the hydrologic cycle and the availability of fresh water for human use. As a culmination of previous work done in environmental science, students will use the Loomis Chaffee campus as a microcosm for learning how to use sustainable practices to improve their local environments. Prerequisite: Ecology

# Advanced Studies in Science: Guided Research Projects in Molecular Biology

half course/seniors

Guided Research Projects are yearlong, half courses in the science department that allow students who have completed the graduation requirements for science, and those with an interest in the biological and biomedical sciences, to engage in sustained, significant, mentored scientific research. In this capstone class, students will pose a specific research-based question and will conduct authentic research in molecular biology. In addition they will derive "hard," numerically based experimental data. Students, with guidance, will design their own research question using an established model system for that experimental work (one that matches the expertise of a Loomis Chaffee science faculty member). Projects will involve sustained skill acquisition and the development of rigorous scientific methodology; they will also require the student to master experimental techniques that go beyond the traditional science department curriculum. Students will maintain a research quality notebook and document their results in either extended lab report or scientific poster format, and they will present their research findings to an audience at the end of the school year. Acceptance into the GRP is a competitive process and students interested in pursuing this class should arrange a formal meeting with the Science department head at the end of their junior year. Interested students are also required to complete a written application. Prerequisites: fulfillment of departmental requirements and permission of the department; fulfillment of or co-enrollment in CL biology electives is required.

# Advanced Studies in Science: Guided Research Projects in Environmental Sustainability half course/seniors

This Guided Research Project is a hands on/experiential learning approach to environmental stewardship and sustainability using Loomis Chaffee as a location of study and action. Students will be learning about all the facets of campus sustainability including waste management, energy conservation, water demands and agriculture. While investigating these themes students will be required to research and organize an action plan and proposal for a specific sustainability project, with the expectation of having the project carried out in the spring term. Prerequisite: Biology, Chemistry, and CL Environmental Science or Ecology and permission of the department

### **Independent Studies in Science**

term course

A student who has completed the two-year laboratory science requirement may undertake an Independent Study Project in Science. Projects may involve either in-depth research of previously encountered topics or an independent study of material not presently offered. The student must arrange for a project advisor from within the department, **submit a written proposal**, and obtain approval from the project advisor, academic advisor, department head, and dean of faculty for any independent study project. Prerequisites: fulfillment of departmental requirements and permission of the department

# VISUAL ARTS

The visual arts program at Loomis Chaffee is centered in the Richmond Art Center, which offers professional studios in drawing, painting, printmaking, ceramics, sculpture, photography, computer graphics, video production, filmmaking, and animation. Exhibits in the Sue and Eugene Mercy Jr. Gallery show work by professional artists, and an active Visiting Artist Program brings professional artists on campus to work in the building and to serve as role models for students. Art courses are designed for all students, regardless of previous experience or ability, and are open to students in all classes unless otherwise indicated. New students who wish to be excused from a prerequisite must present a portfolio of work to be evaluated by the Art Department prior to registration for an advanced class. Students whose portfolios are not deemed adequate will be required to take the prerequisite.

Students enrolled in visual arts courses are required to attend visiting artist lectures, demonstrations, and gallery openings. Classes may take field trips to art galleries and museums. Opportunities to study from a live model are incorporated into the Advanced Drawing and Sculpture courses.

To be competitive for admission to art schools and/or to establish a strong body of artwork for liberal arts college applications, a serious student should plan to take art each year and the CL Seminar course as a senior. (Juniors may enroll with permission of the department head.) A serious art student should take the drawing sequence before the senior year. Help in planning can be obtained from the department head early in the student's career.

The school's arts requirement of three courses for entering freshmen or two courses for all others may be satisfied by any combination of visual arts, theater, or music courses.

For information on courses designated *GESC*, please refer to pages 5–6.

# History of Art and Architecture

History of Art and Architecture courses examine works of art and the contexts in which they functioned and were produced. Students develop visual literacy skills that empower them to unpack visual sources, to ask questions of their purpose, and to begin to do the analytical work of art historians. Enrichment activities include field trips to art museums and demonstrations by artists. Students may elect one, two, or all three terms. The previous term is not a prerequisite for the one that follows, and no previous familiarity with art history is expected.

### **Cultural Encounters in the History of Art and Architecture** (GESC)

fall term/juniors and seniors; sophomores with permission of the department/not offered 2017-18 What happens to art and architecture, those visual assertions of cultural identity and memory, in the context of encounter? Is it taken (looted?) as was the frieze of the Athenian Parthenon? Outright destroyed, like the Buddhas of Bamiyan in Afghanistan in 2001? Preserved? Adopted? Crossbred? In this course, students will investigate the relevance of the man-made object—useful, beautiful, or both—to far-flung case studies of encounter throughout history and across the globe. A crucial component of this course is its emphasis on the development of visual literacy and a curiosity that will encourage students to unpack visual sources, to ask questions of their purpose, and to begin to do the work of art historians.

#### Renaissance and Baroque Art (GESC)

winter term/juniors and seniors; sophomores with permission of the department/not offered 2017-18

This course explores the painting, sculpture, and architecture of the 14<sup>th</sup> through 18<sup>th</sup> centuries with emphasis on Italy and Northern Europe, the primary hubs of cultural activity during the Renaissance and Baroque periods. The art and artists of these two regions will be examined historically and in tandem with the evolution of intellectual thought, artistic techniques, and patronage.

#### **Modern Art**

spring term/juniors and seniors; sophomores with permission of the department/not offered 2017-18 Around 1850, the history of western art took an unexpected turn. The period between 1850 and 1960 has produced some of the most iconic works in all of art history, but in their day these were often not the things of blockbuster museum exhibitions. From Realism to Abstract Expressionism, this course explores the stylistic genres of what art historians call "Modern Art." Students will be introduced to a variety of art historical "lenses" or methodologies for interpreting the art of this period as well as be expected to revise, again and again, their definitions of "art.

# Studio Art

Drawing is a prerequisite or a recommendation for a number of other courses, and it is therefore suggested that a student take drawing as early in his or her career as possible.

# **Painting**

half course

Stressing painting from observation, this course provides a foundation in the use of oil paint and brush techniques. Students explore the painting of landscape, still life, portraits and self-portraits, and painting from photographs. Time permitting, monoprinting is also introduced in this course. Previous work in drawing is helpful.

#### **Watercolor Painting**

half course

Stressing working from observation, this course introduces students to sound principles in handling watercolor. Students explore the painting of landscape, still life, portraits and self-portraits, and painting from photographs. Previous work in drawing is helpful.

Drawing I (term course)

**Drawing I** (half course)

This course builds basic drawing skills, which form the foundation for later creative work in drawing as well as in all other media. Class work introduces students to observational drawing and to techniques used to represent the three-dimensional world on a two-dimensional surface. Through the study of still life and other imagery, students work in pencil, charcoal, and pen and ink to learn about line, value, and rudimentary issues of composition. The class is designed to benefit all levels of ability, from beginner to individuals with experience.

## **Drawing II**

half course

This course continues lessons begun in Drawing I and maintains a progression toward a greater understanding of observational drawing with an emphasis on composition. Through diverse media and source materials, students also have the opportunity to explore and develop personal imagery. Various materials are introduced, and students may work from the live model to study figure drawing and/or portraiture. Prerequisite: Drawing I

**Introduction to Printmaking** (term course) **Introduction to Printmaking** (half course) This course introduces students to two printmaking techniques: relief and etching. In relief, students complete several linoleum block prints beginning with a black-and-white image and progressing to a more complex, color, and multiple-block print. In etching, students explore the basic technique of soft-ground etching on a copper plate and may be introduced to the technique of aquatint. This class is designed for the beginning art student.

## Ceramics I (GESC) (term course) Ceramics I (GESC) (half course)

These courses introduce the student to the physical properties of clay as well as firing and glazing techniques. The syllabus includes wheel throwing and hand forming, creating works in coil and slabs of clay, as well as bas relief sculpting, and mold-making. Clay is an ancient and world-wide medium, and students will be introduced to the aesthetics and techniques of ceramicists from a wide variety of time periods and cultures.

#### **Ceramics II**

half course

As students discover and develop a personal style, this course stresses advanced throwing and handbuilding skills, including large-scale ceramic mosaic work. Field trips and community service projects are part of the course as well. Students in this course are able to run the ceramics booth and sell their work at Springfest. Prerequisite: Ceramics I

### Sculpture

term course

This course explores sculpture through the medium of clay. The two main ways to create sculpture — additive and subtractive — are presented through bas-relief and in-the-round assignments. Figure sculpture is a focus during the second half of the term. An optional trip to museums in New York during spring term is also part of this course.

# **Advanced Studies in Sculpture and Ceramics**

half course

Emphasis in this course will be placed on the development of personal artistic vision and excellence in craftsmanship. Advanced techniques will be explored in depth as will glazing and other finishing techniques. Mixed media will also be incorporated in the works. The course will include a survey of historically important practitioners of the medium as well as field trips to local galleries and ceramics and sculpture studios. Visiting artists to the class will introduce such techniques as body casting, screen-printing on clay, and glass forming. Students will participate in field trips to local galleries and at least one trip to New York City in the spring. A body of work will be created over the course of the year, culminating in an exhibition in the Barnes and Wilde galleries. Prerequisite: Ceramics II or Sculpture

# Photography and Video

The Art Department teaches in both wet and dry (digital) modes. The Richmond Art Center houses a multi-station digital photography lab, a multi-station black-and-white darkroom, and a large shooting studio; all chemicals for photo processing are provided. The student must use the Pentax ZX-M, a durable and reasonably priced 35 mm camera, for the beginning-level darkroom course. A Nikon D40 or similar SLR digital camera is required for the digital course. Both cameras are available for rental or purchase in the school bookstore.

# Photography I (Darkroom)

term course

In this course students are introduced to the basic techniques, processes, and approaches of the black and-white photographic craft. We cover the fundamental principles of 35mm camera operation, the darkroom procedures involved in developing film and making prints, plus some of the methods by which photographs are manipulated and presented. In addition, we explore the medium's relationship to cultural, historical, and aesthetic issues within a fine art context.

# Photography I (Digital) (term course) Photography I (Digital) (half course)

In this course students learn the fundamentals of digital photography, starting with proper control of the Single Lens Reflex (SLR) digital camera. Lessons in capture, resolution consideration, image enhancement/manipulation (utilizing Adobe Photoshop), and ink jet printing techniques are explored. In addition, we discuss the medium's relationship to cultural, historical, and aesthetic issues within a fine art context.

# Photography II (Darkroom)

term course

The first part of this course considers such photographic techniques as solarization, negative prints, combination printing, and toning. The second part allows students to pursue a photographic project of their choosing. Prerequisite: Photography I (Darkroom)

# Photography II (Digital)

term course

This course continues to explore the digital photographic environment, with students learning more complex techniques in Adobe Photoshop. Analogies are made between traditional darkroom practices and digital ones. Students develop a more personal relationship to the medium, which culminates in both a digital and a printed portfolio plus the creation of a hardcover Apple Book. Prerequisite: Photography I (Digital)

#### Advanced Photo III (Digital)

term course

This course is for students who completed Digital Photography I and II and have shown the ability to work on a self-directed thematic project over an extended period of time that would culminate in an exhibition in the Barnes and Wilde Galleries. In addition, each student will research historically important photographers and/or photographic genres, and give two substantial presentations to the Digital Photography II classes within the term. A final portfolio and the production of a photographic book will round out this term course. Prerequisite: Photography II (Digital) and permission of the department

## Film/Video Production

half course

In this course students learn the fundamentals of filmmaking utilizing digital video cameras and Apple Final Cut Express software to edit their footage. We start with an introduction to early cinema and explore film genres ranging from documentary to music videos. Students create their own DVDs with projects based in narrative storytelling to experimental dream sequences incorporating special effects.

# Digital Animation/Special Effects in Video

half course

This course introduces students to techniques in "stop motion" animation as well as other digital animation approaches. Projects range from clay-mation to drawing and painting for animation, utilizing a range of effects and sound. Screening of animated short films will accompany the technical, conceptual, and aesthetic components of this class. In addition, students explore "green screen" technology as a way to combine video footage within a studio setting.

# Portfolio Preparation

Advanced and independent study courses provide the serious art student with opportunities to study a preferred medium in greater depth and/or to prepare a portfolio for college or art school admission.

#### **CL Art Seminar**

seniors; juniors with permission of the department

This is a yearlong intensive studio art experience and prepares the serious art student to submit work for two class exhibitions in the Richmond Art Center and, optionally, for the AP examination portfolio. Additionally, students who wish to complete a portfolio for their college application receive instruction and assistance on photographing, editing, and documenting their work. Students follow a self-directed course of study as they complete their work, decide on a preferred medium, and choose a subject matter to explore. Prerequisite: at least two previous courses taken in the visual arts and departmental approval

# Independent Studies in Art (term course) Independent Studies in Art (half course)

Intended for the student who wishes to continue the study of a specific medium beyond the highest level offered, this elective requires **a written proposal** approved by the academic advisor, project advisor, department head, and dean of faculty. If approved, the student must enroll in the highest level of the appropriate course and serve as a studio lab assistant while working on assignments given by the instructor. The department restricts eligibility to students who have completed their arts requirement through visual arts classes and have taken the highest-level course in the particular medium involved. Painting, watercolor, and printmaking candidates must also have completed Drawing I.

# THEATER & DANCE

The theater and dance courses and programs provide the student with opportunities to enhance artistic and creative talents. Students of performance, dance, direction, playwriting, design, production, and technical theater work directly with theater faculty and professional artists to create excellent theater and dance productions to develop personal skills.

# Theater

The theater department endeavors to spark new interest in those who have never done theater before, to further the development of students who have had some theater background, and to hone the technique and talent of the advanced student of theater. Theater performances offer development opportunities for students not only in acting, singing, dancing, directing, producing, public speaking, and playwriting, but also in technical and leadership positions such as stage management, lighting and sound design, costume, set, lighting, scenic art, carpentry, sound, and stage crews.

In addition to the formal classes listed below, Loomis Chaffee mounts a number of diverse genres of theater and dance productions each year. These include: Fall Play (a drama or a comedy, classic or contemporary); Fall Dance Showcase (works in progress from our fall classes and original student choreography); Winter Musical; Spring Original Student Playwriting Festival and Spring Dance Revue.

Students participating in the fall main-stage productions receive an exemption for the athletics requirement for the fall term. Students cast in the winter musical receive a physical education dance credit.

Theater courses are open to students of all classes, interests, and abilities. To be competitive for admission to acting schools and/or to establish a strong theater resume for liberal arts college applications, a serious student should audition for at least one major and one minor production each year, as well as take at least one theater course each year. Help in planning a theater curriculum can be obtained from the department faculty early in the student's career.

The school's arts requirement of three courses for entering freshmen or two courses for all others may be satisfied by any combination of visual arts, theater, or music courses.

## Acting I: Introduction to Acting (term course) Acting I: Introduction to Acting (half course)

In an effort to enhance confidence in a non-judgmental atmosphere, Introduction to Acting engages its students with highly improvisational theater games and exercises. Over the course of the term or year, students work to discover greater on-stage comfort levels and to decrease stage fright. Typical exercises emphasize movement, speech, creativity, originality, and spontaneity, and prepare students for the more traditional acting theory offered in Fundamentals of Acting. The term course option may be taken as a sixth course.

## **Acting: Comedy**

term course

In this course, students study, create, rehearse, and perform various genres and styles of comedy, including farce, slapstick, political and social satire, burlesque, improvisation, stand-up, impersonation, and comedic scenes. Students will consider the comedic DNA of such artists or groups as Monty Python, Saturday Night Live, Woody Allen, Carol Burnett, Whoopi Goldberg, Richard Pryor, Neil Simon, Jon Stewart, Chris Rock, Stephen Colbert, and Robin Williams. The students' work culminates in their creation and performance of the Spring Comedy Cabaret as part of the department's end of term Share. Viewing several professional comedic performances complements the course. This course may be taken as a sixth course. Prerequisite: Acting I or permission of the department

#### **Acting: Improvisation**

term course

Improvisation class will challenge the acting students to think on their feet while building strong communication and listening skills. Performance improvisation requires the actor to work moment-to-moment establishing settings, relationships, situations, and conclusions to both comedic and dramatic story telling. The class will also explore masks to improvise through physical story telling. The class will further challenge the acting student to rid themselves of theatrical self-censorship allowing them to make intelligent, informed and exciting choices for the stage. This course may be taken as a sixth course. Prerequisite: Acting I or permission of the department

#### **Acting: Stage Combat**

term course

Stage Combat is the illusion of violence for stage or screen. This course is an introduction and exploration of technical and aesthetic aspects of stage combat. The goals are for the students to develop the ability to safely portray violence onstage within the context of a play with specificity and dramatic power, as well as to understand how stage combat fits into the practice of theater as a whole. Understanding the techniques of safe and effective performance combat is a primary objective. The students will build a strong foundation of footwork, attacks, and defenses, and explore movement and partnering techniques specifically for stage combat. Other aspects of the class include the development of strength, flexibility, hand/eye coordination, and the understanding and application of principles of safety in working with a partner and in ensemble. This course may be taken as a sixth course. Prerequisite: Acting I or permission of the department

#### **Acting II: Fundamentals of Acting**

half course

This course emphasizes the philosophical basis and techniques necessary for acting in modern comedy and drama. Students improve their acting, improvisation, and audition skills by studying naturalistic, objective-based, moment-to-moment acting techniques. The class stresses audition pieces, monologues, and scene study from contemporary plays. Viewing of selected film scenes and visits to professional theaters in New York and Connecticut complement the course. This course may be taken as a sixth course. Prerequisite: Introduction to Acting or permission of the department

### **Acting: Shakespeare (GESC)**

half course

This course is designed to make Shakespeare accessible to the performer by learning techniques for acting the text while experiencing the delights and challenges of these classic plays which take place in a multitude of historical times and places. Shakespeare's works have been globally translated into more than 80 languages and have been performed throughout the world in over 70 nations. His plays (comedies, tragedies, and history plays) tell surprising but recognizable tales of human nature, relationships, conflict, love, war, and the human condition. Students will study and perform Shakespeare's plays in a variety of cultural contexts to discover and determine how context affects storytelling in our modern and globalized society. By studying and playing Shakespeare's characters through scene work and individual soliloquies the students will explore the sharing of common stories across cultures. While honing their performance skills the students will develop their communication, critical thinking and problem-solving skills while holding a lens up to current world affairs through Shakespeare's words that offer insight, liberate, inform, and inspire. Prerequisite: Acting I, or permission of the department.

# **Making Dance: Choreography and Composition**

half course

In this course students will explore and examine the history, theories, and methods of discovering, creating, and crafting dance movement. By learning to manipulate the variables of space, time, energy, rhythm, form, style, and dynamics, students will learn to communicate their thoughts, feelings, and ideas through their own unique, creative, original work. Course work includes the study of the history of dance, the work of a variety of choreographers and their different styles, physical improvisation and movement creation, solo and/or group choreography, discussion, feedback, journaling, and research. Select students will have the opportunity to preview their works-in-progress in the Fall Dance Showcase and to present finished pieces in the annual Spring Dance

Revue. Please note: this course welcomes a range of experience levels from novice to advanced dance practitioners as this is a composition rather than a technique class.

#### Masks in Culture and History (GESC)

half course

This theater performance course is designed to explore the cultural significance of masks in societies from around the globe. Students will investigate the role masks play in ritual, celebration, protection, and theater across disparate societies. Students will also discover and uncover the full dramatic potential of the body's movement and gesture when working in a mask. They will relinquish voice and concentrate fully on creating in the present. Mask work helps develop a heightened sense of discovery, awareness of space, a broadened comprehension of body language, and the cross-cultural awareness of the ability of gesture to communicate. While developing the expressive power of movement, stillness and the dramatic attitudes of the mask, students will explore different rhythms in nature: elements, animals, colors, and materials through simplified "honest" gesture and creativity. Students will each create a mask for storytelling to be developed over the course of the year.

#### **Technical Theater**

half course

This course introduces the fundamentals of technical theater. Students gain experience in the construction of scenery and costumes, the hanging and focusing of lighting instruments, and the operation of computerized lighting and sound control equipment. In addition to participating in evening classes that present concepts and skills, students demonstrate their practical knowledge by crewing main-stage Theater & Dance Department productions. Experienced students apply their practical knowledge by serving as designers and stage managers for the student-run shows in the NEO Theater during the spring, and to the creation of their own original work. It is important to note that this class meets for two hours on Monday and Wednesday evenings.

### **Playwriting & Directing**

half course/juniors and seniors

For the first half of the year, students read professional ten-minute and full-length plays, and write several short plays. During the second half of the year, the students of this course learn the fundamentals of stage directing, stage management, and theatrical leadership on their way toward directing one play from each of the class' writers. The course culminates with the Norris Ely Orchard Theater's Students Original Playwriting & Directing Festival.

#### **Public Speaking & Argumentation**

half course

In an increasingly competitive world, the ability to express oneself and speak in public with clarity, persuasiveness, and even elegance is a critically important skill. Of related and equal importance is the ability to readily analyze, develop, and defend a sound and persuasive argument. This course is designed to develop students' confidence and competence to speak in public and argue persuasively and logically. Students hone their speaking skills using a variety of traditional speech events and exercises including oral interpretation of literature, the persuasive delivery of famous speeches, impromptu and extemporaneous speaking exercises, persuasive original speeches and "after dinner" speaking designed to entertain as well as to inform. The course also introduces traditional forms of debate: both extemporaneous and prepared.

### **Independent Studies in Theater**

term course

Loomis Chaffee Theater Department encourages the development of an Independent Study Project in theater. The student must arrange for a member of the theater faculty to be the project advisor, **submit a written proposal**, and obtain approval from the academic advisor and the dean of faculty.

# **Dance**

A variety of dance classes are offered, both during the day and after school. Some classes offer performance opportunities and all but one will fulfill the physical education requirement. The exception is *Making Dance: Choreography & Composition*, which fulfills an arts credit. Upperclassmen may elect to take one daytime dance course for an arts credit. In order to qualify for this option, the student must be on an interscholastic athletic team during the same term as the dance course. A student may elect to use this Dance/Arts credit only one time in his or her Loomis Chaffee career. Please see dance class descriptions on pages 56 and 57.

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# DAYTIME DANCE Dance Company I (yearlong) Making Dance: Choreog & Comp (half)

#### AFTER-SCHOOL DANCE Dance Company II (yearlong) Ballet Technique (term course)

## WINTER

# Dance Company I (yearlong) Making Dance: Choreog & Comp (half)

Dance Company II (yearlong) Hip Hop (term course)

# **SPRING**

Dance Company I (yearlong)
Making Dance: Choreog & Comp (half)

Dance Company II (yearlong)
Jazz Dance Techniques (term course)

# **Making Dance: Choreography and Composition**

half course

In this course students will explore and examine the history, theories, and methods of discovering, creating, and crafting dance movement. By learning to manipulate the variables of space, time, energy, rhythm, form, style, and dynamics, students will learn to communicate their thoughts, feelings, and ideas through their own unique, creative, original work. Course work includes the study of the history of dance, the work of a variety of choreographers and their different styles, physical improvisation and movement creation, solo and/or group choreography, discussion, feedback, journaling, and research. Select students will have the opportunity to preview their works-in-progress in the Fall Dance Showcase and to present finished pieces in the annual Spring Dance Revue. Please note: this course welcomes a range of experience levels from novice to advanced dance practitioners as this is a composition rather than a technique class.

# **MUSIC**

Whether to evoke interest at the introductory level or to challenge and advance the skills of the experienced musician, the Music Department aims to guide students in lifelong learning and music making. Through a variety of curricular offerings, students in the classroom, on the stage, and in the music lesson studio take an active role in creating music and working toward mastery of music performance, reading, and technique. Ensemble and lesson repertoire is chosen from a vast array of genres and time periods. Students enrolled in Music Department classes attend concerts and workshops in the Guest Musician Series and participate in on-campus projects involving music throughout the year. The Music Department also encourages students to participate in department-sponsored Recital Samplers, state and regional competitive auditions and festivals, and the Spring Student Recital Series.

For students planning to pursue the study of music in a significant way at the college level, the Music Department recommends that the secondary school program include at least one music ensemble performance course each year, Music Theory, CL Music Theory II or CL Music Theory III, and private lesson study throughout the student's Loomis career. Beyond these basic recommendations, the department strongly encourages performances on regularly scheduled Recital Samplers, participation in solo or shared recitals during the junior and senior years, and preparation of a recording for inclusion in the college application process.

In collaboration with the Director of Experiential Learning and with the Alvord Center for Global &

Environmental Studies, members of the department encourage student participation in music study and performance programs outside of the curricular offerings and are eager to help students identify programs best suited to their goals and current levels of music mastery.

The school's arts requirement of three courses for entering freshmen or two courses for all others may be satisfied by any combination of visual arts, theater, or music courses. No specific music course is required.

For information on courses designated GESC, please refer to pages 5-6.

# **Music Theory and History**

#### **Music Theory I: Fundamentals**

fall term

Beginning with the basic elements of music theory — note reading, scales and modes, key and time signatures, intervals and chords, and basic melody writing — this course works to build theoretical skills necessary to read, write, and understand chord progressions and bass lines, seventh chords in inversion, and borrowed chords. The course emphasizes ear training and basic keyboard skills. Students will utilize various music theory and composition websites and the Sibelius music notation program. By term's end, students should possess the skills needed to place out of beginning music theory on the college level. No previous theory, vocal or keyboard skill is required.

#### **CL Music Theory II: Harmony and Composition**

winter term

This course focuses on the direct application of concepts such as chord progressions, part-writing, figured bass, modulation, and elements of musical form to both the analysis of existing musical works and student composition. Students utilize Sibelius and web-based composition programs to create their own works for solo instruments and small and large ensembles. In addition, classes are formatted with harmonic analysis, ear-training, keyboard instruction, and sight singing. Local and alumni composers are featured as guest instructors and clinicians. Students wishing to take the AP exam should plan on both CL Music Theory II and III. Prerequisite: CL Music Theory I or permission of the department

# **CL Music Theory III: Harmonic Analysis and Advanced Composition**

spring term

This course is designed for students with advanced music skills and a strong interest in the theoretical, harmonic, and analytical aspects of music. Topics include borrowed sixth chords, seventh and ninth chords, non-traditional modulations, and part writing for more than four voices. In regard to analysis and through the tools of composition, students are introduced to species counterpoint, classic sonata form, and 20th-Century and contemporary composition and harmony. Significant time is allotted to developing keen ear training and aural recognition skills. At the completion of the course, students may elect to take the AP Music Theory exam. The combination of CL Music Theory II and III cover the majority, but not the entirety, of the AP Music Theory examinations. Those students interested in sitting for the AP Music Theory exam in May will need to complete some independent work to prepare for that exam and should consult with the instructor to identify those additional topics. Prerequisite: CL Music Theory II or permission of the department

#### **Digital Music Composition**

half course

With an on-going overview of basic notation, major and minor modes, melodic development, and chord progressions, students enrolled in this course will learn to compose music with the many tools *Logic Pros X* offers: recording, mixing, editing, and composing with notation. In this project-based class, students will work with the guidance of the instructor to create pieces in a variety of musical forms and genres. Students will utilize introductory keyboard and drumming techniques and will have the opportunity to play and record instruments of their own. Advanced students may have the opportunity to work in more advanced notation, sampling, and editing features of Logic Pro X. Note: This class may be repeated for credit.

# The History of Broadway Musicals

term course

This course surveys the musical shows, composers, and performing artists of Broadway's past, present, and future. Students will study the influences of Burlesque, Vaudeville, Gilbert and Sullivan, and Tin Pan Alley on the 20th and 21st Century Broadway musical. Beginning with the development of early show writing teams and composers such as Cole Porter, Jerome Kern, Rodgers and Hammerstein, Rodgers and Hart, and Leonard Bernstein, study will continue with Stephen Sondheim, Stephen Schwartz, and the contemporary teams that created shows such as *Les* 

Misérables and Miss Saigon, rock musicals such as Tommy and Hair, and the rock musicals of today such as Next to Normal and Spring Awakening. Finally, the class will survey the work of composers such as Jason Robert Brown and Adam Gettel. In addition to viewing and listening sessions and discussions, the class will plan to attend outside and on campus performances, receive visits from local music theater artists, and tour a Connecticut theater.

## **World Music** (GESC)

term course

This course introduces students to the rich and diverse world of music in selected non-Western cultures. In addition to listening sessions, videos, and readings, students have opportunity to observe the essence of music in culture through viewing live and streamed performances. In addition, students will work with guest musicians and engage in hands on activities. Cultures and countries included for 2017-18 will be selected from areas of South America, South Africa, West Africa and the Caribbean.

#### Music History: Wolfgang to Wu Tang

term course

This sojourn through the history of music searches historical roots and development of both classic and popular music. With an emphasis on developing critical and discriminative listening skills, students will seek answers to questions such as: How do "emo" and "new age" music relate to Gregorian chant? How are Smetana and Santana related? How did the song cycle influence the modern day album? From Bach and Beethoven to the Beatles and Beyonce, students will investigate political and social events that influenced musical forms, the development of musical instruments, and the ever-changing tools of music composition. Through listening sessions, guest artist performances, discussions, videos, and website research, we will attempt to answer these questions and more.

# Music Ensemble Performance Courses

The courses listed below provide students with the opportunity to earn arts credit through performance in musical groups. All of these performance courses provide a repertoire of diverse styles and periods. Enrolled students must practice regularly, attend all scheduled rehearsals, and take part in all performances.

Performance classes are open to students in all classes; ensemble performance and applied music classes may be repeated for credit. For instrumental classes, the student must indicate the instrument to be played in the "Notes" section of the course registration form. Students enrolled in performance classes must attend three Music Department-sponsored concerts each term.

### **Concert Choir** (GESC)

half course

Open to all who enjoy singing, this course teaches basic techniques of healthy singing through the preparation and performance of a large variety of choral music. Through repertoire ranging from the Renaissance, Baroque, and Classical to American musical theater, pop, and jazz, and especially including multicultural works, the ensemble works to create a meaningful musical choral ensemble experience while internalizing the characteristics unique to each style. From time to time the Choir joins with the Orchestra or Wind Ensemble (Concert Band) in the preparation of larger works.

#### Chamber Singers (GESC)

half course/sophomores, juniors, seniors

Designed for those students with advanced vocal musicianship and keen interest in choral music, this course challenges the vocalist to work toward a high level of vocal proficiency in a choral setting; particular emphasis is made on sight reading and tone production. Repertoire includes classical and contemporary musical compositions for the smaller ensemble and specializes in multicultural music new to the choral genre. The Chamber Singers perform frequently during the school year and are highlighted in two major choral concerts in the winter and spring. An audition is required for enrollment. Students electing this course must also elect Concert Choir.

# Wind Ensemble (Concert Band)

half course

Students in the Wind Ensemble (Concert Band) study and perform a stylistically wide variety of inspiring literature composed for the wind ensemble/concert band medium, as well as outstanding transcriptions from other musical sources. Intellectually, artistically and emotionally challenging, this literature provides the foundation for daily music learning and enjoyment. All students who play woodwind, brass and percussion instruments are welcome and no audition is necessary. The course focuses on each individual student's enjoyment of the musical experience and skill

development. The Wind Ensemble (Concert Band) performs scheduled on-campus concerts twice per year. Occasional off-campus performances and/or field trips may be part of the experience. Advanced students may be selected to play in symphonic works with the Orchestra.

#### Jazz Band

half course

Open to all wind, percussion, guitar, and keyboard players, this group explores the music of the Big Band era and modern jazz. Emphasis is on individual technique, chord study, and improvisation. In the fall, students will participate in a listening session with the instructor.

#### **Jazz Improvisation and Theory**

half course

Through the study of jazz scales, melody, harmony, form, and rhythm, students in this class learn jazz improvisation and theory. Students explore progressively more difficult solo complexities, from simple modes and blues to complex be-bop and post-be-bop styles. Prerequisite: In a fall listening session, students must demonstrate sufficient familiarity with jazz style and technique.

#### **Orchestra**

half course

The LC Orchestra is comprised of violins, violas, cellos, and double basses and is designed to expose players to a variety of music. Repertoire is chosen from genres from the Baroque to Contemporary eras and may feature solo student musicians. Wind, brass, and percussion students from the LC Wind Ensemble (Concert Band) may join the strings in larger orchestral works. On occasion, the ensemble collaborates with the Concert Choir and faculty singers. The Orchestra performs in at least two major concerts each year. Seating auditions for strings are held in the fall term. All strings players are encouraged to join the ensemble.

#### **Chamber Music**

half course

Open to pianists, bowed strings players, guitarists, wind and brass players, this course forms duos, trios, quartets, etc. The course provides instrumentalists the opportunity to study and perform repertoire written specifically for chamber music ensembles. Repertoire is selected from all genres, and groups are formed based on playing ability and level. This class concentrates on the preparation of several scheduled ensemble concerts, in-class performances, and on-campus events. All students electing this course must audition in the fall for appropriate group placement; some students may be advised to further their technical skills another year before admission to the course. (This class meets in the same time block as Wind Ensemble [Concert Band] and Orchestra and may be taken concurrently with those performance classes.)

#### **Percussion Ensemble**

half course

This course is designed for the experienced percussion student who seeks to enhance percussion study and performance with an ensemble experience. Utilizing literature written specifically for percussion ensembles and percussion chamber music, students in this ensemble will play instruments such as marimba, xylophone, timpani, timbales, and concert instruments such as bells, gong, snare, and toms. This ensemble will perform on recital samplers and at campus events throughout the school year. (Students enrolled in this class must be able to read and play written rhythms in time and with a steady beat; some students may be advised to further their technical skills before admission to the course.) A placement session will take place with the instructor at the start of the school year.

#### **Guitar Ensemble**

half course

This course is designed for the experienced guitar student who seeks to enhance guitar study and performance with an ensemble experience. Students will rehearse repertoire from several genres including classic, jazz, rock, and blues. In addition, ensemble members will work on improvisation and solo technique. This ensemble will perform on recital samplers and at campus events throughout the school year. (Students enrolled in this class should be able to read music in first position and play written rhythms in time and with a steady beat; some students may be advised to further their technical skills before admission to the course.) A placement session will take place with the instructor at the start of the school year.

# **Applied Music**

**Beginning Voice Lessons** 

half course

This studio course class teaches basic vocal technique to the beginning vocalist. Through a variety of vocal exercises and repertoire from several genres (including musical theater, pop, and classical), students sing together and individually for the class. Students learn technique for healthy posture, breath support, vocal placement, and singing diction in several languages. Throughout the year, students record their own performances and choose pieces to add to their repertoire. Students view and analyze several professional audio and video recordings and attend vocal performances on campus. Introductory piano, music theory, and sight-reading are included. Please note the expectation that students regularly and consistently practice repertoire and skills on their own. Note: This course prepares the student for future work in Concert Choir and/or private voice lessons; this group-lesson class includes no additional charge to the student; it may not be repeated for credit.

# **Beginning Piano Lab**

half course

This studio course teaches basic piano technique to the beginning pianist. Working with headphones on electronic keyboards, class members work through a level-appropriate piano text; the instructor teaches all students during each class meeting. During some classes, individuals play music for the rest of the class. The practicing and homework may be done on acoustic pianos or electronic keyboards. This course is appropriate for beginners with no experience, players who have studied another instrument but desire piano experience, and students of music theory. Please note the expectation that students regularly and consistently practice repertoire and skills on their own. Note: this grouplesson class includes no additional charge to the student; it may not be repeated for credit.

# **Beginning Acoustic Guitar**

half course

This course introduces the student new to guitar to basic first-position chords, strum patterns, and both pick-style and finger-style playing. Students will learn to read standard musical notation, chord charts, and tablature. In addition, students will learn to tune; if time allows, students will learn to string the guitar. Class members will play both solo and ensemble literature, contemporary and classic repertoire, and skill-building scales and exercises. Please note the expectation that students regularly and consistently practice repertoire and skills on their own. Note: this group-lesson class includes no additional charge to the student; it may not be repeated for credit.

#### **World Percussion Class (GESC)**

half course

Students enrolled in this class will work together to perform and rehearse percussion works multicultural and folkloric in nature. With experience on a variety of hand percussion instruments, class members will learn rhythmic patterns, both by ear and from musical notation. Repertoire will be chosen from several areas of the world, including Ghana, West Africa, the Caribbean, Ireland, and South America. No previous musical experience is required.

#### **Private Music Lessons**

half course

This course, which can be taken for credit or no credit, allows a student to study voice or a musical instrument. Credit is awarded for twenty-six or more private music lessons over the course of three terms during the same academic year; there may be no fewer than eight lessons in a term. NOTE: the weekly lesson includes an additional fee. Parents must clearly express their permission before lessons can begin. Instrumental rentals may be arranged. In addition, students must demonstrate significant technical and musical progress on the instruments studied; consistent attendance alone does not merit credit.

NOTE: the weekly lesson includes an additional fee. Before lesson may begin, parents must clearly express their permission by registering their student(s) through the parent portal. Students and parents must commit to a full trimester of lessons. Instrumental rentals may be arranged.

# The music department currently arranges the following lessons:

Voice Percussion Keyboard Guitar

Bowed Strings Harp (students must provide harp)

Woodwind Saxophone Brass Other

#### **Independent Studies in Music**

term course

The student must arrange for a project advisor, **submit a written proposal**, and obtain approval from the academic advisor, project advisor, department head, and the dean of faculty.

# **Alternate Study**

#### **Educational Projects**

term course/seniors

This program allows the student to set up an ungraded, noncredit study project to pursue an interest that is beyond the scope of the regular academic curriculum. Past projects include an internship with a radio station, a course in sign language, work with a state legislator, and participation in a performing dance company. Further information is available from the Academic Office.

#### **School Year Abroad**

The Loomis Chaffee School is a long-standing member of the School Year Abroad (SYA) consortium. The School Year Abroad program was founded over fifty years ago by Andover, Exeter, and St. Paul's. The consortium now includes just over 40 of the top U.S. independent schools with a strong commitment to global education and foreign language instruction. Loomis Chaffee students may earn a full year of secondary school credit while enrolled at one of the SYA schools in Rennes, France; Zaragoza, Spain; Viterbo, Italy; or Beijing, China.

At all sites the curriculum includes math and English, taught in English by teachers from the sponsoring or associated schools, along with language and electives taught in the native tongue. Students take all SAT, SAT II, and AP exams abroad and are guided through the college application process in close cooperation with the Loomis Chaffee college guidance staff. Standards are rigorous, and the program is known and respected throughout the United States. Students live with native host families chosen by the school for their readiness to integrate an American teenager into their lives. Besides attending school, students take part in community, athletic, cultural, and recreational activities. The program is open to juniors and seniors, who should apply by January 25 of their sophomore or junior year. The application process is coordinated by the SYA coordinator on campus. The decisions on the applications are made by the SYA admissions staff who remain in close contact with the Loomis Chaffee coordinator. For further information, students and parents may contact the SYA coordinator.

#### **SYA** in France

full year

The SYA school is located in Rennes, France, and students attend classes at the SYA facilities from mid-September through the end of May each year. In addition to English and math classes, which are taught in English, students may study literature, history, art history, contemporary global issues, environmental science, or international relations taught in French by native teachers. The program includes 15 to 19 days of group travel in France during vacation periods. Virtually all students finish the year fully conversational in French and with a great understanding of and appreciation for French culture.

#### **SYA** in Spain

full year

Students attend classes at the SYA facilities in Zaragoza, Spain, from mid-September through the end of May each year. In addition to English and math classes, which are taught in English, students study literature, history, art history, macro-economics, environmental science, or political science taught in Spanish by native teachers. The program includes 15 to 19 days of group travel in Spain during vacation periods. Virtually all students finish the year fully conversational in Spanish and with a great understanding of and appreciation for Spanish culture.

#### **SYA** in Italy

full year

The program in Italy is for students who have an interest in classical culture as well as the culture of modern Italy. The SYA school is located in Viterbo, less than an hour's drive from Rome. Students study math, English, and Latin with an American teacher from the consortium schools, while classes in Italian, classical history, art history, archeology and Greek (optional) are taught by Italian instructors. At some point during the second half of the year, when student proficiency in Italian warrants it, the history and art history courses are taught in Italian. There are numerous

excursions to sites of cultural and historical significance. This program is open to students who are either beginning or continuing their study of Latin.

#### **SYA** in China

full year

Students attend classes on the SYA China campus housed at Middle School #2, the secondary school attached to Beijing Normal University. In addition to English, math classes, and an optional AP Environmental Science course taught in English, students study written Mandarin, Chinese civilization, Chinese painting, and Chinese martial arts taught in Mandarin by native teachers. The program includes significant travel in China, and students take part in visits to cultural and historical sites. Students may apply even if they have not studied Chinese. SYA China has had remarkable success with its very intensive Chinese language immersion classes.

#### **Other Studies Abroad**

#### Arabic Year at King's Academy

full year or single term/juniors or seniors

Arabic Year at King's Academy in Jordan offers an intensive one-year or one-term Arabic language study, Middle Eastern cultural immersion, and experiential learning opportunity. Students live at and are part of King's Academy, an American-style boarding school situated 30 minutes away from Jordan's capital, Amman.

Students at AY will take a combination of traditional high school classes and unique Arabic Year courses, a program of study individually shaped for each student depending on the student's level of Arabic and background in the traditional curriculum. With an emphasis on spoken Arabic and introducing students to the essentials of classical Arabic, continuing their Arabic studies begun at Loomis Chaffee, and an integration of classroom learning with beyond-the-classroom experiences unique to the region, students also experience a curriculum informed by the King's Academy guiding principles of respect, love of learning, responsibility, an integrated life, and global citizenship.

The 140-acre campus has six dormitories, an athletic complex, two academic buildings, a 700-seat auditorium, a 30,000-volume library, a health center, a dining hall, a student union, and a spiritual center. In total, more than 50 members of the faculty live on the campus.

## **Domestic Semester Programs**

A variety of semester-long programs are available to Loomis Chaffee students. The following are those in which Loomis Chaffee has engaged as a sending school.

## The Mountain School Program of Milton Academy

half year/fall or spring/juniors or seniors.

Milton Academy offers a unique educational experience at The Mountain School in Vershire, Vermont.

The Mountain School is open to juniors and seniors who are interested in combining a rigorous academic curriculum with a living and working environment on a 330-acre farm. Through studies, farm work, and day-to-day life, the program seeks to foster in students a new understanding of people's relationship to the natural world.

Academic classes include instruction in English, environmental issues, math, French, Spanish, United States history, science, and studio art. Outside of the classroom, there are opportunities to learn practical arts and crafts (including woodworking and pottery) and to participate in the performing arts (theater and music). All students are involved in farm activities, such as raising animals, planting and harvesting crops, and maintaining the property.

Enrollment is limited to a total of 45 students who are taught by eight faculty members drawn from Milton Academy and the associated schools. Further information may be obtained from the Academic Office.

#### **CITYterm**

half year/fall or spring/juniors or seniors

CITYterm is a semester-long urban studies program that makes extensive use of the resources of New York City. Students live in a dormitory at The Masters School in Dobbs Ferry, 40 minutes from Grand Central Station, and they commute approximately three days each week into the city, which serves as the focus of the experiential track of the program.

Morning classes at The Masters School allow students to continue their studies of mathematics and foreign language at the appropriate levels. The core curriculum raises significant questions about the nature of urban life through an extensive study of New York City. The work is interdisciplinary, drawing its texts from a wide range of academic disciplines, such as history, literature, art, architecture, politics, sociology, theater, economics, and science.

Enrollment is limited to 30 students each semester, drawn from schools all around the country. Further information can be obtained from the Academic Office.

# The High Mountain Institute

half year/fall or spring/juniors or seniors

The High Mountain Institute (HMI) is a unique opportunity for juniors and some seniors in high school to spend a semester living, traveling, and studying in the mountains of central Colorado and the canyons of southeastern Utah. Students spend approximately 12 weeks on the Leadville campus and four weeks on three backcountry expeditions. In essence, the HMI Semester combines some of the best qualities of an academic program at a rigorous boarding school with the adventure of a summer backpacking trip. Students and faculty live and work very closely for the four months of the semester. The same people teach academic classes, lead expeditions, organize activities in the afternoon, lead morning exercises, cook dinner with a group of students, and help maintain the buildings.

All HMI classes are taught at the honors or AP level (Algebra II excepted), and students take a minimum of five courses. Courses that keep students abreast of classes in progress at sending schools include Algebra II, Precalculus, Calculus, French, Spanish, and U.S. History (survey and AP). Students also take English, science, and a place-based ethics class. These courses enjoy more freedom to explore local and regional studies. Lessons based on the issues students see and experience each day promote dynamic discussions and problem solving.

Enrollment is limited to 42 students in each semester. Students need not have any outdoor experience to attend the semester.

#### **Chewonki Maine Coasat School**

half year/fall or spring/juniors

The Maine Coast Semester at Chewonki offers juniors the opportunity to live and learn on a 400-acre saltwater peninsula, exploring rocky intertidal zones, sandy shores, and freshwater streams on the Maine coast. They may snowshoe alongside moose tracks, kayak to Hungry Island, hike the Appalachian Trail, or scale Mt. Katahdin. Students' eyes are opened to the ecosystems around them, as they learn to look differently at every bird or flower, tree, or tide pool, and discover, in the process, that everything is connected.

At the heart of the Maine Coast Semester is a challenging academic program for students who share the goal of exploring the natural world through rigorous courses in natural science, environmental issues, literature and writing, art, history, mathematics, and languages. Classes are small — averaging fewer than eight students each and take place around tables or outside. In addition to their studies, students work on an organic farm, in a woodlot, and on maintenance and construction projects on campus. These real-world and hands-on experiences complement the traditional components of every class. Enrollment is limited to 40 students, who are taught by 12 faculty members in residence.

#### The School for Ethics and Global Leadership

half year/fall or spring/juniors

The mission of The School for Ethics and Global Leadership is to provide intellectually motivated high school juniors representing the diversity of the United States with the best possible opportunity to shape themselves into ethical leaders who create positive change in our world.

This semester away program takes place in Washington, D.C., in a residential facility on Capitol Hill just one block from the Supreme Court and Senate Office Buildings and only a few blocks from Union Station and the Metro. SEGL's rigorous academic program focuses on ethical thinking skills, leadership development, and international studies. Guest speakers and site visits take full advantage of being in the nation's capital. With a group of just 17 juniors, the experience is intense and remarkably inspiring for young leaders of today and tomorrow.

# Noncredit Summer Studies Abroad

#### **SYA Summer**

SYA Summer, an extension of School Year Abroad (SYA), offers five-week summer programs for high school students in China, France, Italy, and Spain.

SYA Italy's summer program has an added global studies component. Students will take introductory, practical, conversational Italian classes as well as participate in seminars, taught in English, which will focus on a different global issue each week.

# The Global Scholars Program (GSP) at African Leadership Academy

The GSP is an intensive, nineteen-day, summer youth camp for a select group of secondary school students from across the world. Built around ALA's unique Entrepreneurial Leadership and African Studies curriculum, GSP prepares future leaders to explore their potential to create widespread change in Africa and throughout the world. Participants in this exciting youth program practice leadership by working in social ventures in the Johannesburg community, learn from "fireside chats" with prominent entrepreneurial leaders in South Africa, build a global network with other young leaders from around the world, and discover the history, beauty and diversity of Africa.

### For more information about all Loomis Chaffee global study programs:

Contact Alec McCandless, Christopher H. Lutz Director, Alvord Center for Global & Environmental Studies, Alec\_McCandless@loomis.org; or Tim Lawrence, Director of Studies, Tim\_Lawrence@loomis.org

# **Community Service Program**

The Community Service Program offers students the opportunity to contribute time to a variety of public and private organizations in the Windsor and Greater Hartford areas. This is a voluntary extracurricular program and involves a full-term commitment of one or two afternoons a week. Students who are not participating in an interscholastic sport and who do not have another extracurricular commitment that would interfere (such as a major part in a dramatic production) can serve. Selected club sports will excuse students to participate in the Community Service Program. With prior approval from the director of community service and the director of athletics, students may elect to participate in community service full time in lieu of sports one term per year.

A registration period is held at the end of the previous term. Activities are held after classes, typically ending by 5:30 p.m. Transportation is arranged in school vehicles. The Community Service Program faculty and members of the hosting agencies supervise activities.

Volunteer opportunities currently offered include a variety of tutoring and enrichment programs with children and senior citizens; work with public libraries; support for adults and children with disabilities; refugee support; Special Olympics; and projects with local hospitals. Student-initiated projects are welcome and encouraged.

Students may also join the Community Service Club to participate in special events such as providing meals for a local shelter.

# **ATHLETICS**

Athletics is an important aspect of the Loomis Chaffee student experience. The lessons learned from participation in the athletics program benefit all students and play a major role in the learning process by providing significant opportunities to meet the physical, social, and psychological needs of each student. The skills taught and the attitudes developed in these activities provide students with the knowledge and habits necessary to maintain appropriate levels of health and physical fitness throughout life. The wide variety of activities allows students to choose activities according to their interests.

Activities include competition on more than 60 interscholastic teams at varsity, junior varsity, and "thirds" levels; intramural competition in six team sports; instruction and participation in fitness, dance, lifetime and leisure activities; and physical education classes in lifeguard training, core strength training, weight training and aerobic conditioning.

# Requirements

All students must participate in one Athletics Department offering every term. Students may fulfill the requirement either through interscholastic athletics, after-school sports, or daytime physical education classes (term courses); Fitness and Wellness fulfills one term course.

Freshmen are required to participate in two interscholastic team sports. One of those sports must be in the fall term. (Community service, dance, robotics, debate, or theater can substitute for one sport). Sophomores are required to participate in at least one interscholastic sport. If the sophomore is a new student, the sport must be in the fall or winter season.

Independent study projects are also available on a limited basis to students who wish to pursue activities outside the curriculum and/or to students who have demonstrated a special talent. Candidates for ISPs must demonstrate an acceptable level of cardiovascular fitness. The school encourages participation in a variety of activities and discourages specialization in one sport or activity until the senior year. Students who have a special focus in music and/or theater may apply for a limited number of exemptions from the athletics requirement in order to prepare for a competition or performance.

#### **Athletics Independent Study**

after school

A student who wishes to undertake an Independent Study Project in athletics must arrange for a project advisor who will maintain contact with an off-campus advisor, if appropriate; **submit a written proposal**; and obtain approval from the academic advisor, project advisor, department head, and dean of faculty.

#### **Athletic Training**

after school/term course

Students who demonstrate a strong interest in sports medicine assist the athletic trainers in daily operation of the athletics training room. Permission of the head athletic trainer is required.

#### **Backcountry Program**

enrollment limited/after school/spring term

This course covers all aspects of safety and backcountry travel. Students take day hikes on local trails and canoe during the week, and they pursue lengthier hiking, snowshoe, and canoe trips on some weekends.

#### **Basketball**

Intramural/winter term

Instruction and team competition via league play at two levels.

# **Cardio and Weight Training**

priority given to upper classes/after school/term course Weight training and aerobic activity for fitness.

#### Crew

after school/fall or spring term

Students are transported to Hartford Riverfront Recapture where they participate in this off-campus crew program. Abilities can range from eager beginner to the sport through any individual with vast experience who wants competition at a higher level. There is a cost associated with the program and it is offered both fall and spring

#### **Cycling**

after school/spring term

Students take 20-mile daily tours and one 50-mile trip. They learn basic bicycle repair.

#### Dance

Please see dance class descriptions on pages 56 and 57.

#### **Equestrian**

after school/spring term

Riding at an off-site venue, there is an additional charge for this activity

#### **Fitness and Wellness**

daytime/fall, winter, or spring term course for sophomores; freshmen with permission of the department This course explores the link between a healthy lifestyle, which includes regular exercise and the prevention of chronic diseases, and the relationship between stress and well-being. Other major components of the course concentrate on examining personal behavior with regard to nutrition, drugs and alcohol, tobacco use, and human sexuality. Students gain insight and knowledge so they can apply the health-related science learned in biology to their own lives. Students also examine personal behavior and cultural norms; class discussions stress healthy decision-making that contributes to lifelong well-being.

#### **Jogging**

after school/winter term

In this outdoor program, students receive running instruction with fitness exercising and stretching on four fitness levels.

#### **Lifeguard Training**

daytime/term course

This course provides instruction for American Red Cross Lifeguard training, CPR for the professional rescuer, and AED certification. Prerequisite: Students must be able to pass the American Red Cross prerequisites to take this course (an endurance swim test).

### **Outdoor Fitness**

after school/spring term

Varied workout program designed to improve strength, endurance, and overall fitness.

#### Soccer

intramural/after school/fall term

Instruction and team competition via league play at two levels.

# Squash

Intramural/fall or winter term

Instruction and team competition

#### **Tennis**

 $after\ school/fall\ term/priority\ given\ to\ upper\ classes$ 

Intermediate level of play. Competition in singles and doubles. Not for varsity players.

#### **Ultimate Frisbee**

 $intramural/spring\ term$ 

Instruction and competition

## Videography

after school/fall or winter term

Students are taught techniques of recording sports and editing footage according to the specific needs of an interscholastic coach. They engage in physical exercise when they are not taping. Requires prior consultations with and approval of the athletic director.

# Weight Training (advanced)

after school/each term/priority given to upper classes; not open to freshmen This program is for experienced weight lifters. Prerequisite: permission of the department

#### Yoga

after school/winter or spring term Instruction in a variety of yoga techniques

# **DANCE**

Dance classes are offered both during the day and after school. These classes fulfill the physical education requirement, and some offer performance opportunities as well. Technique classes are open to all levels, beginner through advanced. Dance Companies I & II are for students with previous dance experience. Upperclassmen may elect to take one daytime dance course for an Arts credit. In order to qualify for this option, the student must be on an interscholastic athletics team during the same term as the dance course. A student may elect to use this Dance/Arts credit only one time in his or her Loomis Chaffee career.

#### **Ballet Technique**

after school/fall term

This class focuses on classical ballet technique. Instruction includes barre, center floor work, turns, jumps, and body conditioning to ensure the full development of the dancer. Advanced dancers who are already "en pointe" may, with the instructor's approval, wear their pointe shoes for class. There is an optional performance opportunity in the Fall Dance Showcase for students in this class.

### Jazz Dance Technique

after school/spring term

In this up-beat dance class, students are introduced to traditional American jazz dance, contemporary jazz, and jazzfusion styles. Participants improve their strength, flexibility, coordination, and musicality through warm-ups, technique exercises, and dance choreography set to popular music of the past and present. There is an optional performance opportunity in the Spring Dance Revue for students in this class.

# **Hip-Hop Dance**

after school/winter term

The class studies basic ethnic and street-originated styles that are performed to popular music. The class explores hiphop and funk dance as a means of expression and art. Instruction includes strengthening warm-up, technique exercises, and choreography combinations. There is an optional performance opportunity in the Spring Dance Revue for students in this class. Hip-Hop Dance is taught by a visiting guest teacher.

#### **Dance Company I**

daytime/yearlong course

This course is for students with intermediate to advanced dance experience. Company I explores various techniques within the dance styles of ballet, jazz, and modern dance. This class allows students with previous dance experience and

training to expand their dance techniques and performance abilities. Company I class focuses on both improving technique and learning repertory dances for performance. Students apply their dance and choreography skills to perform at school activities and in the Fall Dance Showcase and in the Spring Dance Revue.

Students who wish to dance and perform, but who are not cast in Company II or are unable to commit to the full year of after-school rehearsals of Company II, are *strongly* encouraged to sign up for Company I. Prerequisite: At least two terms of Loomis Chaffee dance classes or at least two years of *recent* previous dance training. Placement determined by

## **Dance Company II**

instructor.

after school/yearlong course

Dance Company II is the elite dance performance group on campus, and is for advanced dancers who wish to dedicate their after-school time and energy to dance. *Students must audition in the fall* to be considered for Dance Company II. In addition to maintaining and improving various techniques, this course focuses heavily on learning and making repertory dances that are performed at school activities, in The Fall Dance Showcase, and in the Spring Dance Revue. Methods of generating movement and building choreography are also addressed and students' choreography is included in some pieces. A visiting guest teacher is brought in during the winter term to give students a broader dance experience.

Students who wish to dance and perform, but who are not cast in Company II or are unable to commit to the full year of after-school rehearsals for Company II, are *strongly* encouraged to sign up for Company I. Company II is cast by audition. Auditions are held at the start of the fall term.

# INTERSCHOLASTIC ATHLETICS

# **FALL**

Girls Cross Country Field Hockey, Varsity Field Hockey, JV Soccer, Varsity Soccer, JV Soccer, III

Volleyball, Varsity

Volleyball, JV

Boys Cross Country Football, Varsity Football, JV Football, III Soccer, Varsity Soccer, JV Soccer, III Water Polo, Varsity Water Polo, JV

Coed Athletic Training Equestrian (IEA)

# WINTER

GITIS Basketball, Varsity Basketball, JV

Ice Hockey, Varsity Ice Hockey, JV Squash, Varsity Squash, JV Swimming, Varsity Diving, Varsity

Boys Basketball, Varsity Basketball, JV Basketball, III Ice Hockey, Varsity Ice Hockey, JV Squash, Varsity Squash, JV Swimming, Varsity Diving, Varsity Wrestling, Varsity Wrestling, JV

Coed Athletic Training Equestrian (IEA) Skiing, Varsity

# **SPRING**

Girls Golf, Varsity Lacrosse, Varsity

Lacrosse, JV Lacrosse, III Softball, Varsity Tennis, Varsity Tennis, JV Track Water Polo, Varsity

Boys Baseball, Varsity Baseball, JV Golf, Varsity Golf, JV Lacrosse, Varsity Lacrosse, JII Tennis, Varsity Tennis, JV Track

Coed
Athletic Training

## AFTER-SCHOOL ATHLETICS

## **FALL**

Club & Class/Coed
Ballet Technique
Cardio and Weight Training
Crew
Dance Company II (year)
Soccer
Squash
Tennis
Weight Training (advanced)
Videography

# **WINTER**

Club & Class/Coed
Basketball A (advanced)
Basketball B (beginner)
Cardio & Weight Training
Dance Company II (year)
Hip Hop
Jogging
Squash
Videography
Weight Training (advanced)
Yoga

# **SPRING**

Club & Class/Coed
Backcountry Program
Badminton
Cardio & Weight Training
Crew
Cycling
Dance Company II (year)
Equestrian
Jazz Dance Techniques
Outdoor Fitness
Ultimate Frisbee
Weight Training (advanced)
Yoga

# **DAYTIME ATHLETICS**

# **FALL**

Coed
Dance Company I (year)
Fitness and Wellness (term)

# WINTER

Coed

Dance Company I (year) Fitness and Wellness (term)

# **SPRING**

Coed

Dance Company I (year) Fitness and Wellness (term) Lifeguard Training (term)

