

SAINT ANN'S SCHOOL

---

HIGH SCHOOL

---

COURSE CATALOG

---

2018-2019

---



Dearest high schoolers,

What I love about this time of year is the palpable sense of “possibility” that emanates from an unassuming, coarsely bound book. It may not look like much from the outside, but within these pages your teachers have laid out opportunities to both explore strange worlds that you’ve never imagined and retrace your steps in more familiar territory. Within these pages there are innumerable potential paths to take, and I encourage each of you to wander through this catalog with no particular destination in mind. As the wisest of men said sixty-four years ago, “not all who wander are lost...”

A stylized, handwritten signature in black ink, appearing to read 'Chloe'.

Chloe

---

# MINIMUM

---

# GRADUATION

---

# REQUIREMENTS

---

<b>Arts</b>	Four courses in the arts, preferably at least one in art, one in music, and one in theater
<b>Computer</b>	No requirement, but students are encouraged to become comfortable with usage and applications of the computer
<b>English</b>	Four years
<b>History</b>	Four years
<b>Language</b>	Four years of language study
<b>Math</b>	Four years, including Algebra 1, Geometry, and Algebra 2
<b>Rec Arts</b>	One course or the equivalent, or one interscholastic sport, per year
<b>Science</b>	Three years including one year of biology and one year of physical science

---

# HIGH SCHOOL

---

## COURSE CATALOG

---

### 2018–2019

---

#### TABLE OF CONTENTS

<b>Art</b> .....	<b>2</b>
<b>Computer</b> .....	<b>7</b>
<b>English</b> .....	<b>10</b>
<b>Health</b> .....	<b>19</b>
<b>History</b> .....	<b>20</b>
<b>Interdisciplinary Studies</b> .....	<b>27</b>
<b>Languages</b>	
Chinese .....	30
Japanese .....	32
Greek .....	33
Latin .....	36
French .....	39
Spanish .....	42
<b>Mathematics</b> .....	<b>45</b>
<b>Music</b> .....	<b>51</b>
<b>Recreational Arts</b> .....	<b>58</b>
<b>Science</b> .....	<b>63</b>
<b>Seminars</b> .....	<b>70</b>
<b>Theater</b> .....	<b>78</b>

---

# ART

---

All classes meet one double period per week unless otherwise noted. **Note:** Although the descriptions for many of the art electives are general, it is the teachers' prerogative to be more specialized in their individual approaches. For instance, the painting and painting/drawing courses have several sections taught by different teachers in the department. Each teacher guides the curriculum through personal aesthetic passions and interests, while taking into consideration the experiential and technical abilities of each student in the class.

## **Animation**

*(Tokmakova)*

Over the course of the year, each student will produce an animated film. Collaborations are also welcome. Students will write a script or explore a more abstract approach to storytelling, creating their own unique sets and characters from clay, paper cutouts, found materials, or drawings. We will use traditional stop-motion techniques to shoot our films frame by frame, using Dragon Animation software. During the editing stage everything comes together. The images can be layered or manipulated, and the soundtrack, including dialogue, music, audio effects, or narration can be added. No previous experience necessary.

## **Introduction to Architecture & Design 1**

*(Rumage)*

This course introduces and explores some of the basic drawing systems used to communicate three dimensional architectural ideas within two dimensional formats (elevations, floor plans, isometric and axonometric). Students progress from representing simple three dimensional forms to drawing self-designed architectural structures and subsequently translating their architectural plans into scale models constructed from chipboard and a variety of materials.

## **Introduction to Architecture & Design 2**

*(Rumage)*

This course is an extension of Introduction to Architecture and Design. The course will broaden the exploration of architectural concepts and model making, allowing students to gain greater confidence and fluency, while applying the various projection and mechanical drawing systems to specific design problems. This is an excellent course to prepare for the more rigorous Advanced Architecture and Design seminar.

## **Advanced Architecture & Design**

*(Rumage)*

(Please see Seminars)

## Introduction to Digital Photography

*(Poindexter)*

This is a photography course that explores image making through an entirely digital format. Along with using digital cameras, the course relies on the computer to refine and manipulate images that are then produced through a digital printer. No photography experience is necessary.

## Advanced Digital Photography

*(Poindexter)*

Advanced Digital Photography builds on the ideas presented in Introduction to Digital Photography. Students will explore how to nuance their images to move beyond the real—to understand how to use light to generate a variety of visual, psychological, and conceptual effects. Class assignments pursue alternate approaches to the organization of information: maps, diagrams, indexes, and encyclopedias. Over the course of the year, two separate portfolios of photos will be generated (one for each semester). We will draw inspiration from master manipulators (such as Hiro, Jeff Wall, Thomas Demand, Ryszard Horowitz and Philippe Halsman), as well as more experimental images found in print advertising. A solid understanding of how to use an SLR camera in manual mode is required. **Prerequisite(s):** Introduction to Digital Photography

## Drawing

*(Keating, Sassoon)*

In this class we investigate ideas about visual communication, using a variety of media and surfaces. Observation, perception, composition, and the language of mark-making are stressed. Students will work from still life, works of the Old Masters, models, and other sources. Using materials like pencil, charcoal, pastel, ink, watercolor, colored pencils, marker, and transfer techniques we will explore line, tonality, volume, and texture, as we gain rendering skills toward development of an expressive personal vocabulary.

## Failure: Art, Philosophy, And Criticism

*(G. Smith)* (3x per week)

This course explores failure not as a negative outcome, but as the natural backdrop for creative endeavors in contemporary society. Students explore the shape of this failure through two intertwined tracks. In the first, students will engage in art projects using a range of media, including video and drawing. Assignments might include creating self-portraits, maps, manifestos, or short documentaries. As the year progresses, projects will become increasingly open-ended. Students will be encouraged to follow their own interests, and to develop their own ways of engaging with the mediums. No prior art-making experience is assumed.

As with any creative endeavor, failure is part of the art-making process. However, in the second track of the course, students will also explore how failure increasingly plays a role in a range of philosophical and political considerations. Through readings and discussions, stu-

dents will consider how concepts like absolute truth or religious certainty have become difficult to latch onto. Even the boundaries between common pairings such as true/false, right/wrong, individual/community, or male/female, have become foggy. Where do these concepts come from, and why do they no longer seem entirely sound? Or do they in fact retain their power? This ambiguous failure of the authority of absolutes is a main focus of the course.

Students' art projects will be in dialogue with these discussions, and will also be guided by short readings by authors such as Plato, Aristotle, Nietzsche, Cage, de Beauvoir, Goodman, Coates, Halberstam, Preciado, and Svenonius. The ultimate goal is for students to develop their own understanding of, and artistic response to, the tangled grey areas between purported absolutes and certainties. **Note:** This class will meet one single period and one double period per week.

## Figure Drawing

*(Hillis, Tokmakova)*

This class involves drawing from the live model and includes anatomical exercises that will explore the skeleton, muscles and organs to convey an understanding of forms and shapes that make and influence our positions and motions. A goal within each drawing session is an attention to anatomy and proportion and to ways of describing contour and form through the study of light, shadow and movement.

## Figure Drawing with Extensive Study of the Head and Facial Expression

*(Arnold)* (4x per week)

In this course students will learn to draw the human figure from a live model, both dressed and nude. From short movement sketches to longer studies of a still model, students will explore the figure, including special studies of its hands and feet, using china ink, graphite, charcoal, oil sticks, etc. We will pay particular attention to the head. Students will learn to depict the head proportionally, from different angles, and in three dimensions. Drawing from a live model as well as from classical sculptures, they will learn to depict individual facial characteristics, creating a portrait. During the second semester, students will be ready to make stylized portraits (e.g. caricatures, cartoons, and anthropomorphized animals) as well as various realistic expressions. We will also explore drawing groups of interacting figures. This course will be demanding, requiring stamina, dedication, and a desire to learn how to draw realistically. Previous drawing experience is desirable but not necessary. **Note:** This class will meet two double periods per week.

## Painting

*(Hillis, Lee)*

This course is an exploration, through a variety of painting media, of pictorial construction, color, composition, and conception.

## Painting Intensive

*(Bellfatto, Keating)* (4x per week)

See Painting. Offered in an intensive format of two double periods per week. **Prerequisite(s):** permission of the instructor

## Painting Nature from Life

*(Arnold)*

Representational art requires intense focus and concentration. Drawing and painting the natural world from life is a powerful aid to increasing visual skills. In this class students will draw and paint mushrooms, flowers, and plants, as well as various small animals. Throughout the course students will explore many techniques—watercolor and oil paint, pen and ink. They will be introduced to great artworks about nature by da Vinci, Durer, Audobon, Rubens Van Gogh, O’Keefe, and others.

## Painting & Drawing

*(Hillis, Keating)*

An exploration of pictorial life—how drawing begins, its development, manifestation and transmutation. An alchemical approach to picture making: experimentation with content in a variety of styles and media toward the development of a personal vision.

## Photography 1: Basic Camera and Darkroom Techniques

*(Giraldo)*

Learn to capture and share your view of the world through the lens of traditional black and white photography. In addition to class discussions and critiques, students learn the basics of composition and visual communication through slide show presentations of well-known and lesser-known photographers, assignments to be completed outside of class, and in-class exercises in the analog photographic process. Students will learn on 35mm manual cameras and black and white film.

## Photography 2\3: Personal Style and Advanced Darkroom Techniques

*(Giraldo)*

Already equipped with the basics of the analog photographic process, students will learn techniques in documentary photography, portraiture, and methods to develop personal style. Darkroom practice will include the use of new materials such as Fiber-based Silver Gelatin and Medium Format Negatives. **Prerequisite(s):** Introduction to Photography, or equivalent experience in black and white photography and darkroom developing.

## **Printmaking**

*(Lee)*

This is a broad course that combines various screen printing techniques with relief printing (linoleum, woodblock, and intaglio techniques). The premise is to evolve imagery from an understanding of the character of these processes.

## **Printmaking: Posters**

*(Lee)*

This course is devoted to silkscreen design and production. A historical survey of poster designs includes: Japanese 19th century playbills, Polish circus posters, Mexican revolutionary leaflets, rock posters of the sixties, and more. This course works with the Theater Department to produce the posters for all school productions throughout the year. Various printing techniques are explored. We will also print T-shirts and fabric.

## **Ceramic Sculpture**

*(Bellfatto)*

Not a pottery course. We explore basic clay building techniques such as coil, slab and pinch-pot to generate functional and non-functional sculpture. Various surface treatments are investigated: stain, slip, paint, and glazes. Students develop a body of work reflecting an eclectic variety of sources and themes: personal, historical, geometric and organic form, human and animal figure, narrative relief, and architecture.

## **Sculpture**

*(Reid IV)*

This class is an introduction to the rendering of three-dimensional form. We will focus on building ideas from conception to completion. Students begin projects by drafting a sculpture plan to serve as a construction blueprint throughout the process. Each project focuses on a different fabrication method: carving (subtractive), armature construction (additive), molding and casting (replicative). Joinery techniques such as physical and superficial connections, lap joints and butt joints are studied and implemented. Projects will be created using a wide selection of materials, including but not limited to: soap, concrete, modeling clay, chip-board, and wax.

---

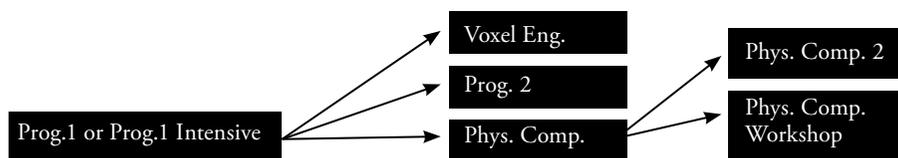
# COMPUTER

---

We are surrounded by science fiction—portable computers, artificial intelligence, 3D printing, electronic games, online journals, instant reference books, genetic sequencing, cameras everywhere, nanotech, increasingly massive datasets—constant innovation with data processing, design, number crunching, and computer science. Our courses show students how to be more than just consumers or users: they will be independent creators on computers, able to control and help shape the tools of today and tomorrow. Using software that runs similarly on Mac, Windows, Unix/Linux, and tablet computers, our courses teach a range of topics including programming, graphics, circuitry, web, spreadsheet analysis, logic, and other skills that are useful for doing everything from analysis to artwork. Classes are full year and meet twice a week unless otherwise noted. Visit [tinyurl.com/sacc2019classes](http://tinyurl.com/sacc2019classes) for more information about any of these classes.

## No Prerequisites

## Classes After Prog. 1



## 3D Modeling and Printing

*(The Department)*

3D printers are personal fabrication tools that are a part of an evolving modern world of technology that allows students to become producers, inventors and artists. Students will create, design, invent and prototype while efficiently and inexpensively taking their digital designs into the real world. Students will be able to easily understand the strengths and limitations of their work and will be encouraged to modify their designs, thereby participating in an iterative engineering design process. Students will learn various 3D modeling techniques and explore several 3D modeling software tools and packages.

## Physical Computing 1

*(The Department)*

Learn how to interact physically with a computer without using the mouse, keyboard or monitor. Move beyond the idea that a computer is a box or a system of information retrieval and processing. Using a microcontroller, a single-chip computer that can fit in your hand, write and execute interactive computer programs that convert movement into digital information. Work with components such as resistors, capacitors, diodes and transistors as well as integrated circuits. Through lab exercises and longer creative assignments learn how to program, prototype and use components effectively. Control motors and interpret sensor data, as well as explore advanced concepts in interface, motion and display. **Prerequisite(s):** some programming experience or permission of the department chair

## Physical Computing 2

*(The Department)*

Students combine theory and practice to interface microcontrollers and transducers. We learn how to make devices respond to a wide range of human physical actions. Building on previous knowledge acquired in Physical Computing 1, we build projects from schematics, make programs based on class examples, and make interfaces talk to each other. Topics may include: networking protocols and network topologies; mobile objects and wireless networks of various sorts; digital logic building blocks and digital numbering systems. Students are involved in short production assignments and final projects, and create a digital portfolio to document their work and research. **Prerequisite(s):** Physical Computing 1 or permission of the instructor

## Physical Computing Workshop

*(The Department)*

Creating interactive work relies on building a relationship between the object and the viewer. By gathering information in the form of input, processing that into meaningful data, and outputting that contextually, new forms of engagement and interaction with an audience can be established. This class is for students who have prior experience with Physical Computing and would like the opportunity to develop their own project and spend time researching, testing, prototyping and documenting it. **Prerequisite(s):** Physical Computing 1 or permission of the instructor

## Programming 1

*(The Department)*

Explore the science and art of computer programming. For students who want to create and modify their own computer software, this course uses the high-level programming languages Java (an internet-savvy version of C++) and Livecode (multimedia coding tool) to introduce the basics of computer control and interactive web sites. We use loops, variables, procedures, input, output, and branching decisions (with Boolean logic) to control graphics, sounds, and

information. Expect to work with Java using the “Processing” tool to create animated color graphics that respond to key and mouse movement.

## **Programming 1 (Intensive)**

*(The Department)* (4x per week)

Explore the science and art of computer programming. Learn important problem-solving and design strategies like modularization and iterative design which can apply to both programming and non-programming environments. This intensive, four periods per week class is for students who want to master fundamental programming concepts which include loops, variables, procedures, input, output, conditionals and data structures. Assignments will allow students to control graphics, sounds, and data while also encouraging them to think creatively, reason systematically, and work collaboratively.

## **Programming 2**

*(The Department)*

A continuation of Programming 1, for students who are becoming more confident in their ability to combine data types and complex computer routines. We use Java and Python (internet-savvy relatives of C++) and other languages to look more deeply at object-oriented programming: class definitions, inheritance, methods, fields, arrays, and collections. Large projects include writing an interactive, animated project with control windows and graphics.

**Prerequisite(s):** Programming 1 or permission of the department chair

## **Voxel Engines**

*(Poindexter)*

Imagine an entire world small enough to carry in your pocket. Are you with me? If you can imagine it, you are almost there. “Voxels” make this possible; they are not magic; they are, in fact, totally logical. Imagine the world is made of little chunks. These chunks are volumetric pixels or voxels. Voxel engines are used to represent 3D data in scientific applications and to create procedurally generated terrain in the game Minecraft. In this class, we will have one project for the whole year: to create a voxel engine that procedurally generates terrain from the ground up in Java. We will start by learning to make a single block out of a set of points in 3D space, to package these points as a mesh and to get them to show up on screen. From there, we will add the ability to change the appearance of blocks, build randomly generated surfaces out of clumps of blocks and add caves and biomes. As part of our efforts, we will encounter concepts and strategies that are useful in programming in general. Having a basic understanding of object-oriented programming is a prerequisite for taking the class.

**Prerequisite(s):** Programming 1 or permission of the department chair

---

# ENGLISH

---

## **Western Literature & The Essay (9th Grade)**

*(The Department)*

The backbone of the ninth grade English course is formed by modern European and American literature, with Shakespeare, Sophocles, and poets from all periods in permanent residence. Freshmen vigorously air their responses to literature, hone their essay skills, and experiment creatively throughout the year. Grammar and vocabulary exercises reinforce reading and writing skills.

## **Poetry, Drama & The Novel (10th Grade)**

*(The Department)*

Sophomores encounter increasing demands on the quality of their thinking and writing, while we provide a widening background in the Western classical tradition and in modern voices. Across the year students examine several genres in depth. The first term typically concentrates on drama and poetry, the second on short forms and the novel. Authors include Shakespeare and Faulkner, Camus, O'Connor, and Baldwin. In an additional class period each week, small groups of six to ten sophomores practice their analytic skills and work on individual writing problems.

## **Junior/Senior Electives**

### **American Literature: United States?**

*(Darrow)*

From our nation's founding, the quest to "form a more perfect union" has been a struggle. Self-interest, disagreement, discrimination, exploitation, and violence seem to have prevailed over 'domestic tranquility.'

President Lincoln hoped for "a just and lasting peace among ourselves." Dr. King saw us "caught in an inescapable network of mutuality, tied in a single garment of destiny." But what common threads bind us? How have Americans connected in meaningful ways? Is there an *unum* left among the expanding *pluribus*?

We'll consider these aspects of the American Experiment and then explore how a wide variety of American writers and characters seek united states—mutuality with others, lasting peace within themselves. Or how they sabotage these. Or why they instead demand separation, solitude, escape, or conflict.

We'll read a little bit of everything American: founding documents; 19th and 20th century novels, plays, stories, poems, and non-fiction; the occasional speech, judicial opinion, song, or advertisement; as well as copious literature and journalism from our moment.

Historical context and ideological debate will inform our investigation, but as an English class we will focus primarily on close reading and analysis of literature, essay skill development, and creative writings.

The curriculum will maneuver around texts that students have encountered already. Authors of longer works being considered include: Chimamanda Ngozi Adichie, Edward Albee, James Baldwin, Michael Cunningham, Junot Diaz, Joan Didion, Frederick Douglass, Louise Erdrich, William Faulkner, Nathaniel Hawthorne, Ernest Hemingway, Zora Neale Hurston, Branden Jacobs-Jenkins, Jon Krakauer, Tony Kushner, Chang-Rae Lee, Carson McCullers, Toni Morrison, Lynn Nottage, Tim O'Brien, Flannery O'Connor, Philip Roth, Sam Shepard, Leslie Marmon Silko, Jane Smiley, Malcolm X, Alice Walker, Edith Wharton, Walt Whitman, August Wilson, Richard Wright.

## The Body In Literature

*(Mooney)*

*And if the body were not the soul, what is the soul?*

– Walt Whitman

A body can be many things: home, anchor, animal, cage. The body has been described, variously, as a biological organism, clothing for the soul, the soul itself, and a social construct. Plato called it a temporary envelope for the spirit; for Confucius, body and mind overlapped and intertwined, with the center of consciousness in the living, beating heart. For John Donne, physical ecstasy and spiritual ecstasy were one and the same; for Augustine, the flesh was a dangerous temptation, something to be mastered with reason. With the scientific revolution came a new idea: the human body was merely an animal form, or even—as Mary Shelley explored in *Frankenstein*—a machine. And the human body is at the center of current debates about race, gender, and sexuality.

We have more knowledge of the human body—its appearance, its health, its chemical makeup—than ever before. But we're still puzzled by how much our bodies define us, and in what ways. Our knowledge of the living body tells us little about death. We can edit and manipulate our bodies—even build new ones—but how much of that power should we exercise? How much of our identity is tied up in our sex, our skin color, our physical ability? Bodies are at once personal and political, individual and communal, and to reckon with the body is to explore concepts of desire, gender, mortality, beauty, and monstrosity.

In this course, we will consider these questions as we explore the various ways that authors and thinkers across cultures and historical moments have understood the human body, the physical *being* of human beings.

We'll read fiction and nonfiction, historical writings and science fictions. Several of our readings will draw from the rich tradition of physician authors-doctors-turned-writers who study bodies through clinical and artistic lenses. Likely texts include selections from or all of the following: *The Death of Ivan Ilyich*, *Frankenstein*, *Confessions*, *Autobiography of a Face*, *Written on the Body*, *The Empathy Exams*, *On Immunity*, *Invisible Man*, *Do Androids Dream of Electric Sheep?*, *The Man Who Mistook His Wife For A Hat*, *The Argonauts*, *A Country Doctor's Notebook*, and *Wit*. We'll also look at short stories, poems, and essays by Chekhov, Didion, Woolf, Verghese, Lam, Dubus, Sontag, Whitman, Carver, and Hempel.

## **Build it Up/Burn it Down: Politics and The Novel**

*(Rutter)*

There are two tendencies in progressive politics. The realist takes vanity, greed, and a desire for dominance as the basic features of our nature. ("Out of the crooked timber of humanity," wrote Immanuel Kant, "no straight thing was ever made.") The Romantic disagrees. She considers compassion and creativity our fundamental impulses, corrupted only by arbitrary social hierarchies. "Man is born free," wrote Rousseau, the arch-Romantic, "but everywhere he is in chains." The chains can be those of vanity (Rousseau), or wage labor (Marx), or rationality (Nietzsche), or plain old racism and patriarchy. The point is that we made them ourselves. Crack the chains, and goodness will flourish.

Who is the true progressive here? A pessimist about individual virtue, Kant was a liberal optimist when it came to the institutions of modern life. He thought democracies would eventually form a single cosmopolitan superstate. He thought disinterested judgment laid a claim to objective truth. Rousseau, who loved to meditate by the shores of Lake Geneva, saw art and science as a power grab. Geometry, developed by land surveyors, was "born from avarice." Philosophy was born from "human pride." If art didn't make us better people, Rousseau argued, why not close the theaters? People who objected would simply have to be "forced to be free." (Here, free of the corrupting pleasures of art.) Rousseau was ready to burn it down. His ideas echo through social justice movements that ask us to be vigilant about privilege, wary of compromise, disinclined to separate the artist from his art.

This class is a debate between realists and Romantics, reformers and radicals, soft moderates who know we're all flawed and hardliners who smell the false equivalency there. Madison and Hamilton were realists when, in framing the separation of powers, they aimed for "ambition... to counteract ambition." Reinhold Niebuhr was a realist when he wrote that "Man's capacity for justice makes democracy possible, but man's inclination to injustice makes democracy necessary." Who was the realist—Martin with the ballot, or Malcolm with the bullet? Do feminists want a seat at the table or a different table altogether? Novels are about people, not theories, of course, so the debate framed here will often drop into the background as we read. Possible titles include O'Connor's *Wise Blood*, Ellison's *Invisible Man*, LeGuin's *The Dispossessed*, Vargas Llosa's *War of the End of the World*, Morrison's *Beloved*, and Roth's *American Pastoral*. We will screen *Black Panther*.

## The Fall: Temptation, Risk, and Ruin in Literary Lives

(Avrich)

*Ofentimes, to win us to our harm,  
The instruments of darkness tell us truths,  
Win us with honest trifles, to betray 's  
In deepest consequence.*

Banquo is right. He is trying to warn his buddy Macbeth not to trust the three freaky, bearded witches they not-so-coincidentally bumped into on the side of the road. Sure, the hags called in a bit of good fortune for Macbeth, but they know he's ambitious and they want to lure him over to the dark side. But does Macbeth listen to Banquo? No. And soon "brave Macbeth" is being called a "tyrant" and a "butcher" and he has no friends left except his suit of armor.

It's surprising how often this kind of thing happens. And to the nicest people! When we first meet Macbeth, he's everybody's best pal and even Lady Macbeth is a good egg before she asks the spirits to "unsex" her. Even Lucifer was the morning star before he turned into Satan and started plotting the doom of humanity. *Great Expectations'* Magwitch was a soft-hearted convict, and Jane Eyre's Rochester was the big-hearted hero before he mucked up his life and turned into a galloping, glowering iconoclast.

Why is it that good, moral individuals fall from grace so precipitously and hard? And when they make those bad, irreversible decisions, do they entirely change? Or do their core personalities remain the same? Maybe it's terms like "good" and "evil" that are problematic—merely relative to each other and socially imposed? We will ask these questions and many more about the characters in William Shakespeare's *Macbeth*, Charles Dickens' *Great Expectations* and Charlotte Brontë's *Jane Eyre*. We will also read Harold Pinter's play *Betrayal*, as well as another contemporary play, and possibly Daniel Defoe's *Moll Flanders*. Throughout the year, we will perform scenes from the books, steep ourselves in their language, and create literary and artistic events as we examine the human compulsion to sin.

## The Great American Novels

(Khoury)

The idea of "The Great American Novel" can be traced back to an 1868 article by that title, in which a writer named John DeForest does some hand-wringing about the state of the nation's letters and casts an envious eye at European traditions. "Have we as yet," he asks, "the literary culture to educate Thackerays and Balzacs?" The goal, it seems, is not just a great book by an American or set in America, but a book that has America as its real subject. Such a novel, he quotes another writer as saying, will "perform a national service," by holding up a mirror to the country: "The American people will say, 'That is my picture.'"

In the exact century and a half that followed, the hubris of this idea has often made it the subject of mockery. In 1923, William Carlos Williams became the first author to go ahead

and make *The Great American Novel* his book's actual title. Five other writers have since made the same joke.

Other countries, it has been pointed out, don't waste time arguing about "the" great Russian, or Indian, or Japanese novel. And indeed, the subject is almost always presented as "The"—not A—Great American Novel. It's tempting to say that there's something quintessentially American in that exclusive, chest-thumping definite article.

And yet, Deforest's quest, for that book that captures and expresses "the American soul," has persisted in earnest as well, with regular surveys of the top contenders for the heavyweight belt. *Moby Dick* often features prominently, as does *Gatsby*; in more recent decades, *Lolita* and *Beloved* have emerged as favorites. What makes these books great will be the subject of our reading and discussion. But we'll also have to figure out what makes them American, and what we mean by that adjective. Who is allowed to write the book, where must it take place, and who must be included before we deem it sufficiently "American"? Our answers have something to tell us not only about our books, but about our country, too.

We'll read many, but not all, of the following (several of which, it's worth noting, are also great in length):

Herman Melville	<i>Moby Dick</i>
Vladimir Nabokov	<i>Lolita</i>
Toni Morrison	<i>Beloved</i>
Marilynne Robinson	<i>Housekeeping</i>
William Faulkner	<i>The Sound and the Fury</i>
Chimamanda Ngozi Adichie	<i>Americanah</i>

## Oddballs and Square Pegs: The Literature of Outsiders

(*Fodaski*)

Some define themselves through adherence to a group; others understand themselves in and through opposition. Some realize their true selves through affiliation and allegiance, while others can never feel free within the bounds of a too strictly defined order or struggle. In this class, we will side with the misfit and the loner, in an effort to understand a world that, to some extent, gets us wrong.

Literature has plenty of nonconformists, and we will read some of them closely. We will also consider the role of the writer, both insider and outsider, skirting the boundaries—perhaps collapsing them—but always, to a certain degree, on the fringe. As James Baldwin said, "Perhaps the primary distinction of the artist is that he must actively cultivate that state which most men, necessarily, must avoid; the state of being alone." The role of the artist, that lone traveler, then, is, according to Baldwin, "to conquer the great wilderness of himself... to illuminate that darkness, blaze roads through that vast forest, so that we will not, in all our doing, lose sight of its purpose, which is, after all, to make the world a more human dwelling place." Through close, deep reading and frequent writing—both expository and creative,

with the possibility of a longer piece of creative nonfiction in the second semester—we will attempt to make our classroom at least a vibrant, human dwelling place.

Texts and authors may include, but are not limited to, James Baldwin (*Giovanni's Room*, Short Stories, and Essays), Ralph Ellison (*Invisible Man*), Marilynne Robinson (*Housekeeping*), Herman Melville (“*Bartleby the Scrivener*”), Nella Larsen (*Quicksand*), Virginia Woolf (*To the Lighthouse*), William Shakespeare (*King Lear*), Rawi Hage (*Carnival*) Jeanette Winterson (*Oranges Are Not the Only Fruit*), and Kazuo Ishiguro (*The Remains of the Day/Never Let Me Go*).

## Queer Literature

(Spencer)

In popular usage, the word “queer” typically describes gender and sexual identities, practices, and expressions that deviate from the norm—in short, it’s an umbrella term for anything “not straight.” Paradoxically, “queer” also suggests the instability of identity categories to begin with: unlike “gay” or “lesbian,” the word has no single clear referent in reality. And to some theorists and thinkers, “queerness” is about more than gender and sexuality: scholar J. Halberstam argues that being queer is about feeling “out of time,” while Harlem Renaissance writers Jean Toomer and Nella Larsen used it to describe the feeling of being mixed race. The potential of “queer” thus appears to be an expansion beyond the limits of traditional identity categories; it offers relief to individuals who have good reason to feel that identity categories themselves confine and delimit, or, in the case of some writers of color, *erase* other parts of lived experience.

How does one define “queer literature”? In a time of intensified tribalism, how can the reading of “queer literature” grant us a more capacious vision of kinship and coalition? Through the attentive study of fiction, memoir, essays, and poetry—texts that may not always deal explicitly with non-normative gender and sexuality, but will certainly resonate with “queerness”—we’ll try to answer these questions. In Proust (*Swann's Way*), Woolf (*The Waves*), and/or Greenwell (*What Belongs to You*), we’ll stray off the straight and narrow path of linear time and experience more porous forms of temporality. In Delany (*Times Square Red, Times Square Blue*), Linmark (*Rolling the R's*), and Miaojin (Notes of a Crocodile), we’ll see what kinds of unexpected forms of kinship queerness invites. And in Chee (*Edinburgh*) and Robinson (*Housekeeping*), we’ll examine queerness’s antisocial dimensions, its invitation to break from society as it stands.

## Reading and Writing

(Bosworth)

*Read everything—trash, classics, good and bad, and see how they do it. Just like a carpenter who works as an apprentice and studies the master. Read! You'll absorb it. Then write. If it is good, you'll find out.*

– William Faulkner, *The Western Review*

*It was really the reading impulse that got me into the writing thing.*

– Toni Morrison, *LiveRead/L.A.*

*I read a lot, I know that. I read a great deal....It's more poets I think of when I think of anyone. I think more of Yeats sometimes....I think it's a love of language. And considering Yeats, I really throw a lot of stuff out that I don't need. And I also am not afraid to make great leaps. I hate the word 'transition.' I just like to make a good jump.*

– Grace Paley, *Conversations with Grace Paley*

In this course we will read texts and respond to them through weekly creative exercises. The texts will reside at that juncture of demanding reading and writerly usefulness. We will be, in the best sense, thieves: of this direct address to the reader, of that self-referential or austere narrative. We will dip into literatures of and beyond the Western canon and eras before our own. We will examine matters of style, structure, inclusion, exclusion, voice, characterization, plot—and genre—and we will strive from the start to establish a professional, nurturing atmosphere in which students feel safe to workshop their own stories and poems. Students will submit a twenty-five page writing portfolio each semester. They will also write essays on major texts; in lieu of a term paper, students may develop a project that includes engaging with a given contemporary writer—or a literary magazine. As interest warrants, we will attend a certain number of readings in NYC, and a year-end reading of our own will cap our year together. A love of language, a yen for story, a willingness to venture (and to revise), these are requisites. While students will be encouraged to respond to writing prompts, the latter are intended partly to get us going. A weekly deadline can have as positive an effect.

Authors may include but not be limited to: Appelfeld, Adichie, Barth, Beard, Bishop, Cheever, Danticat, Darwish, Doctorow, Dove, Ishiguro, Hemingway, Joyce, Kafka, Kleist, Komunyakaa, Lahiri, Mann, Morrison, Paley, Pamuk, Pancake, Plath, Roy, Salih, Shakespeare, Smith, Wolfe, Woolf, Yeats.

## Science Fiction

(Aronson)

In addition to taking readers to other worlds, transformed versions of our world, different times, different dimensions—science fiction is perhaps the most philosophical literary genre. In its ability to play with the parameters of our existence, sci-fi sheds a special light on the great questions of selfhood, ethics, the nature of reality, the accessibility of truth. We will begin with the founders of science fiction, Jules Verne and H.G. Wells, after which our main guides in this adventure of story and ideas will be drawn from the following list: Isaac Asimov (*Foundation*), Arthur C. Clarke (*2001: A Space Odyssey*), Robert Heinlein (*Stranger in a Strange Land*), Ray Bradbury (*The Martian Chronicles*), Philip K. Dick (*Do Androids Dream of Electric Sheep?*), Frank Herbert (*Dune*), Ursula K. Le Guin (*The Left Hand of Darkness*), Stanislaw Lem (*Solaris*), Roger Zelazny (*Eye of Cat*), and Octavia Butler (*Parable of the Sower*). We will, of course, read a spectrum of short stories; as all sci-fi readers know, the short story is a favorite medium of practitioners of the genre. The list of short stories will include works by: Isaac Asimov, Jack Williamson, Frederik Pohl, Harry Harrison, Larry Niven, Harlan Ellison, Octavia Butler, J.G. Ballard, William Gibson, Racoona Sheldon, and George R.R. Martin.

## The 17th Century

(Donohue)

It was an age of upheaval, of cruelty. In London, crowds bought tickets to watch dogs have bloody fights with bears. The heads of traitors decorated London Bridge. Protestants suspected Catholics of treason—and they were occasionally right: Guy Fawkes nearly blew Parliament to bits. A king lost his head to the executioner's ax. The world, in the words of a popular song of the 1640s, was “turned upside down.”

But this was also the age of the first great flowering of English letters, the age of Shakespeare, Donne, and Milton, in which three literary genres—the stage play, the lyric poem, and the epic—were re-invented by writers with unprecedented powers of expression.

In this course, we immerse ourselves in the hundred years between Shakespeare's arrival in London and James II's flight from it. We begin with some of the highly charged sonnets that became so popular in the 1590s, following the publication of Sir Philip Sidney's *Astrophil and Stella*. We read Bill Bryson's short, lively biography of Shakespeare. Then we do four plays: Christopher Marlowe's *Doctor Faustus*, about a deal with a devil; Ben Jonson's *Volpone*, about a wealthy prankster; and two of Shakespeare's greatest works—a tragedy, *King Lear*, and a comedy, *Twelfth Night*. We look at the significance of the King James Bible and give close readings to the works of three major lyric poets: John Donne, George Herbert, and Andrew Marvell.

Midwinter, we read up on the English revolution and civil wars of the 1640s. Then—fair warning—we dedicate a substantial amount of time and energy to Milton's *Paradise Lost*. After term papers, we round out the year with selections from Samuel Pepys's diary of the

1660s, John Aubrey's *Brief Lives*, and William Wycherley's sex farce *The Country Wife*. We will occasionally look at some modern writing, but be advised: almost all of our texts are written in iambic pentameter.

## World War One

(Mellon/Meslow) (8x per week)

By whatever name you call it, "The Great War" or "The war to end all wars" or simply "World War One," the conflict that engulfed the world from 1914-1918 was a cataclysm unprecedented in its scope and destruction. Though 2018 marks the centennial of the end of the war, its impact on the world is still very evident today.

In this class we will start by seeking to understand the conditions and events leading to World War One. This will be followed by an examination of the defining moments, strategies, and conditions during the war itself. Finally, we will examine the human, political, and economic costs of the war that led not only to World War Two but also to the birth of the modern world.

This will be a reading intensive class; expect nightly assignments. We will read from a variety of historians (Max Hastings, John Keegan, Adriane Lentz-Smith, Paul Fussell, Norman Stone, Holger Herwig). We will also study the memoirs, novels, historical fiction, and poetry by the men and women who chronicled this period. Potential authors include Cicely Hamilton, Robert Graves, Erich Maria Remarque, Rabindranath Tagor, Rebecca West, Gabriel Chevallier, Henri Barbusse, Petar II Petrović-Njegoš, Vera Brittain, Ernst Junger, Willa Cather, Pat Barker, Shrabani Basu, and Max Brooks. You should also expect to write regularly in response to all of these writers in literary essays and research papers.

**Note:** This class will meet for four double periods per week and will provide both English and history credit.

---

# HEALTH

---

## **9th Grade Health**

*(The Department)*

This class explores how we make health-related decisions, discusses prevention as a cornerstone to wellness, and examines contemporary issues (for example, abstinence-only sexuality education, marijuana legislation, vaping, and bathroom bills). Students each design an individual project on technology and/or social media. Broadly, the year is broken down into four areas: sexuality, food, substances, and technology.

## **11th Grade Health**

*(The Department)* (Fall semester)

This class is offered in the first semester of 11th grade and looks at health as both a personal and social issue. Weaving in current events, media, and recent research, 11th grade health discusses issues including stress and anxiety, substance use, sexuality and consent. This class also explores controversies in public health and covers the wide range of viewpoints proffered on hot button issues while asking students to think critically about these issues themselves.

---

# HISTORY

---

## **World History: French Revolution to the Present (9th Grade)**

*(The Department)*

This course covers the 19th and 20th centuries. From revolution to globalization, from industrialization to decolonization, we explore these and other themes in a global context. We emphasize intellectual histories along with political and social changes. Throughout the year, students learn to think critically and work with diverse primary and secondary sources to create both analytical and research-based essays.

## **U.S. History (10th Grade)**

*(The Department)*

This course examines the origins and development of the United States from a variety of perspectives including race, class, and gender, providing the students opportunities for in-depth investigations of key moments and themes in U.S. history. In their final year before entering into the elective program, students continue to hone their skills as critical thinkers, readers and writers with a greater emphasis on historiography.

## **America's Civil War in History and Memory**

*(Kapp)*

“All wars,” said novelist Viet Thahn Nguyen, “are fought twice, the first time on the battlefield, the second time in memory.” You need look no further than the violent protests in Charlottesville, Virginia in August 2017—and the removal of statues of Civil War Confederate generals that followed—to know this is true of the American Civil War; that even today, its memory can prompt controversy and confrontation.

With those explosive events in mind, the goal of this course is twofold. In the first part of the course, we will examine the causes, the course, and the direct consequences of the Civil War. We will place the Civil War experience in a broad social, cultural, and political context, look at both Northern and Southern society, and think about the role of gender, racial divisions, and class in the conflict. In the second part, we will explore the contested memories and legacy of this tragic, transforming event over the past 150 years. Americans have long found ways to memorialize the Civil War: through monuments, speeches and, of course, blockbuster Hollywood movies. Why do different people remember the war in different ways? Why do certain memories hold sway or cause controversy? Just what is at stake?

Our approach will be both scholarly and experiential and will culminate in a substantial independent research project. We will read primary documents, personal memoirs, and the

latest scholarship—from historians including Drew Faust and David Blight—to reach our own conclusions and theories about this era. We will investigate how the crisis is remembered and represented in fiction, film, and art. And as part of our effort to understand (in a direct, personal way) the war, its public memory, and unique hold on the American imagination, we will travel to key battlefields and historical sites during the second semester—Harper’s Ferry, Antietam, Gettysburg, and the National Museum of African American History and Culture in Washington, D.C.

## The Cold War and Vietnam

*(Kang)*

*Vietnam is still with us. It has created doubts about American judgement, about American credibility, about American power -- not only at home, but throughout the world. It has poisoned our domestic debate. So we paid an exorbitant price for the decisions that were made in good faith and for good purpose.*

– Henry Kissinger

As Kissinger notes, the nation of Vietnam has certainly played an outsized role in shaping modern American history. In this course, we will embark on an in-depth study of Vietnam within the wider framework of the Cold War. After a close examination of the ideologies contributing to the Cold War, this course will pursue an understanding of a variety of other factors and events that influenced the new world order in the twentieth century. Starting with a brief study of the Red Scare in America and the Bolshevik Revolution in Russia, we will look at the tensions that exploded after the end of WWII. In developing an understanding of the Cold War, beyond the polarization between the United States and the Soviet Union, we will examine the global impact of the war via the lens of Vietnam. After a look at Vietnam’s own indigenous history, we will examine the foreign powers that moved into the region and pay close attention to the independence movements that were buoyed after the Pacific War.

During the spring term, we will focus on a study of Vietnam from the American perspective, and we will study the significance that the Cold War had on American foreign policy. In addition to the political, military and economic decisions that played into our involvement in the war, we will take a close look at the cultural and social impact that these decisions regarding Vietnam had on the American public. This examination will include a study of the counterculture and protest movements of the 1960s and 1970s, and the impact that the war had on art and music, as well as the various films that were made regarding the war. Our course, will culminate in an examination of monuments. After a study of Maya Lin’s controversial Vietnam Veterans Memorial monument on the Mall in Washington D.C., we will look at the wider role of monuments in history.

There is a strong writing and research component to this course. Expect to write and complete regular essays and projects. Also be prepared to analyze a number of primary source documents. Secondary source readings include excerpts from the following: Keith Taylor’s *A History of the Vietnamese*, George Herring’s *America’s Longest War* and Stanley Karnow’s

Vietnam, David Halberstam's *The Best and the Brightest*, Michael Herr's *Dispatches*. We will also view a wide variety of feature and documentary films.

## **Discrimination and the United States Legal System**

*(Heller)*

(Please see Interdisciplinary studies)

## **Greek History and Thought**

*(Deimling)*

*Man is the measure of all things.*

– Protagoras

From Homer to the Hellenistic era, we will examine the history and culture of ancient Greece. Special emphasis will be placed on political, philosophical, and social thought, and we will read Herodotus, Thucydides, Plato, and Aristotle with an eye to their relativistic and radical questioning of their own culture's values and assumptions. We will also deal extensively with Greek art and its meaning in western and world history, as well as the appropriation of Greek culture (or imagined Greek culture) by Romans, medieval Muslims, and Europeans. Students will be assigned very frequent informal writing based on the primary sources; there will also be in-class writing and at least one research paper.

## **History of American Childhood**

*(Goldberg)*

Who is a child, and what is the child's role in society? How much of the child's personality is attributable to nature, and how much to nurture? How much freedom does a child need, and how much control? How much work and how much play? What kind of adult citizens do we want our children to be? How can we raise them to create the kind of society we want to see? What should we teach them? What should we tell them?!

This history course examines the different ways that Americans of all stripes—ministers and educators, children's book authors and popular advice writers, political activists and ordinary parents—have answered these and similar questions since the colonial era. Yet while these questions and their answers offer a window into different adults' goals, expectations, and concerns for children at any given moment in time, they don't get at what the kids thought. And we will also be studying history from the children's point of view, considering how their experiences, expectations, and aspirations have changed over time—shaped by factors such as class and culture, gender and sexuality, race and ethnicity, and age and ability. The history of childhood is diverse and raucous and poignant, but it is troubling too—hardly a straight march toward progress. Indeed, the most significant social movement of our time, Black Lives Matter, erupted over the persistence (and violence) of unequal childhoods: police and vigilante killings of unarmed Black youth who were not afforded the same sympathy and respect that police officers extend to White youth. Clearly, our ideas about childhood, about

who is and isn't deserving of its special rights and freedoms, continue to shape U.S. society in powerful ways.

Topics include the ever-growing role of psychological experts in raising happy, healthy, well-adjusted, free-range, or high-achieving children (you name the desired trait, there's a book on it!); the impact of cultural and technological developments such as consumerism, TV, and the Internet on how kids have spent their time; the politics of childhood, from anti-child labor campaigns to the Civil Rights Movement's focus on schools to the current debate over DACA; the creation of a separate commercial children's culture; and the perennial (and always premature!) pronouncements declaring the permanent "end of childhood" or "disappearance of childhood".

This is a serious reading and writing course, with emphasis on discussion. Sources will include academic history books and articles; the original writings of educational philosophers, child-rearing experts, and other theorists; documentary sources like memoirs and photography; and a variety of children's cultural objects—dolls, clothing, picture books—that we will use to interpret childhoods past and present (including your own). Students will write weekly response pieces and essays, give occasional presentations, and undertake a major research project in the spring.

## **History of China**

*(Swacker)*

This course focuses on an overview of China's long, complicated past by concentrating on key issues and large changes. In the first semester Chinese philosophy and religion are carefully examined, and an abbreviated dynastic survey will evaluate social and cultural changes in the expanding country. Selections from the writings of Lao Tzu, Chuang Tzu, and Han Fei Tzu are perused, and the *Basic Writings of Confucius* (James Legge, translator), *The Art of War* by Sun Tzu, and *Buddha* by Karen Armstrong, are read. In the winter the class will read *Rickshaw* by Lao She. The second semester will concentrate on events in the 19th and 20th centuries. A term paper, several essays, and field trips to Taoist and Buddhist temples in Manhattan, Brooklyn, and Queens will be important components of the course.

## **Making Movements**

*(Mackall)*

(Please see Interdisciplinary studies)

## **The Medieval Mind**

*(Aronson/Stevens)*

(Please see Interdisciplinary studies)

## Modern Middle Eastern History

(Ertas)

This course will examine the history of the Middle East from the end of the 19th century to the present day, focusing particularly on the political, economic, social, and cultural developments that took place after the fall of the Ottoman Empire. We will interrogate themes such as imperialism, nationalism, fundamentalism, sectarianism, decolonization, and statelessness in an attempt to better understand some of the causes of contemporary struggles in the region. Although this course will mainly focus on Turkey, Iran, and countries of the Levant, we will also pay attention to developments in North Africa and especially in Egypt. We will spend significant time on the Arab-Israeli Conflict, the Iranian Revolution, the Kurdish struggle for independence, the Arab Spring, and the roots of the war in Syria. We will also interrogate how religion, race, gender, and sexuality issues shape Middle Eastern society and politics today. Since current events are an important part of this course, students will be expected to keep up to date on news from the region. There will be two short-response essays, two medium-length essays, and two research papers throughout the year.

## Postwar America: From Rosie the Riveter through the Age of Reagan

(Schragger)

This course examines the political, economic, social, cultural, and intellectual history of the United States during the years since the end of World War II. Topics covered include political milestones such as Watergate, the Clinton administration, and the election of 2000; social developments such as suburbanization, the Civil Rights Movement, the New Left, feminism/women's rights, and the rise of the New Right/neo-conservatism; economic issues such as the War on Poverty and Reagonomics; cultural and intellectual trends such as the Counterculture, the "me" generation, and other relevant topics through the present day. This course will cover foreign policy issues such as the atomic bomb and the Cold War, the Cuban Missile Crisis, Vietnam, and the Persian Gulf War, but it will have more of a focus on domestic events and trends.

The course uses both primary and secondary sources, such as *Promises to Keep: The United States Since 1945* (Boyer), *Major Problems in American History Since 1945* (Zaretsky & Lawrence), *The Age of Reagan* (Wilentz) and *Nickel and Dimed: On (Not) Getting By in America* (Ehrenreich). In addition, the course includes films and documentaries that relate to this time period, including *The Atomic Café* and *Eyes on the Prize*. There is also a substantial independent research component, and students will complete several research projects during the year.

## The Rise and Fall of the Soviet Union

(Brazee)

While the Cold War may have ended nearly thirty years ago, recent political events have many people asking questions about Russia's past, particularly the Soviet period. Sealed off behind the Iron Curtain for close to 50 years, the history of the Soviet Union remains one of the most curious and complex.

This class will be an in-depth exploration of the Soviet Union, ranging from the pre-revolutionary period to its disintegration. Through a variety of readings, films, class discussions and writing projects, this course will address the numerous social and cultural policies implemented by the state, the relationship between the people and the Soviet government, the role of the Soviet woman and family, Stalin's purges of the 1930s, Khrushchev's de-Stalinization efforts, the Cold War from the Soviet perspective, Gorbachev's *glasnost* and *perestroika* reforms, and the political and social implications of the Chernobyl disaster. We will conclude with the events leading up to the union's collapse and its immediate aftermath.

Readings will likely include "Did the Russian Revolution Have to Happen?" by Richard Pipes, *Rulers and Victims: The Russians in the Soviet Union* by Geoffrey Hosking, "Thermidor in the Family" by Leon Trotsky, *Everyday Stalinism* by Sheila Fitzpatrick, *The Dictatorship of Sex: Lifestyle Advice for the Soviet Masses* by Frances Lee Bernstein, *The Cosmonaut Who Couldn't Stop Smiling: The Life and Legend of Yuri Gagarin* by Andrew Jenks, *Voices From Chernobyl* by Svetlana Alexievich, and numerous other scholarly texts. Films will include *The Russian Revolution in Color*, *The Battle of Chernobyl* and *My Perestroika*, among others.

This course requires a solid amount of reading and writing, along with lively and informed class discussion. Monthly writing assignments will be given in addition to one research paper and a few film responses.

## Socioeconomics and Race in Medical Research and Medicine

(Bertram/Thomas)

(Please see Interdisciplinary studies)

## World War One

(Mellon/Meslow) (8x per week)

By whatever name you call it, "The Great War" or "The war to end all wars," or simply "World War One," the conflict that engulfed the world from 1914-1918 was a cataclysm that was unprecedented in its scope and destruction. Though 2018 marks the centennial of the end of the war, its impact on the world is still very evident today.

In this class we will start by seeking to understand the conditions and events leading to World War One. This will be followed by an examination of the defining moments, strategies, and conditions during the war itself. Finally, we will examine the human, political, and economic costs of the war that led not only to World War Two but also to the birth of the modern world.

This will be a reading intensive class; expect nightly assignments. We will read from a variety of historians (Max Hastings, John Keegan, Adriane Lentz-Smith, Paul Fussell, Norman Stone, Holger Herwig). We will also study the memoirs, novels, historical fiction, and poetry by the men and women who chronicled this period. Potential authors include Cicely Hamilton, Robert Graves, Erich Maria Remarque, Rabindranath Tagor, Rebecca West, Gabriel Chevallier, Henri Barbusse, Petar II Petrović-Njegoš, Vera Brittain, Ernst Junger, Willa Cather, Pat Barker, Shrabani Basu, and Max Brooks. You should also expect to write regularly in response to all of these writers in literary essays and research papers.

**Note:** This class will meet for four double periods per week and will provide both English and history credit.

### **Independent Research in History**

*(The Department)* (1x per week)

The Independent Research in History program enables students to explore a historical topic in depth over the course of the school year. Working with a mentor from the department, students will identify the significant historical questions raised by their chosen topic, and pursue them by various research techniques, and through the use of a variety of sources and documents. Students will meet one period a week in class, and once a week with their individual mentors throughout the year.

Each research project may be the work of up to two students. The expectation is that students will develop their research into a significant formal historical essay, to be presented at the end of the school year in a symposium. Papers may be accompanied by a supplementary presentation of research in another medium.

To be considered for Independent Study in History, students need to submit a substantial research proposal to be considered for approval by the department. This proposal should be submitted to the History department by June 1.

Preference will be given to seniors. The maximum enrollment for this program is 16 students.

---

# INTERDISCIPLINARY STUDIES

---

All interdisciplinary courses except for Making Movements may be taken by juniors and seniors only.

## **Discrimination and the United States Legal System**

*(Heller)*

Our nation's founding was accompanied by broad pronouncements about equality and freedom, yet one may ask, particularly in light of recent political developments, *How do these lofty statements compare with reality?* This course will consider a range of different types of discrimination—based on race, sex, sexual orientation, wealth, and other characteristics of human beings and their lives—and look for patterns in the way in which American government, culture, and the legal system have grappled with discrimination. We will investigate the historical origins of discrimination in America, looking in particular at the role of the Supreme Court, the one part of the national government equipped to enforce equality before the law.

In addition to reading historical texts that will provide context and allow us to investigate the cultural and historical ramifications of Supreme Court decisions, this course will examine the full opinions of the Supreme Court in landmark cases from the mid-nineteenth century to the twenty-first century, some of which have put the firm imprimatur of the law on inequality, while others have proclaimed the end of a particular form of discrimination. We will also examine the dissenting views of some Justices and the path forward that they illuminated. At times, we will examine the original written and oral arguments of advocates on both sides of these cases to understand the ideas that the Supreme Court accepted and those it rejected.

Students will write essays throughout the year that analyze historical trends, Supreme Court decisions, and the relationship between these two focal points. There will be a research term paper. We will read Supreme Court decisions such as *Dred Scott v. Sanford* (1857), *Bradwell v. Illinois* (1873), *Plessy v. Ferguson* (1896), *Muller v. Oregon* (1908), *Brown v. Board of Education* (1954), *San Antonio Independent School District v. Rodriguez* (1973), *Romer v. Evans* (1996), and *Obergefell v. Hodges* (2015).

**Note:** This course is for juniors and seniors and can be taken for history or interdisciplinary studies credit.

## Making Movements

*(Mackall)*

From the work of the National Association of Colored Women's Clubs (NACW) and the Niagara Movement during the Progressive Era to the mid-century independence movements in Africa and the Caribbean and the Civil Rights movement in the US and the contemporary #BlackLivesMatter movement, we consider the history, literature and culture of people of African descent in the United States and the Diaspora in the 20th and 21st centuries through the lens of movements—for human rights, for civil rights, for national rights. Special attention will be paid to how issues of color, class, gender, nationality and sexuality have intersected with and reflected on organized collective actions for self-determination.

We will center the voices and scholarship of people of African descent in our course materials, which will include primary historical documents, personal narrative/memoir, poetry, narrative fiction, scholarly writings, and multimedia materials. In keeping with the traditions of Sankofa, we will consider the contemporary implications of this history.

Students will be expected to read independently and respond to the course materials in class discussions, regular short response essays, and a substantial culminating project, which might include written research, oral presentation, performance, or other creative expression.

Possible readings include: W.E.B. DuBois, Ida B. Wells, John Hope Franklin, Paula Giddings, Langston Hughes, Zora Neale Hurston, Ann Petry, Ella Baker, Malcolm X, Martin Luther King, Jr., Alice Walker, Toni Morrison, Audre Lorde, James Baldwin, Angela Davis, Mariama Ba, Christina Sharpe, Ibram X. Kendi, Ta-Nehisi Coates, Chimamanda Ngozi Adichie.

**Note:** This course may be taken for interdisciplinary credit by freshmen and sophomores, and it may be taken for either history or interdisciplinary studies credit by juniors and seniors.

## The Medieval Mind

*(Aronson/Stevens)*

When people think about the Middle Ages—the period in European history from roughly 350-1500 CE—they tend to think of a monolithic, static world and worldview. This course will examine the various complex strands of thought that in fact run through this period. Through an examination of primary sources and a study of medieval politics and society, we will consider a variety of questions that concerned medieval people. These will include the nature of God, the problem of evil in the world, the structure of society, and the ethical responsibilities of the individual, to name just a few. In order to fully understand how medieval people addressed these issues, we will also consider the philosophical line of thought that has its roots in antiquity with Plato, Aristotle, and the Neo-Platonists, and that has particularly important branches in medieval Christian thinkers ranging from Saint Augustine and Boethius in the early middle ages to Saint Bernard of Clairvaux, Peter Abelard, Saint Thomas

Aquinas, Ibn Sina, and Christine de Pisan in the high medieval period. Our readings will be drawn from medieval literary authors, secondary historical texts, and primary philosophical works, and will include authors from western Europe, the Mediterranean and the Islamic world. We will also consider the impact of medieval thinking on some modern works of literature, particularly T. S. Eliot's poems *The Wasteland* and *Burnt Norton*. Students will write a number of essays over the course of the year analyzing the relationships between specific philosophical and historical issues, and there will be a research term paper.

**Note:** This course is for juniors and seniors and can be taken for history or interdisciplinary studies credit.

## **Socioeconomics and Race in Medical Research and Medicine**

*(Bertram/Thomas)*

Scientific objectification of individuals has often been based on "otherness." This creation of the other has led to the dehumanization of marginalized communities in a spectrum of realms. This course focuses on the realms of medicine, medical research, and public health, and the efforts carried out by those in positions of power. Starting with historical and scientific ideologies, we will take a look at the major scientific and pseudoscientific ideologies of the 19th Century, in particular Darwin's original writings on natural selection, Samuel G. Morton's study of phrenology and Linnaeus's classification system. From these, students will be able to piece together the constructs of race and poverty. We will then look at movers and shakers of the time, noting how these contemporaries were able to make use of Darwin, Morton, and Linnaeus and create their own interpretations such as social Darwinism. By assessing scientific journal articles on research conducted by doctors throughout the 19th and 20th centuries, we will work through both the scientific experiments and the language used to describe the ideas, experimental techniques and -- most importantly--the impacts on the subjects, with the hopes of answering how science contains inherent racial or socioeconomic biases. We will focus on Europe and North America--but we will eventually show how European ideas influence practices and policies internationally. Finally, in reading primary sources from individuals within marginalized groups, we will see the social impact of scientific and medical biases in terms of doctor-patient dynamics, the controversy around donating an individual's time and body to research, and the creation of tests and the issuing of treatment. Students will be responsible for scientific and historical vocabulary and concepts, and they will write response essays on primary sources and scientific research articles. There will be a final research term paper and presentation on a topic of the student's own choosing.

**Note:** This course is for juniors and seniors and can be taken for history, interdisciplinary studies, or science credit.

---

# CLASSICS & ASIAN LANGUAGES

---

## ASIAN LANGUAGES

---

### Chinese

Chinese classes at all levels are aimed at developing communication skills in listening, speaking, reading, and writing. Our goal is to help students use Chinese to exchange information and to communicate their ideas. We use *Chinese Made Easy* to introduce Pinyin, the four tones, characters, and basic sentence structures. Afterwards, we start the series of Integrated Chinese with more intensive study of grammar, vocabulary, and different topics while reading more authentic materials. In addition to developing language skills, the courses endeavor to increase students' awareness and understanding of Chinese-speaking cultures. The integration of language learning and culture is strongly emphasized. Both traditional and simplified characters are introduced according to the interest of the students.

#### Chinese 1

*(The Department)*

This course is an introduction to the Chinese language, with an emphasis on pronunciation—Pin Yin and four tones. At the same time, students study radicals, stroke orders, characters and basic sentence structures. Chinese songs, poems, and rhymes are introduced. Students study 350 characters.

#### Chinese 2

*(The Department)*

The review of Pin Yin and tones continues throughout the year with an emphasis on the use of Chinese to discuss related topics in both speaking and writing. Students study more grammar, sentence structures and vocabulary. They read short paragraphs and selected authentic materials such as advertisements, weather forecasts, etc. Students are encouraged to initiate and carry on conversations to exchange information and express opinions about related topics. Students study an additional 360 words and expressions.

#### Chinese 3

*(The Department)*

This course is designed to help students solidify their grasp of grammar and vocabulary. The emphasis is on increased ease and accuracy in speaking Chinese and reading comprehension. Students are expected to give oral presentations about topics such as schools and places in China. They study topics like Chinese cooking, communities, Chinese festivals, and school calendars. Students learn an additional 600 words and expressions.

## **Chinese 4**

*(The Department)*

In addition to introducing more vocabulary and grammatical points, this class concentrates on more complex sentences and paragraphs. Intensive study increases the students' command of linguistic structures and functions and gives them a firmer grounding in speaking and writing more idiomatic Chinese. Students learn to discuss and write more fluently and with greater length on the geography of China, the relationships between parents and their children, the differences and similarities between Chinese medicine and Western medicine, and the relationship between pollution and environmental protection. Another 600 words and phrases are introduced.

## **Chinese 5**

*(The Department)*

Students finish the remaining five lessons in *Chinese for Youth*, which introduce Chinese paintings and calligraphy, famous writers and their works, the influence of modern inventions to our lives, summer vacation plans and part-time jobs. Students learn to express their personal views and exchange opinions about these social issues in more complex language. They do more exercises like responding to e-mails and writing personal letters on related like reading complicated signs, public announcements, and newspaper clippings, as well as giving presentations and doing interviews in more fluent and accurate Chinese. Students learn an additional 500 words and expressions.

## **Chinese 6**

*(The Department)*

Students continue to study more probing texts that reflect the many facets of contemporary Chinese society, family values and Chinese literature. China's strengths and problems are revealed through analysis, explanation and debate. Some lessons deal with crucial social and intellectual concerns in current China. Students continue to hone their overall abilities in speaking, reading and writing Chinese. Another 500 characters and phrases will be introduced.

## **Chinese Conversation**

*(The Department)* (2x per week)

Through the use of various practical scenarios, it offers an opportunity to gain confidence and facility in speaking more idiomatic and spontaneous Chinese. By enlarging vocabulary and improving oral/aural skills, students gain fluency in discussions about daily life, education, politics, food, travel, and so on.

# Japanese

## Japanese 1

*(Otsue)*

The first year of Japanese focuses on building students' foundations in the language. While students take in the two phonetic systems, hiragana and katakana, and some kanji characters, they learn basic grammar including distinctive aspects of the language such as use of markers. Numerous patterns that are needed to construct sentences to function in various social situations are also introduced. Additionally, students continuously explore the Japanese culture and traditions from ancient periods to the current "pop" trends through extensive examinations of history, philosophy, the arts, etc. Each year, students have face-to-face exposure to various Japanese artists.

## Japanese 2

*(Otsue)*

The second year continues from the first with grammar, but adds an emphasis on composition—students begin writing weekend journals. They continue to build their foundation in the language including distinctive aspects such as measurement words for various objects, equipment, animals, machines, etc. Students continue to learn to function in various social situations including ones in which they are required to use keigo or honorifics.

## Japanese 3

*(Otsue)*

The third year continues the emphasis on developing all four skills of speaking, listening, writing, and reading, and build on what they have learned in the previous years. In the second half of the semester, a number of complex sentence patterns and formulaic expressions are introduced. Students are provided with extensive training to enhance their communication skills, putting emphasis on spontaneity and accuracy. Creative writing exercises are embedded in grammar exercises. The listening comprehension materials include real life dialogues. New kanji and kanji vocabulary are introduced on a daily basis.

## Japanese 4

*(Otsue)*

The fourth year builds on the foundation from the third, but explores reading more extensively. The reading materials include manga style texts, stories, cultural episodes, etc. and include a number of new and old kanji. Students continue to build up their vocabulary.

## **Japanese 5**

*(Otsue)*

The fifth year continues with an emphasis on reading, but will now feature texts with more complex syntax and advanced kanji vocabulary in both the formal and the informal styles. Readings cover a wide range of topics including Japanese inventions, social hierarchy, traditional arts and Zen, etc. Students will further their understanding of Japanese society and culture through discussions on history and current social issues. In addition, students will learn to express their opinions and thoughts in the formal style of writing with stronger command of the language. In order to facilitate students' fluency, more sentence patterns, formulaic expressions, idioms, and use of onomatopoeia are introduced

## **Japanese Conversation/Composition**

*(Otsue)* (2x per week)

Students further develop their abilities to express themselves effectively. Students also explore the culture via various mediums. Students are given ample time to discuss topics like cross-cultural issues, cultural and current events, etc. On a regular basis, students are asked to conduct research and give oral presentations on a topic of their choice. As they develop their presentation skills, students learn to construct cohesive paragraphs when working on both spoken and written tasks.

## CLASSICAL LANGUAGES ---

## **Greek**

### **Greek 1**

*(The Department)*

This course introduces students to the rudiments of Ancient Greek. Memorization of forms, vocabulary and syntax are stressed in order to facilitate the reading of unadapted Greek texts as quickly as possible. By the year's end, students will have a strong command of basic syntax and will be prepared to learn complex syntax in Intermediate Greek.

### **Intensive Ancient Greek**

*(The Department)*

This is a fast-paced, intense course that introduces the essential morphology and syntax of Ancient Greek. The systematic acquisition of forms and vocabulary complement the learning of simple and complex syntax. As the name of the course indicates, this is an intense experience, but one that enables students to read Ancient Greek texts in the original by the end of the year.

## Greek 2

*(The Department)*

This course features review of material from Greek 1 and continues to round out the students' knowledge of Greek forms and syntax. In the second semester, students will refine their skills through translation of selections from a variety of authors, including Herodotus, Plato, and Aristophanes, and will explore the different styles and expressions employed by each. The course is intended to provide students with the skills and confidence to move on to more intensive exploration of specific Greek texts. **Prerequisite(s):** Greek 1

## Greek 3

*(The Department)*

A pure translation course, this class focuses on writings that concern the conflict between rational and irrational on individual and societal levels. We read from Plato and Euripides, the possibly delving into the world of comedy. Students gain an advanced understanding of syntax and familiarize themselves with prose and tragic constructions. **Prerequisite(s):** Greek 2 or Intensive Ancient Greek

## Greek 4: Homer, The Odyssey

*(Milov-Cordoba)*

In this class we will read one of the most influential poems in world history in the original Greek—*The Odyssey*. *The Odyssey*, at its heart, is a poem about coming home, not only from war, but also from wandering. It is a story that contains within it many different, overlapping stories. As we seek to develop command of Homeric Greek, we will explore a selection of these stories. Some of these will be Odysseus's stories—like the stories of the Lotus Eaters, the Sirens, and the island of the witch Circe. Others will belong to other heroic arcs like the coming of age of Telemachus, the loyalty of Penelope, the aftermath of the *Iliad*, the return of Helen, and Achilles in the Underworld. Still other stories will take us beyond the world of heroes to explore broader questions about the nature of justice (in peace and war), the roles of different women in the poem, the question of violence and exclusion, the place of storytelling, and, of course, what it means to come home. In the spirit of the text itself, we will take each episode as it comes, and let the lessons from one lead us on to the next. And the next. And the next. **Prerequisite(s):** Greek 3

## Greek 5: Lysias and Lysistrata

*(Kingsley)*

We'll study two touchstones of the so-called "classical" period of Athens: the law speeches of Lysias and the sex-strike comedy of Aristophanes, both of which are built from the heady agonistic energies that characterize the period, where the hostile pursuit of your neighbors is the very connective tissue of the body politic. Three things come into focus: savvy strategy by the characters (and "character" isn't the wrong word for Lysias, writing in the persona of his client); glimpses on the social structures of this glorified but fraught age; and lots of linguistic

deftness, which is just fun to read. Our target texts center on the unenfranchised influencing the citizenry proper—women, the poor, the metic. Who deserves to be on the dole? On the voting roll? Can the jerks in charge be somehow reined in? Replaced? Revenged?

Lysias achieved massive professional success as an orator, though as the child of an immigrant, never with citizen status and its protections. His rhetoric gained immortality for its taut lucidity, its vividness and restraint. Reading him invites us to see at a pragmatic level what worked on a jury, to practice pure Attic up close, and to ask why later readers took him so feverishly as a model. It also offers perspective on the city's vacillation between democracy and tyranny, which to Lysias was more than an abstraction, in fact costing him dearly.

Aristophanes trafficked in colorful exaggerations of fantastic plots and tenacious characters, overthrowing pompous order and keeping the prominent ever in the crosshairs. What orders are left unthrown will be an interest of ours, as the celebration of the women rebels, following their leader the “Army-Weakener” (Lysi-strata), goes down maybe too easily. But the premise is still deeply pleasurable: Woman the barricades! The housewives seize the treasury, the thugs get beatdowns by pacifists, and the authoritarians (entitled in the bedroom and the Council) get comeuppance. The daringness of the conspirator heroines is matched by the creativity of the dramatic structure, and the play's topicality to the outside world where recent disaster in the Peloponnesian war clouds every line—is written into the vivid debates that beset the acropolis.

These antagonisms are delights to read on their own, but pairing them will cross-pollinate our understandings of each. We will care about the sentences as well as the more global literary composition, and we will do our best to get at their historical contexts. **Prerequisite(s):** Greek 4

## Greek 6: The Oresteia

(Mason)

Staged at the City Dionysia in Athens in 458 BC, Aeschylus' Oresteia—*The Agamemnon*, *Choephoroe*, and *Eumenides*—won first prize for its account of the brutal events emanating from the house of Atreus after Agamemnon's return home from Troy. The only complete trilogy to survive antiquity, it is a *tour de force* of poetic diction that intimately and, at times painfully, explores the power of anger and vengeance in human affairs, the roles of the *polis* and *oikos* in mid-5th century Athens, the relationship between humans and gods, and the elusive sense of justice that motivates human actions. It is in no sense an easy play. In language that is rich and challenging, it offers no simple answers to fundamental human questions. In this class we will read in Greek the entire *Agamemnon* and excerpts from the rest of the trilogy. In addition to gaining familiarity and even some fluency with Aeschylus' language, we will attempt to engage the play as a cultural artifact of 5th century Greece while considering its reception in world literature and confronting its difficult questions from our own perspectives. **Prerequisite(s):** Greek 5

# Latin

## Latin 1

*(The Department)*

This course introduces the student to the basics of Latin forms and syntax. Memorization of forms and syntax is stressed in order to facilitate the reading of Latin literature as quickly as possible. Readings are selected from Cicero, Caesar, Martial and others. The course also covers background material on mythology, history, and Roman life.

## Latin Poetry, Prose, Drama & The Novel

*(The Department)*

Designed as a bridge between the introductory Latin course and specialized electives, this course emphasizes facility in reading and translating Latin authors, studying the literary forms we read, and using textual evidence to gain insight into life in the ancient world. Authors include Cicero, Ovid, Plautus, Sallust, Livy, Catullus, Horace, Caesar, Vergil, and others. The course also intensively reviews Latin grammar and syntax.

## The Aeneid: Vergil and The Latin Epic

*(The Department)*

*The Aeneid* is the Roman epic that charts the mytho-historical founding of the Roman people and state. Books I, II, IV, VI, VII, VIII, X and XII of the *Aeneid* are read in Latin, in part or in whole, and the rest of the text in English. Emphasis is on translation and textual analysis, with daily assignments for translation as well as passages for sight-reading in class. Several short critical papers are required. **Prerequisite(s):** Latin Poetry, Prose, Drama & The Novel

## Latin: Rage Against the Machine: Expression and Exploration of Anger in Imperial Rome

*(Henneman)*

Is it possible for a society that tied its earliest history to fratricide to condemn anger?

In Vergil's *Aeneid*, Aeneas is told in the underworld that the Roman's role is to impose a rule of peace, spare the weak, and strike down the proud. Why then, does Aeneas let rage dictate his actions and kill his supplicating enemy in the final lines of the poem? Anger was a constant element of the empire; it governed relationships in battle, discourse, and daily life. In this class, we will read texts that capture the struggle for control over anger and its role in relationships—positive and negative—during and after the *Pax Romana*. We will touch upon Tacitus's history, Lucan's epic, and Martial's insults. We will explore Seneca's philosophical discourse and tragedy. As we cross genres and travel through time, we will look for recurring themes that lead us to a more nuanced understanding of the general, monolithic terms so frequently found in translation. **Prerequisite(s):** Vergil

## Latin: Skepticism (or How to Live a Life Without Beliefs)

(Connaghan)

The oracle of Delphi said no one was wiser than Socrates, and he doubted neither the god nor his own conviction that he was not wise. This seeming paradox led Socrates to realize that he was wisest in knowing only that he knew nothing (else). Some three hundred years later in 155 BCE Carneades, head of the Academy (founded by Socrates' student, Plato), was on an embassy to Rome. On the first day he wowed his Roman audience with a brilliant argument in defense of justice, while on the second he argued, again brilliantly, against justice. Rome was scandalized and expelled him as a danger to the state. What grew from Socrates' experience and so terrified the Romans was skepticism. Skepticism has been defined as the doubt that knowledge is possible.

In class we will read Cicero's defense of skepticism, the *Academica*, and Augustine's refutation of it, the *contra Academicos*. We will reflect on the philosophical dialogue as literary genre and on these stellar writers' treatments of this genre. Yet our primary focus will be ancient skepticism. We will explore the power of its arguments in their contemporary setting and whether or not (or to what degree) Augustine's refutation succeeds.

We will also look at the reception in the Renaissance and after of the *Academica* and of the great Pyrrhonian skeptic Sextus Empiricus. Sextus wrote in Greek but we will read him in Latin from a Renaissance translation. We will also read in Latin (the lingua franca of the day) the major skeptic thinkers of the Early Modern period (Montaigne, Gassendi, et al.) and their opponents (Bacon, Descartes, et al.). We will consider the impact that the rediscovery of classical skepticism had on a period fraught with the 'discovery' of the New World, with the Reformation, and with the birth of the New Science.

Given time we will look to skepticism in the modern period with its Common Sense, Brains in Vats, and Contextualisms. We will see its ability to dissect and destabilize the concerns and preoccupations of the Classical, Renaissance, Early Modern, and Modern periods. We will see skepticism's power: unsettling, illuminating, and ever so paradoxical. **Prerequisite(s):** Vergil

## Latin *Epyllia*: Epic Poems in Your Pocket

(Siebengartner)

In the prologue to his perplexing, fragmentary, but hugely influential *Aetia*, Callimachus (310-240 BC), standard-bearer of Hellenistic Greek poetry of the Alexandrian period, proposes a bold new literary aesthetic. Defending himself against the criticism that he has not written "one continuous poem of many thousands of lines on kings or heroes," i.e. *not* a big, grand epic, he insists that "poems are sweeter for being short," explaining that Apollo appeared to him when he set out to write poetry and advised him to "keep the Muse slender." In addition to Callimachus' own *Hecale*, a roughly thousand-line hexameter narrative of the hero Theseus' visit with an elderly widow (Hecale) in Attica, several other "mini-epics" appeared during the Hellenistic period, broadly united by a few features: the use of the hexameter, relatively small size (usually less than 1,000 verses), and themes often considered

bracingly un-Homeric. While no surviving ancient text clearly defines these poems as belonging to a distinct genre, 19th-century classicists popularized the term *epyllion*, the diminutive form of *epos*, “epic,” to refer to them.

This class will be an investigation of the Roman reception of this style of “epic in minor key,” as one scholar has called it. We will read: Catullus 63, which movingly recounts the self-castrated Attis’ initiation as a priest(ess) of the goddess Magna Mater; Catullus 64, on the wedding of Achilles’ parents Peleus and Thetis, in which is embedded the tragic story of Theseus’ desertion of Ariadne; the Orpheus and Eurydice section of Vergil’s *Georgics* 4; the Nisus and Euryalus episode from *Aeneid* 9; Ovid’s Philemon and Baucis story from *Metamorphoses* 8; the Ciris (“The Sea-Bird”), traditionally, though probably falsely, attributed to Vergil, on the ill-fated love of Scylla (not the sea monster), daughter of king Nisus of Megara, for her father’s enemy Minos, and her eventual transformation into, you guessed it, a sea-bird; and the *Culex*, also probably mistakenly thought to be by Vergil, about a gnat who bites a sleeping shepherd, is swatted to death, and then comes to said shepherd in his dreams to recount his trip to the underworld. While devoting ourselves primarily to the close-reading of these spectacularly beautiful bits of Latin poetry, we will throughout be guided by the central question of whether those 19th-century thinkers were right to think of the *epyllion* as a distinct genre in Latin and Greek. **Prerequisite(s):** Vergil

## Other Courses

### Introduction to Linguistics (2x per week)

*(The Department)*

This class will introduce students to the study of human languages. We will ask big questions—what is language, how does language work in the brain, the body, and society, and what, if anything, can we learn about humanity by considering human languages? We will explore topics in linguistics, from grammar (phonetics, morphology, syntax, etc.) to sociolinguistics, historical linguistics, lexicography, second language acquisition, and computational linguistics. Our focus will in part be determined by student interest. This class will mostly be conducted as a workshop and homework will be limited. That said, students will be invited to give presentations on topics that particularly compel them. No knowledge of Greek or Latin is necessary.

---

# ROMANCE LANGUAGES

---

## French

### **Accelerated French**

*(The Department)*

This course is offered to students who have successfully completed at least two years of another Romance language, and whose experience with language learning enables them to proceed at a faster pace in assimilating the usages of French. This course emphasizes aural/oral proficiency as well as written skills.

### **French 1**

*(The Department)*

This course is for students who are new at learning a Romance language, and for those who need one more year to solidify their knowledge and usage of the fundamentals. Emphasis is placed on sentence structure and oral expression. Students acquire elementary conversational skills, and vocabulary is learned through texts and review exercises. Web-based interactive exercises and activities help students practice and retain the material. Special attention is given to accurate pronunciation.

### **French 2**

*(The Department)*

Students entering this level already possess fundamental skills of grammar and expression (as described in French 1). This course is designed to foster continued development in each of the four language skills: speaking, writing, reading, and aural comprehension. A variety of materials are used: a textbook and workbook to reinforce grammar and vocabulary, and short readings to encourage class discussion and serve as samples of written text. Audio materials are used in class to improve listening comprehension skills. Accurate pronunciation is stressed.

### **French 3**

*(The Department)*

In French 3 the objectives are to reinforce the students' command of basic grammatical concepts and to stress the idiomatic use of French. We place an emphasis on the assimilation of all major grammatical structures. Readings such as Saint Exupéry's *Le Petit Prince* or Sempé and Goscinny's *Le Petit Nicolas* are used to expand vocabulary and provide topics of discussion. We consider questions of content and form. Topics of class discussion serve as the basis for composition writing. At the end of this course, students should be able to speak and understand French with relative ease and to write coherently.

## **French 4: French Language & Culture**

*(The Department)*

This course exposes the students to a variety of materials, textual as well as audio-visual, and emphasizes communicative skills through conversation and hands-on activities. Cultural themes pertaining to life in the French-speaking world, are presented through French films and other appropriate material. After a careful elucidation and practice of the linguistic elements necessary for exploring these themes, students are able to express themselves on the various topics introduced.

## **French 4: French Language & Composition**

*(The Department)*

This course is designed (1) to help students refine their knowledge of the subtler, more complex points of French syntax, and (2) to put the students at ease with the practice of the structures learned previously, by seeing them and applying them “in context.” To that end, literary texts are used as tools to expand vocabulary and to familiarize students with increasingly difficult texts. By the end of the year, the students should have assimilated and synthesized all previously learned rules and forms of French syntax. They should also be proficient readers and writers.

## **Contemporary Topics in French Literature and Film**

*(The Department)*

Designed for students who have successfully completed French 4 and are interested in gaining increased fluency in oral French, this two-semester course explores contemporary topics in the French-speaking world through literature and film. One semester is dedicated to reading and discussing works by contemporary French writers. Students are required to read an average of five to ten pages per night and to keep up with the new vocabulary introduced. While the emphasis is on oral expression, students are expected to write summaries, character and plot analyses, as well as short essays, on a regular basis. The other semester is dedicated to the viewing and discussing of films addressing topics such as education, politics, relationships, gender, race, and the environment. Each week students come to class having watched the film assigned over the weekend and ready to discuss it. Through activities such as oral presentations, dubbing, writing film reviews, dialogues and character studies, students will expand their vocabulary and improve their communication skills. Special attention will be paid to idiomatic expressions and the way French is spoken in everyday life. By the end of the year, students should have refined their aural and expressive abilities and gained a greater awareness of some aspects of the contemporary Francophone world.

## French Literature From the 19th to the 21st Century

*(The Department)*

The early 19th century sees the flowering of the Romantic movement in literature, music, and art. The poets, novelists, and dramaturges of the period often incarnate the Romantic hero portrayed in their works: Lamartine, Hugo, Desbordes-Valmore. With the onset of the industrial age, new writers reject *l'idéalisme romantique* for *la réalité matérielle*. The preferred genre of the realists is the novel, which comes into its own in the 19th century: Balzac, Flaubert, Zola. Poetry flourishes with the works of Baudelaire, Verlaine, Rimbaud, and Mallarmé. The early 20th century celebrates the marriage of philosophy and literature in *la littérature engagée* of Sartre, Beauvoir and Camus, while the theater—Ionesco, Beckett,—seeks its own solutions to depicting the modern *condition humaine*. Finally, the nouveau roman not only announces the death of character but seems to herald the demise of the novel itself: Robbe-Grillet, Duras. Other authors may include Proust, Breton, Césaire, Damas, Ben Jelloun, Modiano, and Lahens.

## 17th and 18th Century French Literature: Classicism and The Enlightenment

*(The Department)*

Open to juniors and seniors who have successfully completed the French Literary Trends course. We begin at the golden age in France, a time of belief not only in the divine right of kings but in the divine itself. Inherent in such beliefs was the idea of the absolute—absolute power, absolute reason, and, by extension, the “absolute” work of art. In literature, perfection becomes the rule, and prescriptions for achieving it are devised. Corneille, Racine, and Molière are recognized as major craftsmen. By the 18th century, cracks begin to appear in the bastion of Absolutism. Writers known as les philosophes declare war on heretofore sacrosanct tenets, with words for weapons. The French Revolution begins as a conflict of ideas eventually exploding into insurrection. “*On est tombé par terre, c’est la faute à Voltaire; le nez dans le ruisseau, c’est la faute à Rousseau.*” Authors are chosen from those above and from the following: Pascal, Madame de Sévigné, Madame de la Fayette, La Bruyère, La Fontaine, La Rochefoucauld, Beaumarchais, Diderot, and Montesquieu.

## Advanced Readings in French Literature

*(The Department)*

For students who have completed all other French electives. Works are selected based on students’ interests and literary background.

## French Conversation

*(The Department)* (2x per week)

Offered to juniors and seniors, and to sophomores with permission of the department chair, this class helps students use their acquired vocabulary and expand it to express themselves more fluently. Through a variety of verbal games, paired activities, and oral reports, students build their oral/aural skills and use them in a context of informal conversation on topics such as politics, education, fashion, everyday life, or other subjects of interest to the group.

# Spanish

## **Accelerated Spanish**

*(The Department)*

This course is offered to students who have successfully completed at least two years of another Romance language, and whose experience with language learning enables them to proceed at a faster pace in assimilating the usages of Spanish. This course emphasizes aural/oral proficiency as well as written skills.

## **Spanish 1**

*(The Department)*

This course is for students who are new at learning a Romance language, and for those who need one more year to solidify their knowledge and usage of the fundamentals. Emphasis is placed on sentence structure and oral expression. Students acquire elementary conversational skills, and vocabulary is learned through texts and review exercises. Web-based interactive exercises and activities help students practice and retain the material. Special attention is given to accurate pronunciation.

## **Spanish 2**

*(The Department)*

Continuing the study of grammar and building vocabulary, students read and discuss short stories relevant to Spanish culture and begin to express more sophisticated ideas in writing.

## **Spanish 3**

*(The Department)*

Grammatical concepts are further reviewed and reinforced at this level. Students are introduced to more literary texts, poetry, and to articles on culture and current events in Latin America and Spain.

## **Spanish 4**

*(The Department)*

This course is designed to consolidate previously-acquired language skills and enable students to enjoy increasingly complex literature. While particular emphasis is given to class discussion and writing to improve active command of the language, it is through reading texts of various literary genres that the students will review grammar and start producing critical and creative writing. The authors studied include, but are not limited to, Allende, Borges, Cortázar, García Márquez, Sábato, García Lorca and Neruda.

## Literature and Visual Arts in 1940s Latin America

(*Montalva*)

This course is designed for students who have successfully completed Spanish 4. This class will focus on a variety of Latin American authors from the 1940s whose works are seen as precursors to the literary boom of the 1960s. We will begin by considering the distinct cultural foundations of Latin American literature (aboriginal, Spanish, African) and some important foundational texts (the *Popul Vuh* and the chronicles of de las Casas, El Inca Garcilazo de la Vega and Guaman Poma). Then we will turn our attention to the *negrismo* movement and the real *maravilloso* (the marvelous real) which began to flourish in the first half of the 20th century in works by Guillen, Olivella, Asturias, Carpentier, and Fuentes. Students will also learn about the Latin American visual arts of the period and about the relationships that writers had with artists such as Xul Solar, Wilfredo Lam, and Frida Kahlo. Students will be asked to research, write and make oral presentations about these and other artists of the period, and to explore the interrelationships between the literary and visual arts. By the end of the year students will have developed a good sense of the artistic forces that helped shape contemporary Latin American culture and national identity.

## Creative Writing in Spanish

(*Martin-Basas*) (2x per week)

*Leer es cubrirse la cara y escribir es mostrarla.* (To read is to cover one's face. And to write is to show it.)

– Alejandro Zambra, *Formas de volver a casa*

Designed for students who have completed Spanish 4, this course will operate like a writing workshop and thus requires a commitment to writing frequently in Spanish. Students will prepare a piece of writing in Spanish for every class, which they will share with their fellow students. Commenting upon each other's work in Spanish will be an essential component of the class. Students will get grammatical and literary input from both teacher and peers. They will read and discuss short fiction and poetry and then "try on" the different narrative voices in their own writing. We will take inspiration from recognized contemporary and classical writers in Spanish such as Roberto Bolaño, Valeria Luiselli, Gabriel García Márquez, Cristina Fernández Cubas, and Luis Sepúlveda among others.

## 20th and 21st Century Literature in Spanish

(*The Department*)

The prose and poetry studied in this course provides a comprehensive view of 20th and 21st century Hispanic letters. Through the works of Unamuno, Martín Gaité, Matute and García Lorca (Spain), and of Fuentes, Borges, Bolaño, Restrepo and García Márquez (Latin America), and poetry from both continents, the course aims to stimulate the students' interest in contemporary Hispanic literature and expand their knowledge of language and culture. Short novels by contemporary authors such as Zambra and Vásquez introduce students to the present literary trends in a Latin America that lived through dictatorships, economic

crises, and drug wars. Excerpts from movies that explore said conflicts are also watched and discussed.

### **Advanced Readings in Spanish**

*(The Department)*

For students who have completed all other Spanish electives. Works are selected based on students' interests and literary background.

### **Spanish Conversation**

*(The Department)* (2x per week)

For juniors and seniors who have completed at least Spanish 3, this course develops communicative proficiency. Placing special emphasis on practical vocabulary and enhancing the interactional use of the language, we try to build each student's self-confidence and facility in speaking Spanish.

---

# MATHEMATICS

---

## Required Courses

### **Algebra 1 (8th Grade)**

*(The Department)*

In Algebra 1, students learn to generalize the laws of arithmetic and perform the four operations on variable expressions. They develop their ability to model and solve word problems by assigning variables to unknown quantities and determining the precise relationship between constant and variable terms. Students apply the laws of equality in order to solve a wide variety of equations and proportions. In the process of graphing the solution sets of linear equations on the Cartesian plane, students gain familiarity with the concepts of slope and intercept. They find simultaneous solutions to systems of equations and apply factoring in order to find the roots of quadratic equations. All of these activities promote both arithmetic and algebraic fluency.

### **Geometry (9th Grade)**

*(The Department)*

In Geometry, we study the world of points, lines, and planes. We cover topics that include the analysis of congruent and similar triangles, the Pythagorean Theorem, angle sum and area formulas, and theorems concerning the relationship between chords, secants, and tangents of a circle. We solve problems and explore geometric situations intuitively; we also investigate geometry as a formal system, where we begin with a small set of postulates and then build up a Euclidean geometric system by deductively proving further results. With this balance, we uncover mathematics the way it often plays out historically, where bursts of intuition drive knowledge forward, and then formalization solidifies known results into a cohesive whole.

### **Computational Fluency (9th Grade)**

*(The Department)*

In this once-per-week course, students apply their mathematical knowledge of arithmetic, algebra and geometry to a variety of problems written in the format of questions on the mathematics sections of the ACT and SAT. These problems are organized into thematically related units. By reviewing key topics, students in this course will bolster their mathematical vocabulary and their understanding of concepts and applications. By working on problems in a multiple-choice format, students will practice applying their mathematical knowledge to standardized mathematics tests.

## Algebra 2

*(The Department)*

Students come to Algebra 2 after having had a year of Geometry, and this knowledge is applied on a regular basis. The Cartesian plane provides a setting for examining transformations such as reflection, translation and scaling. Parallel and perpendicular lines are analyzed using the concept of slope. Functions are examined both algebraically and graphically, as are systems of equations and inequalities. Students also work in a purely algebraic setting, solving equations, manipulating algebraic expressions, working with higher-degree polynomials, expanding binomial powers, and examining rational expressions. The challenge of solving quadratic equations leads to such techniques as factoring, completing the square, the quadratic formula, and the discovery of the complex numbers.

## Electives

### Trigonometry

*(The Department)* (Fall semester)

Beginning with trigonometric functions and triangle solutions, we move on to identities, equations, angle formulae, and the practical applications thereof. Last, we cover the graphs of all the trigonometric functions including inverses and period, amplitude, and phase shifts. In conjunction with the spring semester course Analysis, this course is a prerequisite for Calculus. **Prerequisite(s):** Algebra 2

### Analysis

*(The Department)* (Spring semester)

This course is a rigorous approach to polynomial and exponential functions; sequences and series; vectors; and some analytic geometry. Emphasis is on the mastery of proofs and creative applications to practical problems. This course is a prerequisite for Calculus. In conjunction with the spring fall semester course Trigonometry, this course is a prerequisite for Calculus.

**Prerequisite(s):** Algebra 2

### Calculus

*(The Department)*

This is a rigorous calculus course with heavy emphasis on proofs, derivations, and creative applications. Limits, derivatives, integrals, and their technical applications are covered. This course will include an early use of transcendental functions and will require a working knowledge of trigonometric, exponential, logarithmic, and rational functions. **Prerequisite(s):**

Trigonometry/Analysis

## Techniques in Integral Calculus

*(The Department)* (Fall semester)

In this class, we will continue the exploration of calculus with advanced integration techniques, such as integration by parts, partial fractions, trigonometric substitution. We will study applications such as arc length, perimeter, measurement of surfaces, areas of regions on polar coordinates, and differential equations. We will reexamine integration with a more rigorous treatment than we took in Calculus, formally producing proofs of results that employ Riemann sums. **Prerequisite(s):** Calculus

## Further Explorations in Calculus

*(The Department)* (Spring semester)

In this course, we will take ideas from calculus and use them as stepping stones towards extensions and explorations in more advanced areas. For example, we will delve deeper into the convergence and divergence of sequences and series, leading us to a discussion of the Taylor and Maclaurin Series. We will study how the concept of infinitesimals leads to exciting results in physics and harmonic analysis, as well as offering insight into the local behavior of various curves that we may have taken for granted. Using infinite series, we will take on a formal study of real analysis, working with concepts that may span continuity, completeness, and cardinality. Along the way, we will continue to explore advanced integration techniques. We may examine special functions and number sets, such as the Bolzano-Weierstrass function, the Bernoulli numbers, and the Cantor set. We may use the idea of volumes of rotation as a way to begin talking about repeated integration and multivariable calculus. **Prerequisite(s):** Calculus, Techniques in Integral Calculus

## Mathematical Logic: Gödel, Computability, and Axiomatics

*(Heller)* (Spring semester—same period as fall semester course Formal Logic)

The study of properties of the natural numbers using the operations of addition and multiplication—appears deceptively straightforward, but is the source of some of the great problems of mathematics, and is often a basis for other branches of mathematics. Yet in the 1930's, Kurt Gödel, then a young Austrian mathematician, proved that the ordinary axioms of arithmetic are incomplete: that is, there are statements in arithmetic that are true, but not provable from those axioms. Gödel's proof and related theorems about the limits of axiomatic systems use techniques and ideas from mathematical logic. In this course, we will develop the basic mathematical logic and the axiomatics of the counting numbers needed to understand Gödel's theorems, and then work towards proving those theorems and explore some of their amazing and strange consequences.

## Formal Logic

*(Aronson)* (Fall semester—same period as spring semester course Arithmetic)

Formal logic, a discipline created by Aristotle, has applications in a variety of disciplines including philosophy, mathematics, physics, computer science and linguistics. One might in fact argue that logic is relevant to any endeavor that involves reasoning. This course begins

with a consideration of arguments of English and the question: What constitutes a good argument? We then focus on the symbolic system known as sentential logic and the more powerful symbolic system known as predicate logic. In both cases, students learn to translate arguments of English into symbolic arguments and to evaluate such arguments using the aforementioned systems. This is a proof intensive class. **Prerequisite(s):** Geometry

## Fractals and Chaos

*(Neesemann)* (Spring semester—same period as fall semester course Geometry II: Modern Elementary Geometry)

You've probably seen a fractal or two floating around the internet, usually in videos with tie dye colors and psychedelic music in the background. You've also probably heard the term "chaos theory" thrown around, maybe as some fringe science or something that a rogue mathematician character on CSI: Miami will say to seem more believable. In this course we will push beyond the pop-culture sheen of these topics and dissect them rigorously with mathematics. We will explore fractals such as the Snowflake Curve, Cantor Dust, and the Sierpinski Carpet in terms of self-similarity and dimension. We will use computers to better understand the notion of recursion and program them to create fractal drawings as well as to create experiments to test chaotic behaviors. We will also use them to explore topics like chaotic orbits, cellular automata, and Julia and Mandelbrot sets. Breaking away from the computers, we will use simple physical experiments to observe and test the chaotic nature of the world around us. Prerequisite(s): Geometry

## The History of Mathematics in Theory and Practice

*(Andrus)* (Spring semester)

This course begins with the origin of numbers and the number system, tracing its pre-historical roots to the civilizations of Ancient Egypt and Mesopotamia. We will explore the workings of the Babylonian sexagesimal system, and look at its impact on our current ways of measuring angle and time. We will also explore the creation of the earliest calendars through observations of the lunar and solar cycles, and the mathematics of various non-Western cultures. The course will follow the development of a deductive system of geometry in Ancient Greece, and the emergence of algebra. The course concludes with investigations into modern mathematical topics: non-Euclidean geometries, the development of modern algebra, and the emergence of probability and statistics.

## Geometry II: Modern Elementary Geometry

*(Totten)* (Fall semester - same period as spring semester course Fractals and Chaos)

This course will concern itself in great part with what is called "modern elementary geometry." Since the Renaissance, and especially in the last two centuries, there has been great development and expansion of the work of Euclid and the ancient Greeks. Our study will begin with the many figures associated with the triangle: orthic and medial triangles, the Euler line, the Fermat and Gergonne points, the Feuerbach circle, excircles, and Simson lines. Special topics regarding circles—the power of a point, the radical axis, harmonic division, and Apollonian circles—will be covered, and will lead into an introduction of transformational geometry with an emphasis on Steiner inversion.

## Data Science

*(Cross)*

Data Science is the process of taking information and turning it into knowledge. We express this knowledge in the form of a model -- explicitly stating how we think some small part of the universe really works. We might use a model to try to understand how presidential elections unfold, which movies are enjoyed by similar audiences, which Ok Cupid users will hit it off or which players will help our team win a championship. Our models will (hopefully!) prove their worth with their ability to make accurate predictions.

In this class, we will construct and evaluate our own mathematical models. We will write code to slice, dice, merge, sort, summarize, graph and model data with an eye towards deepening our understanding of the world and making better forecasts. We will also study how algorithms extract knowledge from data by examining decision trees, multiple regression, Bayes' Theorem and clustering algorithms. We will learn how to do reproducible research and why we might want to do it. A significant portion of our time will be spent writing code (in R), but no prior programming experience is required or expected.

## Mathematical Art

*(The Department)* (2x per week)

Mathematical art making has a proud and gorgeous tradition: Mayan temples and Arabic palaces, the drawings of M.C. Escher, the paintings of Bridget Riley and Odili Donald Odita, the stories of Stanisław Lem, the instruction-art of Sol LeWitt, the algorithmic music of Laurie Spiegel, Steve Reich, the data-porn of Ryoji Ikeda—the list goes on and on. In this class we will make drawings and sculptures, write poetry and prose, build synthesizers and sound installations, compose music and enact performance art: whatever medium we pick, we will have the subtle, fascinating curves of mathematics as our live model.

This class will run as a studio. The only prerequisite will be a firm commitment by each student, no matter what previous experience they have, to engage in serious art-making in a variety of media. Periodic presentations of new mathematics or mathematical art pieces will be offered to students as points of inspiration, but an independent curiosity and creative energy is vital! Gallery shows and informal performances will dot the year, but the meat of the class will be the machinations of our brains as we let the beauty of mathematics pour over our hearts and into our art. **Prerequisite(s):** none

## Advanced Problem Solving

*(The Department)* (2x per week)

This course is designed for students who love solving math problems, and it is especially appropriate for students intending to participate in the school's math team. We focus on mathematical topics not typically covered in the standard curriculum. Topics such as number theory and modular arithmetic, polynomials, geometric loci, probability, functional equations, algebraic and trigonometric identities, geometric inequalities, divisibility, three dimensional geometry, complex numbers, recursions, infinite series, quadratic forms and abstract algebra

are explored through a series of problems, often selected from various mathematical contests. The problems in Advanced Problem Solving tend to focus on clever tricks and creative thinking beyond what is typically required in a classroom. Through problems, the objective of the course is both to be more familiar with these clever tricks and also to have wider exposure to mathematics beyond standard curriculum. We meet twice a week, once to work on problems and a second time to go over the problems together as a class. This schedule is occasionally altered when we take a math contest as a class. **Prerequisite(s):** none

## **Independent Study in Mathematics**

*(The Department)*

Students work one-on-one with a mentor on a focused research project. Topics are to be determined by interest and inclination of the student. **Prerequisite(s):** Students must submit a research proposal to the department chair by June 1 to be considered for Independent Study in Mathematics. Proposal guidelines can be picked up in the High School Office or in the Mathematics Department.

---

# MUSIC

---

All music courses meet two periods per week unless otherwise noted.

## Performance Study and Ensembles

The Music Department will offer the following large ensembles based on student needs and interests. It is recommended that students interested in large ensembles choose two. Please consult with your current instrumental teacher if you need to know more about any group. It is strongly encouraged that a student engage in private lessons on his/her instrument. Students must be proficient in reading and sight singing as determined by the department. Please note that all performing ensembles are subject to change from year to year depending on the number and musical level of all participating students.

### Large Ensembles

Brass Choir\*—(horns, trombones, trumpets)—Pickering

Chamber Orchestra\*—(strings and winds)—Baeza, Woitun

Consort\*—(bass, cello, viola, violin, winds)—Gilbert, Kwon

High School Chorus—Asbury

Jazz Performance—Elliott/Coe

Wind Ensemble\*—(bassoon, clarinet, flute, horns, oboe, saxophone, trumpets)—Henderson

\*requires audition/approval of director

### **Bach Ensemble: The Study of the Vocal and Instrumental Chamber and Solo Music of J.S. Bach and His Contemporaries**

*(Gilbert/Levitt)*

We will work on many aspects of Baroque interpretation, performance practice, style, ornamentation, tempi, the relationship and interdependence of words and music, and any other topics that come up in the rehearsal and preparation of repertoire. We will explore Bach and his contemporaries from the bottom up, paying close attention to the power and influence of the bass line in these great musical works. Keyboard players will learn how to interpret and realize a figured bass and will learn how to play the portative organ. Limited to advanced vocalists and instrumentalists. **Prerequisite(s):** permission of the instructor

## Brass Choir

*(Pickering)* (3x per week)

The Brass Choir is an ensemble for advanced brass players. Musical and technical skills are cultivated through the study and performance of major brass ensemble compositions representing a wide variety of styles. The Brass Choir will perform in multiple settings during the year including assemblies, choral/instrumental concerts and graduation. Ensemble members are strongly encouraged to take private lessons. **Prerequisite(s):** permission of the instructor

## Chamber Orchestra

*(Baeza, Waitun)* (3x per week)

A plucked clarinet? A bowed flute? A violin that uses reeds? A cello with leaking pads? Have you buzzed your viola yet? Something is upside down! Chamber Orchestra is an ensemble where woodwind, brass and string instruments learn how to play together and enjoy the rich sound world they create. Instrumentalists prepare to play in keys utilizing up to four sharps and flats. Chamber Orchestra draws repertoire from art music extending from the Renaissance to today. A conducted ensemble, where the individual is cherished and challenged with music suited to each player, this group meets for one double period plus one sectional period each week. Students in Chamber Orchestra should be concurrently taking private lessons. An audition is required for any student enrolling in a large ensemble for the first time.

## Chamber Players

*(The Department)*

Historically, chamber music has been the pastime of the aristocracy, yet it is as democratic as music making can get! For students interested in the challenge of chamber music performance, Chamber Players groups (including piano ensembles) are organized based on enrollment. Duos, trios, and quartets will be coached once a week. Because of the skills required to perform chamber music, students are strongly encouraged to take private lessons. An audition is required for all students who will be participating in the chamber music program for the first time. Students presently participating will be placed at an appropriate level.

## Consort

*(Gilbert/Kwon)* (3x per week)

The Consort is a group of mixed winds and strings for advanced players. This ensemble performs without a conductor and will participate in all instrumental concerts during the year. The Consort works closely with a director in rehearsal. Students learn the art of section leading and ensemble playing through the study of repertoire that spans all periods. The Consort will rehearse for one double period and one single period each week. **Prerequisite(s):** permission of the instructor

## High School Chorus

*(Asbury)*

High School Chorus is open to anyone who loves to sing. The chorus sings repertoire from a variety of genres and styles, spanning 500 years of Western music. No previous singing experience is required.

## Jazz Performance

*(Coe, Elliott)* (3x per week)

Students will perform compositions from the huge jazz repertoire, spanning the major styles of jazz from swing to post-bop. Each combo will consist of a rhythm section and front line. All instrumentalists are welcome. There will be opportunities for large group arrangements as well. We will explore approaches to jazz improvisation through the study of harmony, scales, instrumental technique, and arrangement. Combos will have opportunities to perform in our jazz concerts and more informally in assemblies throughout the year. Students should demonstrate an ongoing engagement with their instruments, willingness to improvise, good reading ability, and should have taken Jazz Techniques (or the equivalent). Private lessons are strongly encouraged.

## Jazz Techniques

*(Coe, Elliott)*

A class in jazz improvisation and ensemble playing. Instruction in basic scales and chords provides a vocabulary for improvisation. Students are introduced to the jazz repertoire. All instrumentalists and vocalists are welcome; interested students should prepare an audition demonstrating a grasp of major and minor scales and chords. Students in this class are strongly encouraged to enroll in private lessons.

## Jazz Guitar Ensemble

*(Coe)*

This ensemble performs a variety of music arranged for guitars and percussion. The repertoire includes jazz standards, modern jazz compositions and original music. Ensemble members improve their reading, composing, accompanying, and rhythmic skills. Members should be very comfortable reading music and charts. **Prerequisite(s):** permission of the instructor

## Percussion Ensemble

*(Lazzara)*

This ensemble studies and performs 20th and 21st century music specifically composed for percussion instruments. Additionally, pieces transcribed from other sources are studied. **Prerequisite(s):** Middle School Percussion 2 or permission of the instructor

## Vocal Study and Ensembles

*(Asbury, Clark)* (3x per week)

Vocal study at Saint Ann's is comprehensive. Our goal is to build better singers, as soloists and choristers. Proper breathing, vowel production, diction and basic singing techniques will be the foundation of our study. Art songs (in English, Italian, French and German) and repertoire from the American musical theater and opera will be studied and performed in solo concerts. Additionally, singers will join together to explore the rich and broad canon of western choral music in various voice combinations. Performance opportunities include choral concerts, the spring voice recital and the musical theater workshop. There is no audition required. Students in Vocal Studies/Ensembles will also participate in High School Chorus.

## Wind Ensemble

*(Henderson)*

The Wind Ensemble combines woodwind and brass instruments. We develop musical and technical skills by studying compositions from a wide variety of styles, composers and time periods. Private lessons are strongly encouraged for students in this ensemble.

**Prerequisite(s):** permission of the instructor

## Instrument Instruction

### Advanced Guitar

*(Coe)*

This course is designed to enhance performing skills on the guitar through the study of popular, jazz and classical pieces. **Prerequisite(s):** Guitar 1 or permission of the instructor

### Double Bass

*(Langol)*

This course is designed for the beginning and intermediate double bass player. The course work focuses on developing performing skills and good double bass playing technique through the study of recognized method books, classical pieces, popular music and jazz. The students are provided an opportunity to focus on skills and repertoire specific to their instrument through the study of solo and ensemble literature with the goal of playing in an ensemble setting. Tone production, technique development, basic bowing technique and how to practice for maximum effectiveness are focused on in the class assignments. **Prerequisite(s):** permission of the instructor is required; prior string playing experience is a plus

## **Percussion: The Drum Set**

*(Lazzara)*

This class explores the role of the drummer in popular music. We study and play techniques that helped define this music, and we listen to recordings of the classic drummers.

## **Advanced Percussion Techniques**

*(Lazzara)*

This course explores percussion techniques for performing ensembles as well as solo playing. Timpani, 4 mallet vibraphone, drumset, and solo snare drum will be studied.

**Prerequisite(s):** permission of the instructor

## **Theory, Composition, and Music Technology**

### **Theory & Composition 1**

*(Elliott)*

This course offers an exploration of the fundamentals of notation, rhythm, harmony and melody. Students gain a deeper understanding of all musical styles. We train our ears, develop musicianship skills, and study the evolution of the system of tonality used in most musical cultures. Computers and MIDI are used in composition projects.

### **Advanced Composition/Electronic Composition**

*(Elliott)*

This course covers the study of harmony and voice leading, form, counterpoint, notation, style, and instrumentation, including ear training and musicianship. We will analyze the works of the masters to gain understanding of compositional techniques. Students will work on composition projects using notation software. Compositions for acoustic instruments and electronic media are encouraged. **Prerequisite(s):** Theory and Composition 1, or equivalent and permission of instructor

### **Music & Computers 1**

*(Langol)*

This class explores the use of electronic keyboards, computers, and software in making music reflective of various musical idioms. Our focus is put on understanding the bigger concepts around making music with current music technology in contemporary musical idioms. This class is for the student with no experience or a beginning knowledge of using music technology. In addition to advancing skills as music technologists, the students will be exposed to fundamentals of music theory and various compositional methods as required. Project work will apply these ideas as well as the musical desires of each student. Previous experience with composition is desirable, though not necessary.

## Music & Computers 2

*(Langol)*

This advanced level class continues to explore the ideas covered in Music & Computers 1, while solidifying skills established through previous music lab experience. We explore the use of electronic keyboards, computers and software in making music reflective of various musical idioms. Included in this course work is a deeper exploration of various musical concepts as well as the possible application of compositional methods to the creative process. A detailed look at basic synthesis and sound design as well as a sharply focused look at effects processing is part of the class discussion. **Prerequisite(s):** Music & Computers 1 or middle school Music Lab experience, and permission of the instructor

## Music Scoring for Multimedia

*(Langol)*

This class targets the ideas around electronic music composition specifically for film, dance, puppetry, theater, and animation. Open to students with advanced skills, an interest in performance/composition, and a facility with music making software, this workshop/class allows students with experience in MIDI and sound processing to realize their creative ideas using the myriad tools of the music lab. Software technology enables composers to achieve unprecedented variety and richness in manipulating recorded sound to create unique compositions. The possibilities are practically limitless. The developing of listening skills and musical analysis are employed in the course work and these become an important part of utilizing compositional methods and style. **Prerequisite(s):** permission of the instructor, music lab experience, and facility on an instrument

## Music Literature

### The Broadway Musical

*(Clark)*

We will get to know the seminal works of the Broadway canon, looking at the roots and development of this most American of art forms. Class work involves reading the texts, listening to show tunes, and DVD watching. Class participation will include trips, taking advantage of the rich offerings of the New York theater scene. **Note:** This class is not redundant for students who have previously taken The Broadway Musical

### Jazz History

*(Elliott)* (2x per week)

Jazz and blues are among America's greatest cultural achievements, exports to the world community that give powerful voice to the American experience. Born of multi-hued society, this music unites people across the divides of race, religion and region. Jazz history explores freedom, creativity, and the American identity at home and abroad. In this course, we will learn about the development of jazz since its origins at the turn of the 20th century. We will

encounter colorful personalities and amazing artists, taking a look at their specific contributions to the music, in an effort to understand the stylistic evolution of jazz. Trips to major cultural institutions will complement our extensive listening and learning activities.

## **Modern Music: The 20th and 21st Centuries**

*(Elliott)* (2x per week)

A revolution in musical thinking took place in the 20th century that would lead to decades of remarkable innovation and creativity in the composition of art music. These developments would inspire musicians of all genres and styles. The advances in technology that define the 20th century provided remarkable potential for sound explorers to invent entire new worlds. We will study the great musical artists of the last 120 years, more or less, from Stravinsky and Schoenberg to today's most innovative musical thinkers.

## **History of Western Music**

*(Elliott)*

Through its evolution since the Middle Ages, western art music has established the language of all familiar musical genres from plainchant to popular song. A style emerges, flourishes, grows amazingly complex, and finally topples, rendered obsolete by the genius of the next artistic generation. Students will explore the major forms and genres from the plainchant to Symphony, sonata to opera. We will hear incredible music, find the reflection of the past in the present, and explore new ways to understand musical language. We will take advantage of the exciting musical life of New York City to inspire our journey.

---

# RECREATIONAL ARTS

---

## **Basketball**

*(The Department)*

This course will prepare the students for both the physical and mental aspects of basketball, and is open to all skill levels. Students will learn basketball vocabulary, explore strategies, and raise their overall basketball IQ. Students will have a chance to implement their skills in half and full court games during class time.

## **Challenge Course**

*(The Department)*

This course is a combination of the Inward Bound and climbing classes. Students are faced with challenges through group activities and will set individual as well as collective goals. Team work, leadership, and trust building are major components of this class. We will explore horizontal and vertical climbs on our climbing wall and learn various climbing and belaying techniques. The course includes a three-day camping trip which includes rock climbing and a ropes course.

## **Competitive Sports Training**

*(Rohrs)*

This course is for the athlete who is looking to improve their athletic ability both physically and mentally. Lessons will focus on preparing students for their upcoming athletic season(s). The student will participate in and learn sport specific exercises that include agility, injury prevention, coordination, speed, strength training and flexibility. Students will also learn advanced skills and strategies in sports like basketball, baseball, volleyball, track, and cross country.

## **Fencing 1**

*(Balboa)*

This class, covering the fundamentals of fencing, is open to beginners and those with a limited background in fencing. Students learn basic fencing movements and strategies.

## **Fencing 2**

*(Balboa)*

The class stresses conditioning, competitive bouts, and advanced techniques. **Prerequisite(s):** at least one year of fencing and permission of the instructor

## Flag Football

*(Schirrippa)*

This course introduces the rules and fundamentals of flag football. Emphasis is placed on proper techniques of throwing, catching, offensive and defensive concepts, and teamwork. Students will work through skill drills and learn strategies for playing in game situations.

## Floor Hockey

*(Paszke)*

This is an enjoyable and exciting class for all skill levels. Students improve hand-eye coordination and knowledge of the game through drills and games. All hockey fans will enjoy this course.

## Karate 1

*(Zur)*

Students learn the basic punches, kicks and blocks of traditional karate, combining these techniques in the practice of forms and freestyle sparring. Some self defense applications are covered, although the primary emphasis of the course is on karate as a sport and martial art. A gi (karate uniform) is supplied by the school.

## Karate 2/3

*(Zur)*

In this class we cover material for the color belt ranks, with increased emphasis on free fighting and street defense. **Prerequisite(s):** a minimum of one year's training in the Saint Ann's martial arts program

## Parkour Fitness

*(Benney)*

Parkour is the physical discipline of training to overcome any obstacle within one's path by adapting one's movement to the environment. This class will incorporate both the technical aspects and the physical rigor of Parkour to create a challenging and adventurous workout. Perfect for students interested in gymnastics, dance, and athletics, this "boot-camp" style of exercise class will focus on upper body strengthening, cardiovascular endurance, balance, and agility. It will take place in the 10th floor apparatus room and gym, and at various outdoor locations depending on the weather.

## Physioball Fitness

*(The Department)*

Using large physioballs, this class teaches different exercises designed to increase flexibility, enhance coordination, develop strength and improve cardiovascular fitness. The emphasis is on core (abdominal and back) strengthening and conditioning.

## **Pilates Conditioning**

*(Lattimer)*

The Pilates method of body conditioning is a unique system of stretching and strengthening exercises developed over ninety years ago by Joseph Pilates. It strengthens and tones muscles, improves posture, enhances flexibility and balance, and unites body and mind.

## **Racquet Games**

*(Stevenson)*

Racquet games is a course for all skill levels. The units will include badminton, pickleball, and table tennis, depending on gym availability. Beginners learn the games by working on fundamental stroke technique; more advanced players polish their skills while improving game strategy. All students participate in exciting singles and doubles matches.

## **Running**

*(The Department)*

A course to help people with little or no running experience; experienced runners are also welcome. Stretching and cooling down exercises are taught, along with techniques to improve form and increase speed. Weekly runs vary in distance and intensity. Running routes change from week to week.

## **Sports and Games**

*(The Department)*

If you enjoyed your MS “Gym/Park” class, then this class is for you. A variety of sports and physical activities will be offered. Based on the availability of indoor and outdoor facilities, you will play games like Capture the Flag, Dodge ball, Ultimate Frisbee, soccer, whiffle ball, basketball, and volleyball. Individual fitness activities may be offered in the fitness room as well.

## **Table Tennis**

*(Carr, Stevenson)*

Table tennis is one of the fastest growing sports in the United States. Join this class to speed up your hand-eye coordination and to learn how to play this enjoyable game.

## **Tap**

*(Howard)*

This class teaches rhythmic tap technique, working with complex foot rhythms that lead to improvisation. The body attitude is grounded (closer to the ground), like African dance, as opposed to the lifted attitude of the Broadway tap style. Traditional and contemporary works are learned.

## Urban Cycling

*(Benney/Carr)*

Get outside. Ride a bike. See Brooklyn from a new vantage point. This full year class will emphasize safe cycling and group riding procedures. Students will learn basic bike maintenance in addition to building cardiovascular endurance. Students should already feel comfortable riding a bike. Bikes and helmets will be provided, or students may provide their own equipment. **Note:** All bikes must have hand brakes.

## Ultimate Frisbee

*(Benney)*

Ultimate offers a fun, exciting alternative to traditional sports. Students incorporate throwing, catching and teamwork into a framework of speed and finesse.

## Weight & Fitness Training

*(The Department)*

This course introduces the student to the merits of weight and fitness training. Both free-weight and machine work are incorporated into each personally designed workout. Other areas to be explored include flexibility (through stretching) and the value of aerobic training.

## Yoga 1

*(J. Zerneck)*

This course introduces the ancient discipline of personal development that balances body, mind, and spirit. Students learn a series of physical postures and proper breathing as well as meditation and other practical methods for relaxation that promote health, alleviate stress, improve skeletal alignment, and increase muscular strength and flexibility.

## Yoga 2

*(J. Zerneck)*

In this class we begin to explore more vigorous yoga sequences, breathing techniques and styles of meditation. Different styles of yoga will be introduced including Ashtanga, Bikram, Vinyasa and Anusara. This course will be either a single or double period depending upon student schedules. **Prerequisite(s):** one year of Yoga and permission of the instructor

## Interscholastic Sports

*(The Department)*

The recreational arts requirement may be fulfilled through full-season participation as a player on a junior varsity or varsity team. Emphasis is placed on developing and fostering athletic standards of excellence through participation and competition. All team sports require a significant commitment to practice and game schedules. Saint Ann's is a member of the Athletic Conference of Independent Schools (ACIS), and the girls' teams also belong to

the Athletic Association of Independent Schools (AAIS). Our cross country and track teams are members of the Private Schools Athletic Association (PSAA). The fencing team is a member of the Independent School Fencing League (ISFL). Teams include baseball, basketball, cross-country, fencing, gymnastics, soccer, softball, squash, track, and volleyball.

---

# SCIENCE

---

All courses meet for a full year unless otherwise noted.

## Biology Courses

### Biology

*(The Department)* (required)

Biology is the scientific extension of the human tendency to feel connected to and curious about all forms of life. It takes us to the wet, wild world inside a cell, and nudges us to take a close look at the stripes of a zebra or to plunge down to the dark regions at the bottom of the sea where albino crabs move with unhurried pace over the soft, cold mud. This course covers vital topics in this field such as cytology, genetics, biochemistry, taxonomy, evolution, botany, and ecology. This is a dense, grand tour of the most definitive aspect of this planet.

**Prerequisite(s):** none

### Advanced Biology

*(Kaplan)*

This is an intense and rigorous immersion in a comprehensive study of biochemistry, cell biology, genetics, botany, evolution, and anatomy and physiology. Lectures and discussions are supplemented with occasional in-depth labs, and articles from journals such as *Nature*, *Science*, and *Scientific American*. The only way to cross the ocean of information, enjoying the fast pace and laboratory work, is to be a bonafide biophile! The class meets one seminar period each week in addition to regular class time. Students are expected to have a thorough grasp of ninth grade biology topics. **Prerequisite(s):** Biology and Chemistry

### Advanced Physiology and Medical Ethics

*(Levin)*

Do you want to learn how to read an EKG? How a bone marrow transplant works? Why carbon monoxide gas is poisonous? How human T cells can be reprogrammed to fight cancer? Or about fetal surgeries that can be performed before birth? We will explore all this and more in Advanced Physiology as we work our way through the many complex systems of the human body, including the cardiovascular, respiratory, immune, and reproductive systems. Along the way, we will examine what happens when our human machinery fails, and the medical therapies designed to treat these disease states, such as defibrillators, ventilators, antibiotics, organ transplantation, cancer immunotherapy, and gene therapy. We will also tackle mystery cases in which you will become doctor and researcher alike, diagnosing a patient through a series of medical clues, explaining the pathophysiology of each disease, and

proposing treatment options for your “patient.” This course will involve readings from journals like *Science and Nature*, along with articles from popular magazines like *The New Yorker* and other literary works related to health and disease. Delving deeply into these varied readings, we will build skills in critical analysis of the scientific literature, and will also challenge ourselves to grapple with some of the most complex ethical dilemmas in modern medicine.

**Prerequisite(s):** Biology and Chemistry

## Animal and Plant Adaptations

(Zayas)

In this course we will survey the structure and taxonomy of plants and animals while investigating their evolutionary histories and relationships. We will focus on form, phylogeny, and functional adaptations, observing living specimens when available. The course will be presented through a combination of lectures and labs. Not for the faint of heart, laboratory assignments will require participation in the observation and dissection of various specimens, including protists, plants, and both invertebrate and vertebrate animal species. Students will be active participants in directing these labs, so be prepared to get your (gloved) hands dirty!

**Prerequisite(s):** Biology

## Molecular Biology

(Radoff)

What is a GMO (genetically modified organism)? How do you make a clone? How do forensic scientists identify the origins of bodily fluids left at a crime scene? How is DNA replicated and how are proteins made? What is this CRISPR thing all of your friends are talking about? Molecular biology aims to answer these questions and more. In this lab-intensive course we will discuss genetics and DNA technology from a theoretical and practical perspective. Students will practice lab skills such as pouring agarose gels and agar plates, designing PCR primers, and analyzing DNA sequences for evolutionary relationships. If you want to hone your lab skills while still learning a lot about advanced biological topics and techniques, this is the class for you! **Prerequisite(s):** Biology

## Neuroscience

(Lerman) (Fall semester)

If understanding the brain were a marathon, we have only come a few feet. In this course, we will study the most complex machine known to man, pointing out what we know as well as what we do not. Major topics will include brain anatomy, medical case studies, and the biological basis of behavior. Throughout the semester we will be creating descriptions, drawings, and animations of the brain to culminate in a collective final publication. We will need illustrators, writers, collaborators, and researchers! **Prerequisite(s):** Biology and Chemistry

## Psychology

*(Lerman)* (Spring semester)

What is the cause of human behavior? We will examine this question, studying famous psychologists, influential experiments, and ourselves. We will cover seminal articles in the field from Freud, Pavlov, and Skinner, as well as the modern thinkers in the field. Students will hone their skills of thinking critically and analyzing the complex forces that govern the way we are. Throughout the semester we will be creating descriptions, drawings, and animations of the mind to culminate in a collective final publication. We will need illustrators, writers, collaborators and researchers! **Prerequisite(s):** Biology and Chemistry

## Chemistry Courses

### Chemistry

*(The Department)*

This is a broad, sweeping, fast-paced survey course introducing students to the fundamental principles of chemistry, and to the basic techniques a chemist uses. Topics include stoichiometry, atomic and molecular theory, basic atomic and molecular structure, and gas laws, and may also include thermodynamics, chemical equilibrium, and acid-base chemistry. Students develop facility working with calculators and become intimate with the Periodic Table. Laboratory work is an integral part of the course, both in illustrating principles presented in lectures and in providing experience conducting qualitative analysis. **Prerequisite(s):** none

### Advanced Chemistry

*(Velikonja)*

Advanced Chemistry is designed to give students the experience of an intensive college-level course in which they will hone their ability to think critically about chemical phenomena. We will discover why some chemical reactions happen while others don't, how quickly reactions happen and how far they will proceed (thermodynamics, kinetics and equilibrium). We will also revisit, and explore in greater depth, some of the topics from first year Chemistry including stoichiometry, gas laws and bonding. Additionally, we will discuss applications of chemistry such as electrochemistry, buffer systems and solubility. The rapid pace of the course requires independent learning and preparation on the part of the students and weekly labs add to the time commitment. Advanced Chemistry is for those who seek a deeper understanding of matter, relish wrestling with equations, and who find chemical reactions exocharmic. **Prerequisite(s):** Chemistry

## The Chemistry of Food and Cooking

*(Velikonja)*

Have you ever tried to make homemade whipped cream and wound up with butter, or wondered why egg whites turn white when heated? This course is about the chemicals in foods and the processes that take place in the kitchen. We experiment with many chemical processes such as crystallization (a.k.a. candy making) and emulsification (mayonnaise). We explore food spoilage and learn how humans have exploited it to produce yogurt, cheese, bread and beer. We also investigate some of the unusual chemicals in food, from beneficial elements (selenium in Brazil nuts) to harmful compounds (cyanogens in apple seeds), and learn about trends in food such as gluten-free and vegan cooking. This course includes many topics not covered in Chemistry 1 while exploring the applications of some Chemistry 1 concepts. The class consists of lectures and labs (many of which will produce edible results!).

**Prerequisite(s):** none

## Organic Chemistry

*(K. Fiori)*

Organic molecules are everywhere. They make up our bodies, our clothing, the medicine we take, and the food we eat. This course is an introduction to the astounding complexity of these molecules and the diverse chemistry in which they participate. We will focus primarily on the basic principles necessary to understand the structure and reactivity of these ubiquitous organic molecules. Students will learn to think like organic chemists. We will explore how differences in electronegativity, the presence of lone electron pairs, and resonance structures influence reactivity. We will analyze the symmetry of molecules and learn how to see molecules in three dimensions. Students will use chemical techniques and spectroscopy to determine the structure of unknown organic molecules. Additionally, we will learn to use our chemical knowledge to design routes to make complex molecules from simple starting materials. Throughout this course, we will draw on examples from daily life to illustrate the important chemical concepts we are studying. Weekly labs will introduce common laboratory separation and purification techniques and allow students to have first-hand experience performing the reactions they study in class. **Prerequisite(s):** Chemistry

# Physics Courses

## Physics

*(The Department)*

This course provides a systematic introduction to the main principles of classical physics such as motion, forces, fields, electricity, and magnetism. We emphasize the development of conceptual understanding and problem solving abilities using algebra and trigonometry. Familiarity with trigonometry is highly helpful, but not required. The class includes a laboratory component. **Note:** open to sophomores, juniors, and seniors, or others with permission of the instructor

## Astronomy

*(Kandel)*

This course will provide a rigorous tour of the objects and events that comprise the Universe. We will study the formation of stars and planetary systems, the interaction between galaxies and supermassive black holes, and the cataclysmic physics of the first few moments following the Big Bang. We will dabble in xenoscience, the study of extraterrestrials; we'll discuss necessary and sufficient conditions for life, and means of detecting—and eventually exploring—exosolar habitats. We will peruse theories of the size, structure, and ultimate fate of the Universe, and discuss multiverse theories that spring from quantum mechanics, inflation theory, and even more exotic philosophical riffs. “Hard” sci-fi (science fiction that relies on plausible science) will be utilized to vivify concepts and catalyze debates. Students will emerge with knowledge of the mind-boggling diversity of the contents of the Universe, as well as familiarity with the underlying laws of physics, and a sense of how science progresses in the face of seemingly intractable problems. For example, we may study the red supergiant, Betelgeuse, tracing its evolution, eventual explosion and collapse, while noting the methodological breakthroughs that allow us to tell such a bizarre (and true!) story. **Prerequisite(s):** none

## Physics: Mechanics and Relativity

*(Kandel)*

Mechanics and Relativity is a physics course that emphasizes deep problem solving, along with the philosophical and historical dimensions of the subject. Because we focus our efforts on mechanics (though we briefly discuss thermodynamics, electromagnetism, and optics), we can go into far greater depth. Students strive for a sturdy grasp of physical theories, utilizing diverse modes of thinking: qualitative reasoning, pure intuition, rigorous analysis. We consider the big questions: Where is the Earth in relation to the cosmos, how is it moving, and do its local laws generalize to the Universe? There are wonderful stories behind all of these, in which theories rise and fall, and human beings struggle to overthrow the mental constraints of their forebears. We study the astronomers of the Ancient Greeks, the Copernican Revolution, and the beautiful contributions of Galileo, Newton, and Einstein. In all of these realms, we not only tackle daunting problems, but we bring attention to the problem-solving process itself, to gain insight into our own learning processes; and we consider the wider philosophi-

cal implications. For example, does the unprecedented accuracy of Newtonian predictions threaten our belief in free will? Does the very concept of Laplace's demon imply that the future is predetermined? We employ mathematical methods to describe trajectories, orbits, and the strange physics within a spinning spaceship. By the end of the year, we are forced to question many of our deepest assumptions as we tackle the paradoxes of Special Relativity and the implications of the Big Bang model! **Prerequisite(s):** none

## Analytical Physics

*(Pelzer)*

This second-year physics course builds on the material from a first-year Physics course with an emphasis on deeper, more complex problems and covers new topics such as fluid dynamics, optics, electricity and magnetism, and particle physics. The course focuses on problem solving and mathematical methods. **Prerequisite(s):** Physics

## Electricity and Magnetism

*(The Department)*

This course is an in-depth, calculus-based, proof-driven study of oscillations, waves, electric fields, magnetic fields, and radiation. Purpose: Derive the speed of information.

**Prerequisite(s):** Analytical Physics and Calculus. **Co-requisite:** second-year calculus

## Other Courses

### Ocean/Atmosphere Science

*(Richards)*

Earth systems are in a constant state of flux. Melting ice caps, increasing occurrences of extreme weather, shifting animal migration routes... What role do ocean-atmosphere interactions play in these phenomena? A significant one, in fact! In this course, we will examine the science behind climate variability, focusing on how changes to the energy balance between the ocean and atmosphere influence everything from weather and freshwater resources to fisheries and agriculture. Natural cycles and anthropogenic impacts will be considered, as will strategies for reaching a climate-resilient and sustainable future. While interactions will be emphasized, the first semester will focus primarily on ocean systems, and the second semester will focus more on the atmosphere, thus students may enroll for one or both semesters.

**Prerequisite(s):** none

### Science Policy

*(Baierl)*

This course will examine the structure of institutions that generate scientific knowledge, and precisely how scientific research makes its way out of the lab, through the peer review process, into a journal publication, and eventually into policy on the house and senate floors

as well as into the broader public consciousness. The sciences have not always occupied as prominent a place in society as they currently hold, and our aim will be to better understand how throughout history the sciences grew to interact so fundamentally with governmental institutions traditionally considered “outside” of science. We will investigate prominent 20th century clashes between the research and policymaking spheres such as fights over the dangers of tobacco smoke, the ozone hole, and acid rain, leading into the current climate change crisis. Students will study the ways that pathways of information are both used and misused to influence public perceptions and sway policy debates. We will also begin to see how the distinctions between scientific work and its material and political settings frequently become muddled. We will explore the ways that the social nature of modern scientific understanding exists interdependently with a concrete and institutional world, and consider questions about the role of values in science and policymaking. Readings and discussions will span broad topics in physics, environmental science, chemistry, biology, and philosophy. **Note:** open to sophomores, juniors and seniors.

## Socioeconomics and Race in Medical Research and Medicine

*(Bertram/Thomas)*

(Please see Interdisciplinary Studies)

## Independent Science Research

*(The Department)* (1x per week)

The Independent Science Research Program grants students the opportunity to design experimental strategies to explore personally perplexing questions of science: What would happen if...? Why is it that...? How does...? Research objectives are as unique and varied as the investigator. Topics are multidisciplinary, ranging from biology and chemistry to the physical fields.

Independent Science Research is a cooperative endeavor between a student or several students and their chosen mentor. Saint Ann’s science teachers, as well as auxiliary research investigators, serve as advisers. Students meet with the research coordinator to discuss exploration topics and to make a productive mentor match. Research work proceeds at a pace stipulated by the project as well as the ambition of the research team. Research groups are expected to meet regularly every week. In addition, research students are required to gather as a group for one scheduled class period per week. This class will be used to discuss scientific literature, investigate science research methods, and conduct peer review presentations. After completing a year of exploration, students summarize their projects in a formal research paper. In the spring, discoveries are made public through a poster session and oral symposium. **Note:** This course bears one half credit. **Prerequisite(s):** Students are required to submit a research proposal to their adviser or the Science Department by June 1 to be considered for approval by the department. Proposal guidelines are available in the Science Office and the High School Office.

---

# SEMINAR

---

The high school seminar program is a unique series of offerings by teachers in addition to their regular teaching load. The seminars are double periods at the end of the day, during which students explore shared intellectual and creative interests. Keep in mind that theater rehearsals and athletic practices are often scheduled during this time of day, as well.

## **Advanced Architecture & Design**

*(Rumage)*

This course explores a variety of architectural/design problems in greater depth than in previous Architecture & Design courses. In order to develop skills in 3D problem solving, model making is a major component of this rigorous course. To enter this advanced course, students are required to have completed Introduction to Architecture & Design 1 and 2, or to have gained permission from the instructor. Each student is also required to be skilled in presenting design considerations in plan, section, elevation and axonometric projection drawings.

## **Africa**

*(Flaberty)*

We will take a broad look at a huge continent through a variety of means, endeavoring to ask the question: what is Africa? Is it a coherent continent, a disparate collection of incongruous pieces slapped together by colonialism, or a yet unrealized, powerful idea? Current events will dictate some of our emphasis, but a basic historical underpinning will be provided of the ancient sub-Saharan kingdoms to the modern struggles against colonialism, and the perplexing modern map it has produced.

We will encounter authors such Wole Soyinka and Anthony Appiah, as well as contemporary accounts of the slave trade and early exploration. Music will be a major part of our endeavor. We will listen to many recordings, and put them in a cultural context: Fela, Thomas Mapfumo, and Franco are just a few examples. Hopefully an opportunity to hear some live music (and eat some African cuisine) will present itself throughout the year.

No papers, no tests, but enthusiasm is required, as well as a willingness to challenge received wisdom about the oldest place we know—a place that is challenging in its ever-changing reality.

## American Dissent

*(Tompkins)*

*I am in earnest—I will not equivocate—I will not excuse—I will not retreat a single inch—and I will be heard.*

– William Lloyd Garrison, *The Liberator*, 1831

In this seminar we will explore the forms, languages, politics, and consequences of dissent, whether by individuals or organized groups. Working mostly with primary sources we will discover the circumstances that have given rise to dissent, uncover its origins and understand the role dissenters have played at key moments in American history. Among the topics we will explore are religious and political dissenters in colonial America; the role of dissent in the American Revolution; abolitionists and anti-slavery activists (Garrison, Tubman, Douglass and others); advocates for the rights of Native Americans; Transcendentalists and utopians in antebellum America; the Populist movement; advocates for the rights of women; proponents of racial equality and African-American empowerment (DuBois, Garvey, King, Malcolm X); voices of protest on the political right in the 20th and 21st centuries (segregationists, John Birch Society, neoconservatives, the Tea Party); and other poets, seekers, dreamers and activists who catch our interest and imagination.

This seminar will require significant reading in a range of primary and secondary sources.

## The Art and Practice of Fly Fishing

*(Rumage)* (Spring semester)

An introduction and overview of the practice, science, and rich literary history surrounding fly fishing. Readings will range from Sir Isaac Walton to Hemingway, with an emphasis on 20th Century artists and practitioners. The biology of aquatic life, in particular the life cycle of the mayfly complements the technical instruction of casting and presentation. Additional classroom sessions include an understanding of fishing knots, reading water, tackle, fly selection, as well as playing, landing, and releasing fish. Travel to nearby rivers and streams will provide the students a practical opportunity to develop their technique and their understanding of fly fishing.

## The Art of Debate and Rhetoric

*(Kingsley, Mason)*

The Debate and Rhetoric seminar meets as a single House once a week in the late afternoon seminar period. We break up into smaller committees to debate and vote on resolutions, practice speaking in various formats, arrange impromptu and prepared intramural debates in both large and small houses; and participate as individuals and as a team in the Princeton Model Congress in November and other Model Congresses. The House is largely self-governing, on the premise that the secret of free speech is respect for difference of opinion, and rule by majorities—democracy—depends on the assent of minorities. **Note:** Students who take this seminar should not commit to more than one season of an interscholastic sport with practices or games that conflict with class meetings. Enrollment may be limited.

## **Bible Shenanigans**

*(Townsend)*

The Bible, in both its Jewish and Christian versions, it is composed of some of the most famous stories of shenanigans in human culture (Adam and Eve and the original forbidden fruit, Joseph and his fancy coat, Moses and the exodus, David and his deeply messed-up family, Jesus and those Pharisees), along with a vast array of obscurities (apocalypses, letters, histories, legends, etc.). Our object will be to get a sense of how to grasp the literary importance of the Bible while both enjoying its wilder side and taking a serious look at the various ways its wide range of adherents have understood it. To that end, we will read significant passages in all of the categories above, while also exploring how the Bible has been subjected to shenanigans in various historical periods and settings, including our own (e.g., Bob Dylan's "Highway 61 Revisited"). Some comparison between it and the writings of other religions (Islam, Buddhism, Mormonism, etc.) will come into play as well.

The seminar will be taught by Visiting Scholar Craig Townsend, former Saint Ann's English teacher, Episcopal priest, and holder of a Ph.D. in the study of religion.

## **Comedy 202/303 (Formerly Sketch Comedy)**

*(Kandel)*

Learn valuable skills for today's workplace! That's right, at no extra charge! Move beyond the ordinary! Embrace the unknown! Be unbearably annoying in a safe environment! Move beyond the place beyond the ordinary—and then beyond even THAT! Learn to manipulate people without threats, using merely your own facial expressions! Talk the talk AND walk the walk! Master neuro-social signalling and impress your parents' friends!

## **Communication and Negotiation**

*(Pickering)*

*Since it costs a lot to win and even more to lose, you and me bound to spend some time, wondering what to choose.*

– Hunter/Garcia

Have you ever felt frustrated, stymied or confused when a seemingly simple request turns out to be anything but that? Would you like to improve your skills when advocating on behalf of yourself and others? In this seminar we will utilize negotiation simulations, case studies and readings to explore topics including: creative conflict resolution, the development of conceptual, strategic, practical and ethical negotiation strategies, improved personal effectiveness, better deal-making capabilities and how to get solutions accepted and implemented.

We all participate in negotiations every day. How and what we communicate are essential elements to the satisfaction of all involved. To be clear, this class is not debate. Many of you are already pretty good at that! **Note:** This semester-long course will be offered twice, both in the fall and spring, to accommodate sports/theater and other seasonal conflicts. All are welcome.

## Creating Documentary Theatre

(P. Zerneck)

Like a good film documentary, documentary theatre can entertain and enlighten audiences by creatively highlighting specific truths and perspectives that exist throughout our world today, from the political to the social to the more personal, and anything in between. A performance style carried into the mainstream by the great Anna Deavere Smith, documentary theatre—also known as ethnodrama or verbatim theatre—employs techniques that will teach students how to collect data in order to write and perform play scripts based on interview transcripts and/or print and media records. We will discover the skills, advantages, challenges, and ethics that comes from this unique and powerful form of stage drama.

## Fire Works

(Klein, Sullivan) (Fall semester)

In this art seminar, we explore the idea of transformation, the shift of materials from one state to another. In particular, we will look at two materials that rely on transformation by fire in the art process: porcelain and metal. In the studio, we will use porcelain and metal to make work that is sculptural, functional and poetic. And along the way we will explore the concept of shape—of shapes shifting, changing—with a special awareness to the ways in which the artist affects the object, summons it, shifts it from what it is to what it becomes.

*as being available  
to any shape that may be  
summoning itself  
through me  
from the self not mine but ours.*

– From “Poetics,” by A.R. Ammons

## Introduction to DJing

(Rumble)

In this course students will learn basic techniques of mixing, blending, and transitioning different genres of music including pop, R&B, jazz, dance, and hip-hop. In addition students will learn about related history such as the progression from vinyl to mp3, and about new-age DJ equipment such as controllers, programs, and speakers. The goal will be for students to ultimately create their own 12 minute set. Students will be able to demo and practice mixing, and they will also learn how to listen to music measures, and know when it's time to cue and mix the next track. **Note:** This class will be limited to 10 students.

## The Lore of Mushrooms

(N. Fiori) (Fall semester)

The quiet hunt. Surrounding you in the forest are fungi in their many forms. The deliciously potent *porcini*. The *ling chih*, a mushroom that makes a tea so soothing it is a common

leitmotif in Chinese art. The ancient hallucinogen *soma*, known now to be quite toxic, but appearing with its speckled red cap in thousands of years of painting and literature. The deadly *amanitas*, which are responsible for more deaths than any other mushroom family. These, along with about 100,000 other species of mushroom-forming fungi, lay before you, presenting a world of exploration so vast that you could devote your life to it and still be a humble beginner.

This is partly a biology course, but it is mostly an ode to a fungal form. It is about foraging—the seeking of a hidden treasure that surrounds you—as much as it is about mushrooms themselves. And foraging we will do! To take full advantage of the fall season, we will start the semester with several field trips to nearby parks where we will look for, examine, and identify mushrooms. When the cold weather keeps us indoors, we will study the science of mushrooms, investigate the role of fungus in culture, literature, and ecosystems, and cultivate oyster and shiitake mushrooms from spore cultures in media that range from coffee grounds to fallen tree limbs to old Saint Ann’s Course Catalogs.

## New Narratives

*(da Silva)*

This seminar is interested in creative nonfiction as a genre with the potential to reconstruct and reaffirm personal and cultural narratives, with an emphasis on race and sexuality. In a time when individual and collective histories are often distorted and sometimes erased, the world is re-evaluating its relationship with creative nonfiction, seeing it now as a vehicle to understanding this particularly intricate world. From essay and poetry all the way to music and performance, we will explore the poetic and often, political space that creative nonfiction can occupy.

Moving from the 60s through the present, we will look at different manifestations the genre allows for while investigating its role in the larger cultural contexts. Examples include selections from flash nonfiction and works from Claudia Rankine, Yiyun Li, Roxane Gay, Joan Didion, Solange, Kendrick Lamar, and newer, more experimental artists like Brinae Ali (tap dancer & musician) & Akiko Hatakeyama (electronic musician and performance artist). As we delve deeper into these examples, you will have the chance to experiment with these various forms yourself. This seminar is geared towards helping you figure out what CNF can do for you as you try to make sense of the world, as to try to create art, and as you try to construct your own narratives.

This course will be taught by visiting literary artist (and Saint Ann’s alum) Katarah da Silva.

## Philosophical Ethics

*(Aronson)*

On the one hand, we need to know how to live. Are lies permissible? Kant: Never. Mill: Yes, if the aggregate duration and intensity of pleasure-states is maximized for all affected parties. Aristotle: The question is not whether it is permissible to lie but whether it is desirable to be the sort of person who tells lies. Nietzsche: If you have to ask—probably not.

On the other hand, there is much we do agree on. (Murder is wrong; thieves must be punished.) But what can justify this knowledge? According to Judaism, Christianity, Islam—God. According to Plato and Kant—reason. According to Hume—feeling. According to Nietzsche—we need a critique of justification itself.

This course considers the central paradigms of Western ethical thought, beginning, as indicated above, in Ancient Greece and reaching into the modern era. Be ready to think hard about the nature of right and wrong, good and evil.

## Pilot School

*(Roam)*

“Cessna niner-niner-zero-eight-golf is departing from runway one-eight.” Licensed pilot Mike Roam is offering ground school for future aviators. We’ll fly the x-plane simulator program, practice maneuvers and navigation, study maps and charts, memorize emergency procedures, and practice our radio calls. Landing is important, of course, but there are many other things to learn including the physics of flight, the power of weather, and the rules of the sky. Both of my parents are licensed pilots and flight instructors—Mom often flew a plane with the same tail number as Amelia Earhart’s plane—and we encourage all young people to visit the sky.

## Poetry Writing Workshop

*(Skoble)*

Poetry is a craft as well as an art. Poems don’t happen, they are made. In this workshop we learn how to use the tools of poets. We take poems apart to see how they work, and we put things together to see if they work. Construction and experimentation, exploration and imitation are the processes we use to help us create poems. The poetry workshop is open to all, including dancers, thespians, musicians, athletes and astrophysicists. We meet one double period each week to share our efforts, to read and discuss, and, of course, to write.

Come and join in to trail the steps of these “giants” as they follow their individual quest for freedom and personal expression.

## Preschool Seminar

*(Fuerst and Preschool Teachers)*

*“I am cherry alive,” the little girl sang,  
“Every day I can be something new...”*

...begins Delmore Schwartz’s ode to childhood. I love this poem: it is what preschoolers do all day, trying on and discarding myriad characters, as they discover what is true, what is untrue, sneakily just like the rest of us. The difference: they live life out loud. Come be part of the conversation, playing with three and four year-olds at the preschool once a week, and meeting weekly as a seminar to revel in the something news.

## Student Internship in Technology @ Saint Ann’s

*(Forsythe)*

This elective will allow students to explore the realm of Information Technology in an educational environment. While the primary focus is on technical support, students will also learn how to manipulate and work with large datasets in database and spreadsheet applications, become familiar with network and wireless protocols and architecture, and work towards eventually being able to perform certain technical support tasks, under the supervision of the Technology Department staff. Students will gain a practical skill set acquired in a hands-on learning process, and will aid their peers and instructors in the use of technology at Saint Ann’s. This will require one to two periods per week, scheduled in periods where the student and their mentor are mutually available. **Prerequisite(s):** none

## Toy Design

*(Kaplan)*

*I could tell my parents hated me. My bath toys were a toaster and a radio.*  
– Rodney Dangerfield

We can do much better. From dolls to puzzles to hoverboards, every toy has to be imagined and then fabricated. In this seminar, we will explore the process of toy production, including aspects of design, manufacturing and ultimately sales. Guest lecturers will include professionals in the fields of design, graphic arts, intellectual property, manufacturing and retail. Students will work to design and prototype their own toys, using computer-aided drawing and 3d printing, among other tools. Class critiques will help hone the ideas and feasibility of each toy concept. At the end of the semester, each student should have a finalized design and prototype of their individual toy—perhaps the next Lego.

## True Stories 1

*(Donohue)* (Fall semester)

How do you write a story about a weird guy who lives in your neighborhood? (Start by reading Joseph Mitchell.) How do you write about a social trend? (Read Joan Didion.) How do

you write a celebrity profile without sounding like a twit? (Read Ian Parker.) How do you write about a sports star? (John Updike.) How do you write about subjects that don't want to be written about? (Janet Reitman on Scientology, Gay Talese on Frank Sinatra.) How do you write about race? (James Baldwin, Ta-Nehisi Coates.) About war? (Michael Herr.) How do you reconstruct an event of extreme complexity? (C.J. Chivers on a school massacre in Russia; David Grann on a wrongly convicted Texan.) How do you write about your own experiences? How do you shape your material? How do you tell a true story?

This seminar will explore various forms of narrative nonfiction—investigative journalism, war reporting, personal essays, feature stories, sportswriting, profiles, and travelogues. Each week we examine a classic example of long-form journalism. We read not only as literary critics but also as aspiring practitioners. We take the stories apart, and we try to figure out how to write them ourselves. We invite journalists to come and tell us about their work.

In early January, True Stories 1 ends—and then you have to decide whether you want to write a story yourself. If you do, you stick around for True Stories 2.

## **True Stories 2**

*(Donohue)* (Spring semester)

Those from True Stories 1 who want to write their own pieces stick around for the sequel. Everyone will write a long piece of narrative nonfiction—a feature story, a profile, a historical account, or a personal essay. (In recent years, pieces have run from 2,000 to 10,000 words in length.) For a few weeks, we talk about practical matters and bounce ideas off each other. Then we use the seminar period as a writing studio, with regular one-on-one meetings as each piece comes together. Completed first drafts are due on Tuesday, April 23. In recent years, several pieces from True Stories have been published in *The Ram* or *The Ram Magazine*. **Prerequisite(s):** True Stories 1

## **Yearbook: Send the Story of Your High School Life to Your Future Self**

*(Giraldo)*

Through imagery and book design, students will create a historical document that will encapsulate this very special time at this very special school. Photographers, illustrators, animators, and filmmakers will work together to communicate what you would like to document about this flash of time. Open to juniors and seniors. **Prerequisite(s):** two years of photography or portfolio review

---

# THEATER

---

All classes meet one double period per week unless otherwise noted.

## **Acting**

*(Barnett, Lamazor)*

This professional-caliber acting class emphasizes character study, acting technique, breathing, vocal, and relaxation exercises. Time is devoted to movement exercise, sense memory, and to improvisation, games and storytelling. Also, we will explore and read plays aloud together in class. Ensemble work is encouraged and developed. Scenes and monologues focus on discovering the individual actor's personal relationship to the role and to the text. Actors learn how to break down scripts and understand beats and actions. There are opportunities for performing scenes and monologues, geared toward the individual actor's needs and desires. Scene rehearsals with partners often take place outside of class time. We may have visits from special guest artists and workshop leaders, and we take trips to see exceptional productions around town. Ibsen, Shaw, Stoppard, Wilson, Brecht, Mamet, Nottage, Genet, Churchill, Williams, Shepard, Howe, Lorca, Kushner, Hall, Wilder, Jacobs-Jenkins, Fornes, Ionesco, Ruhl, Wilde, Shakespeare, and many more fascinating friends await you. Experience the joy of playing great roles! All acting class students participate in the Scene Marathon, which is presented in our theater. Come and participate in the extraordinary!

## **Acting Intensive**

*(Lamazor)* (4x per week)

Same description as above, except that this class may work on collaborative playwriting/performance or musical/movement projects, film projects, or full length plays, in addition to scenes and monologues. Students may direct scenes or projects on occasion. There may be several performances at different sites over the course of the year. Imagination, empathy, humor and love are our guiding forces. In this time period, in which technology is so heavily relied upon as the means of communication and self-expression, this class focuses on "being here" and being passionately "present" as artists, humans and authentic inter-actors! This class functions as a true, joyful "company" of actors! All Acting Intensive students participate in the Scene Marathon, which is presented in our theater. We will take trips to productions of note and have guest workshops! **Prerequisite(s):** open only to advanced students with the permission of the instructor

## **African Dance**

*(Jackson, Mackall)*

African Dance is an exciting survey of the techniques and traditions of dances from the African Diaspora with a special emphasis on the dances of West Africa. Classes are accompanied by live drumming. **Note:** Participation in the High School Dance Concert, an essential element of this class, requires attendance at weekend and afterschool rehearsals.

## **Costume Production**

*(The Department)*

Come explore costume design and construction, as you create personal projects and help build the costumes for the High School productions. All experience levels are welcome in this class, as assignments will offer a range of technical difficulty. In addition to focusing on construction techniques, students will have the chance to explore other topics such as fashion design, the intersection of art and costume, and Costume history. Each year the High School Costume students take a trip to explore a certain costume or fashion-related exhibit. Past trips have included excursions to The Fashion Institute of Technology's museum, a guided tour of the Garment District, a backstage tour of the costume shop at the Metropolitan Opera, and a Broadway matinee. There will be some opportunities to help design and coordinate pieces for the High School Playwriting Festival, the High School Film Festival or the High School Dance Concert under the guidance of the instructor. Welcome to the world of costume at Saint Ann's! **Note:** Costume Crew participation for a minimum of one play or dance concert is required.

## **Dance 1**

*(The Department)*

The class focuses on developing students' individual choreographic voices through improvisation and the creation of short movement studies. Class begins with a warm-up that integrates different techniques from ballet to African dance to yoga. Students are exposed to different choreographic approaches through attending performances and studying videotapes. In addition, they have the opportunity to work with professional choreographers, learning pieces and taking direction. Dances developed both individually and collaboratively with the class are performed during the year. Those developed in association with the instructor are eligible for performance in the student dance concert, for which original costumes may be designed or assembled by students. Both new and experienced dancers are welcome.

## **Dance/Choreography 2/3**

*(The Department)*

This class studies dance technique, improvisation and composition to create expressive dance pieces, exploring movement and drama through solo, duet and group forms. Modern dance technique leads to improvisational work and short studies to explore movement textures and qualities. We work with directing multiple bodies in space, using partnering techniques and

weight exchange to convey emotional meaning, and studying formal compositional elements such as symmetry, tension, dynamic use of space, costume and environments. Diverse dance styles, uses of rhythm, and music from many traditions are investigated, and students have the opportunity to learn pieces and take direction from professional choreographers. Dances developed in association with the instructor are eligible for performance in the student dance concert, for which original costumes may be designed or assembled by students. There are field trips to notable performances. **Prerequisite(s):** Dance 1 or permission of the instructor

## Dance/Choreography 4

*(The Department)*

We continue our study of dance technique, improvisation and composition. Emphasis is on the development of the individual artistic voice through complex, expressive dances incorporating solo and group aspects, examination of multimedia techniques, and the use of juxtaposition and collage to expand dramatic possibilities. Each student undertakes a research project supporting the creation of his or her own dances. The Lincoln Center Library for the Performing Arts provides a resource for our study of diverse music and the integration of costuming, language, and props or sets into our dances. Students have the opportunity to learn pieces and take direction from professional choreographers. Dances developed in the class in association with the instructor are eligible for performance in the student dance concert, for which original costumes may be designed or assembled by students. There are field trips to notable performances. **Prerequisite(s):** Dance 1, Dance/Choreography 2/3, and permission of the instructor

## High School Puppetry

*(Asbell)* (1x per week)

This class is open to all current and former puppetry students, and if you have never taken puppetry before, now is a good time. All skill levels are welcome. Individual projects of your choosing may include: building rod puppets, hand puppets, marionettes, body puppets, masks, and creating puppet shows.

## Moving Image 1

*(The Department)*

This class concentrates on the study of film as a two dimensional art form that moves, focusing on the dynamics of screen space and the language of cinema. Working with 16mm film equipment, the class emphasizes the basics of film emulsions, lenses, light readings, and editing. Students develop ideas into well-structured screen narratives, and then each student writes a one page treatment for a short silent film. Working individually or with a production partner, students storyboard, produce, direct, and edit their treatment into a 16mm black & white film. This is a non-linear course requiring constant participation and much out-of-class work. **Note:** This class is open to sophomores, juniors, and seniors.

## Moving Image 2

*(The Department)*

With continuing emphasis on two-dimensional design and the language of cinema, this class focuses on digital video production and electronic editing, producing sync-sound narrative projects. Students are introduced to sound recording technology, and the aesthetics of the sound image—writing dialogue, directing actors, recording location sound, and layering sound images during editing. The class produces four, seven minute screenplays developed during the screenwriting component of the class. Students are divided into production teams to storyboard, cast, produce, direct, shoot and edit these team projects. **Prerequisite(s):** Moving Image 1 and permission of the instructor

## Moving Image 3

*(Dobski)*

This is a course in advanced film production and color cinematography. Students shoot 16mm color negative film, transfer the images to high definition video, and then edit electronically, producing a three-to-five minute work with a complete soundtrack, including an original score. **Prerequisite(s):** Moving Image 1 and 2 and permission of the instructor

## Ninth Grade Videography

*(Mirabella-Davis, Oppenheim)*

This two-semester workshop reflects the structure of an auteur HD video production class. Students will intensively study all aspects of filmmaking and videography including camera direction, directing the actor, lighting for color, screenwriting, interview techniques, editing, and sound design. In the second semester each crew of three will write, cast, and independently shoot an HD, color short or documentary. In this burgeoning age of technological advancement, digital filmmaking has emerged as one of our era's principle forms of expression, fiction, and broadcast. The goal of this course is to give students the skill sets to tell their own stories in a new and accessible format. **Note:** This class is open to freshman only.

## Performance Art

*(Barnett)*

In this class, we cultivate an improvisational technique that encourages personal storytelling, spontaneity and abstract thinking. There is a unit on autobiography and a unit on interactive site-specific theater (performances, 'happenings,' or installations set outside the traditional stage). Past work has taken place in a stairwell, a park, and on a street corner; pieces have taken the form of a scavenger hunts, dance parties, and games. Students work individually and in groups. Through trips and lively discussions the class learns about the role of performance in history and contemporary culture. Given the role of technology in art (and life!) today, this class is also a time to 'disconnect,' and to explore the impact that live performance can have on both the audience and the artist. This is a course for students with or without previous experience in improvisation. It is class for visual artists and dancers interested in

working with text, and writers wanting to transform their ideas into physical life. The class also benefits anyone who is nervous when speaking in public.

## **Play Production**

*(The Department)*

Each member of a production staff, from the director to the stagehand, has specific duties and skills. Students in this class learn techniques for running a smooth and professional show, taking on the responsibilities for our theatrical productions. Topics covered are construction, maintenance and set-up of props, reading and taping-out scale ground plans, writing cues, calling light and sound cues, and more. This is a course for advanced tech students committed to our theater and productions. Students with an interest in stage management, props mastering, as well as light, set, and sound design are encouraged to enroll and to deepen their experience of backstage life; the vital, unseen, component of the theater. **Prerequisite:** This course is open to students with one year of Technical Theater, or by permission of the instructors. **Note:** All students are required to work on at least one production which will require time outside of class.

## **Playwriting**

*(The Department)*

This course explores the elements of playwriting that make it a three-dimensional living art form. Through weekly exercises and assignments, we approach the playscript as a blueprint. The course culminates in a festival of staged readings of the students' plays. In addition, students explore the work of contemporary playwrights by analyzing and discussing their texts, ultimately compiling a list of "fellow travelers," playwrights whose work each student feels drawn to in content and form.

## **Playwriting Intensive**

*(The Department)*

Playwriting intensive is an investigation into playwriting strategies, movements, and motivations. Plays will be approached from all angles. Students should have experience writing plays, and an eagerness to sharpen their commitment to the craft. In addition to exercises, there will be an emphasis on reading and discussion. From the study of contemporary plays, to theoretical texts, from tragedy to comedy, this intensive workshop encourages students to challenge their preconceptions, and grapple with wide-ranging theatrical concepts. The workshop culminates in a festival of new work, which is the last major theater production of the year. The festival requires a major commitment of time and energy during the final three weeks of school. **Prerequisite(s):** at least one year of High School Playwriting and permission of the instructors

## **Shakespeare Workshop**

*(Reardon)*

Get ready for Will the Bard in all his glory... from sonnet to soaring soliloquy. The workshop begins with learning and performing a sonnet then proceeds to monologues and on to scenes and finally at year's end we bring it all together in two performances, one at school and one at Manhattan's Drama Book Shop called "Will and Friends from Brooklyn." Those friends may include some of the revenge tragedians such as Marlowe and Middleton and the later Restoration Comedians but it is mostly Shakespeare. In this workshop, you will experience the joy of playing Shakespeare and gain a trust and ease of performing the playwright's blank verse as if it were your native tongue. You will also use all your other talents from singing to musical skills on instruments both modern and old fashioned. And in our scene studies, everyone plays a leading role.

## **Technical Theater**

*(The Department)*

An introduction to stage carpentry and other theatrical craftsmanship, Technical Theater is both a practical and a theoretical course. Carpentry, electrics, audio, and effects lectures act as groundwork for hands-on experience with power tools, lighting equipment and sound gear. Students work side-by-side with their teachers, developing basic stage construction skills, building flats and platforms, creating props, and painting. Stage etiquette is adhered to in this productive environment. We encourage and welcome students who wish to extend themselves further to apply for a position on a production running crew; it should be noted that this will require time outside of class.

---

# HUMANITIES COURSE PERIODS

---

## **Period C (English)**

American Literature: United States? (Darrow)  
The Fall: Temptation, Risk, and  
Ruin in Literary Lives (Avrich)  
Oddballs and Square Pegs (Fodaski)  
Science Fiction (Aronson)  
World War One (Mellon/Meslow)

## **Period C (History)**

The American Civil War in History  
and Memory (Kapp)  
The Cold War and Vietnam (Kang)  
Discrimination and the U.S.  
Legal System (Heller)  
History of American Childhood (Goldberg)  
Postwar America (Schragger)

## **Period D (English)**

17th Century (Donohue)  
The Body in Literature (Mooney)  
Build It Up/Burn It Down (Rutter)  
The Great American Novels (Khoury)  
Queer Literature (Spencer)  
Reading and Writing (Bosworth)  
World War One (Mellon/Meslow)

## **Period D (History)**

Greek History and Thought (Deimling)  
History of China (Swacker)  
The Medieval Mind (Aronson/Stevens)  
Modern Middle Eastern History (Ertas)  
The Rise and Fall of the Soviet Union (Brazee)

**Non C/D:** Making Movements, Socioeconomics and Race in Medicine

---

# SCIENCE COURSE PERIODS

---

## **Period A**

Biology  
Chemistry  
Physics  
Analytical Physics  
Animal and Plant Adaptations  
Astronomy  
Neuroscience (fall)  
Psychology (spring)  
Organic Chemistry

## **Period B**

Biology  
Chemistry  
Physics  
Analytical Physics  
Advanced Physiology  
Molecular Biology  
Ocean/Atmosphere Science  
Science Policy

**Non A/B:** Cooking Chemistry, Electricity and Magnetism, Independent Science Research

**TBD:** Advanced Biology, Advanced Chemistry, Mechanics and Relativity, Socioeconomics and Race in Medicine









Saint Ann's School  
129 Pierrepont Street, Brooklyn, NY 11201-2705  
T 718-522-1660 | [www.saintannsny.org](http://www.saintannsny.org)