

SAINT ANN'S SCHOOL

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HIGH SCHOOL

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COURSE CATALOG

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2020-2021

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Dear High Schoolers,

“It was straightness and emptiness, of course; the symmetry of a corridor; but it was also windows lit up, a piano, a gramophone sounding; a sense of pleasure-making hidden...Absorbing, mysterious, of infinite richness, this life.”

—Virginia Woolf, *Mrs. Dalloway*

As I listen to someone playing our very own grand piano in the lobby, I am struck by the infinite richness of our life here at Saint Ann’s. There are absorbing mysteries around every corner of this book, and I am excited to see how much hidden pleasure-making will result from the incredible list of classes that you are about to explore.

I greatly look forward to a year of joy and experimentation within our ever-asymmetrical corridors.

Love,  
Chloe

Cover Artwork by:

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# MINIMUM

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# GRADUATION

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# REQUIREMENTS

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<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

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# HIGH SCHOOL

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## COURSE CATALOG

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### 2020-2021

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# ART

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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 employ 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, is 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 projections and perspective). Students progress from representing simple three-dimensional forms to drawing self-designed architectural structures and translating their architectural ideas into representative scale models.

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

*(Rumage)*

This course is an extension of Introduction to Architecture and Design 1. 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. **Prerequisite(s):** Introduction to Architecture & Design 1

## **Advanced Architecture & Design**

*(Rumage)*

See Seminars.

## **Introduction to Digital Photography**

*(Venable)*

This course will introduce the basics of photography using a digital workflow. We will begin by focusing on the various technical tools, concepts, and philosophies essential to making compelling images. We will focus on camera operation, composition, and effective use of light, as well as the basics of Photoshop and digital printing. Technical assignments will be used as a jumping-off point to build basic skills and enable a greater creative vision. As the technical aspect becomes second nature, each student will begin to form their unique approach to image-making. No photography experience necessary.

## **Advanced Digital Photography**

*(Venable)*

This course will dive further into the topics covered in Introduction to Digital Photography and take a more experimental approach to image-making. We will continue working on more complex techniques in Photoshop and work together to create individualized projects specific to each student's interest in photography. Students will hone their conceptual focus through readings and critical analysis, class critique, and discussions. A solid understanding of how to use a DSLR camera and basic understanding of Photoshop is required. **Prerequisite(s):** Introduction to Digital Photography, or equivalent experience in digital photography, as determined by the instructor.

## **Drawing**

*(Greenwood, 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 such as pencil, charcoal, pastel, ink, watercolor, colored pencils, marker, and transfer techniques, we will explore line, tonality, volume, and texture as we gain rendering skills towards the development of an expressive personal vocabulary.

## **Failure: Art, Philosophy, and Fabric**

*(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 a range of art projects, focusing primarily on video, collage, and sewing. Assignments might include creating a self-portrait, making a video from found footage, creating fabric banners, presenting a manifesto, or collaborating to create an installation. As the year progresses, projects will become increasingly

open-ended, and students will be encouraged to follow their own interests. No prior art-making experience is assumed.

As with any creative endeavor, failure is part of the art-making process. But as we complete our projects, other routes of entropy, lack, and absurdity will creep in. For example, how do we talk about what we've made? Can we make judgments? Who decides which points of view are valid, and how? This leads us to our second track of the course, where students will consider failure from a philosophical and political angle. Through readings and discussions, we will consider how concepts like absolute truth or religious certainty have become difficult to latch onto. Even the boundaries between commonly accepted 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, Friedrich Nietzsche, Fred Moten, Jack Halberstam, Chris Krauss, Paul Preciado, Audre Lorde, and Ian 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. During each drawing session, we will focus on anatomy and proportion, and on 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.

## **The Joys of the Research-Based Art Practice**

*(Collins)*

This course is an exploration of art practices that have come to be known as “research-based.” Together, we’ll consider research as a legitimate and critical foundation for artistic output. There are two main aspects of the course: first, throughout the year we’ll study artists that have worked in this mode. We’ll look at the way artists have studied psychoanalysis, history, sociology, and other disciplines to add conceptual depth to their artworks. Secondly, students will create their own works of art. The impetus for these works can come from any number of drives: a personal or political cause, an interest, an impulse. Students will begin to study all aspects of the thing they’ve chosen, and make artworks in response to this study. This artistic output can take any number of forms, from the concrete (sculpture, physical installations) to more ephemeral works (short videos, websites, memes). We’ll place an emphasis on utilizing technology as a tool to produce our final works, with a particular focus on using Photoshop and other Adobe Suite programs. In the end, we hope to produce both knowledge and art through circuitous study. We look at art, we read books, and then we make things afterwards. That’s the idea.

## **Painting**

*(Hillis, Lee, Tokmakova)*

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

## **Oil Painting: Style and Technique**

*(Arnold)*

This course covers basic painting techniques for working on primed canvas with a brush and palette knife. Students will learn the rules of composition and color contrast, the creation of texture, and varnishing. We will explore various styles from the mid-19th century to today, including Realism, Impressionism, Cubism, Primitivism, Surrealism, and Pop Art, and study paintings by Van Gogh, Cézanne, Rousseau, Matisse, Picasso, Magritte, Hockney, Freud, and others. This will help students learn to recognize a particular style and also use it in their own painting. Students will be free to paint from imagination or observation, making still-lives, portraits, and landscapes. Field trips to museums and student presentations on assigned artists will take place throughout the course.

## **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, Venable)*

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, using 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, as determined by the instructor.

## **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.

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# COMPUTER

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We are surrounded by science fiction—portable computers, artificial intelligence, 3D printing, electronic games, online journals, instant reference books, genetic sequencing, nanotech, increasingly massive datasets—evidenced by 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/sacc2021classes](http://tinyurl.com/sacc2021classes) for more information about any of the courses listed below.

## 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. **Prerequisite(s):** none

## Algorithms for Bio-Informatics

*(Roam)*

For experienced programmers, this class introduces programs that analyze genetic sequences. There are numerous exercises in pattern-matching and string comparisons, calculating family trees based on DNA sequences while taking into account the basic operations of mutation, insertion, deletion, and transposition. Though we mostly use simplified models of DNA (without worrying about protein folding), this topic gives us a chance to study “design patterns,” data structures and algorithms for large data sets, and basic molecular models. **Prerequisite(s):** Programming 1

## Computer Animation

*(The Department)*

Learn about computer-aided methods of animation with frame-by-frame animation including the traditional walk-cycle project. Use more advanced techniques including digital puppets within a 3D space, and explore special effects such as lightning and explosions. Additional projects may include stop motion, green screen projects, 3D movie title sequences (like the iconic Star Wars titles), music videos, and a final animated movie using techniques of the student's choosing. No prior experience is required, but attention to detail and perseverance are a must! **Prerequisite(s):** none

## Designed for Disaster

*(Caccamise)*

This is an applied design course in which students will use engineering, 3d printing, and computer aided drafting skills to deal with potential changes from climate change, extreme weather, and rising sea levels. Students will dream up, design, and build renewable energy sources and other inventions that may help to avoid the worst effects of climate change. No experience needed. **Prerequisite(s):** none

## Physical Computing 1

*(The Department)*

Move beyond the idea that a computer is a box or a system of information retrieval and processing, and learn how to interact physically with a computer without using the mouse, keyboard or monitor. 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 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

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# ENGLISH

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## Global Perspectives (9th Grade)

*(The Department)*

The backbone of the ninth grade English course is formed by nineteenth and twentieth century writers from around the world—Achebe, Adichie, Lahiri, and Orwell—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

### Big City Lit

*(Donohue)*

Some love the big city, some hate it, and some love to hate it. “Prepare for death, if here at night you roam,” a young Samuel Johnson wrote of London in 1738. Four decades later, Johnson declared that “when a man is tired of London, he is tired of life.” The poet William Blake was so dismayed by “marks of weakness, marks of woe” in London faces that in 1800, at age forty-three, he packed up and left. Three years later he moved back.

In this class, we read about five big cities—Beijing, Paris, St. Petersburg, London, and New York, roughly in that order—and the various ways by which they’ve been loved and hated. We’ll also read some poets, some who praise city life (Whitman, O’Hara), some who find it soul-crushing (Wordsworth, Yeats), and others who can’t make up their minds. We’ll start the year with Lao She’s *Rickshaw Boy*, a Beijing novel from 1936. Then we’ll study a trio of sprawling urban novels of the 19th century: Balzac’s *Le père Goriot*, Dostoevsky’s *Crime and Punishment*, and Dickens’s *Great Expectations*. We end in modern-day New York, as depicted in Teju Cole’s *Open City* and Rachel Kushner’s *The Flamethrowers*.

## The Fall

(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 makes a good point. He is trying to warn his buddy Macbeth not to trust the three freaky, bearded witches they not-so-coincidentally bump into on the side of the road. Sure, the hags call 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 hollow 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. Lady Macbeth is a good egg before she asks the evil 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 upstanding, moral individuals fall from grace so precipitously and hard? When they make bad, irreversible decisions, do they entirely change? Or do their core personalities remain untainted? 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 assorted poems and perhaps another contemporary play. 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.

## Global Women's Literature

(Mooney)

What is women's writing? It's the writing women do, of course—but then, as Simone de Beauvoir famously asked in *The Second Sex*, “What is woman?” In this course, we will read literature by and about women from around the world. As we read, we will consider the many ways in which common experiences of womanhood are shaped by differences in culture, race, geography, sexual identity, and social position. We will also experiment with writing of our own: be prepared for weekly in-class creative assignments.

We will read some (but not all) of the following:

<i>Beloved</i>	Toni Morrison	United States
<i>Persepolis</i>	Marjane Satrapi	Iran
<i>Her Body and Other Parties</i>	Carmen Maria Machado	United States
<i>Freshwater</i>	Awkwaeke Emezi	Nigeria
<i>Women of Algiers in Their Apartment</i>	Assia Djebar	Algeria
<i>Like Water for Chocolate</i>	Laura Esquivel	Mexico
<i>The Vegetarian</i>	Han Kang	South Korea
<i>To the Lighthouse</i>	Virginia Woolf	England
<i>Tracks</i>	Louise Erdrich	Turtle Mountain Chippewa Nation
<i>Housekeeping</i>	Marilynne Robinson	United States
<i>Little Fish</i>	Casey Plett	Canada
<i>Paradise of the Blind</i>	Dương Thu Hương	Vietnam
<i>The God of Small Things</i>	Arundhati Roy	India

## The Great American Novels

(Kboury)

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, casting 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 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 most of the following (several of which, it's worth noting, are also great in length, so be prepared for the occasional 30-page assignment):

<i>Invisible Man</i>	Ralph Ellison
<i>Lolita</i>	Vladimir Nabokov
<i>Giovanni's Room</i>	James Baldwin
<i>Beloved</i>	Toni Morrison
<i>Housekeeping</i>	Marilynne Robinson

## The Kids Are Alright? Children on Their Own

(*Fodaski*)

When Richie Havens performed the traditional spiritual "Motherless Child" at Woodstock in 1969, he retitled it "Freedom." In what way does this sense of loss—being a parentless child, or leaving childhood behind—also bring with it a freedom we've never known? We have all, at some time and however differently, felt the double edges of growing up and away. Burgeoning independence is both gain and loss: we become independent by separating from our parents, by leaving home. When and how we negotiate this process is dependent to some extent on how we've grown attached, the bonds we've forged, the models we've learned from.

This class will look at an array of protagonists who are finding their way in the world without parents. Some never knew them and are faced with a kind of self-discovery that verges on the archeological. Some are just beginning to discover their own identities outside of their family ethos, leaving home for the first time. All of them are figuring out who they are, as are we all.

The texts we will almost certainly read:

<i>Giovanni's Room</i>	James Baldwin
<i>Housekeeping</i>	Marilynne Robinson
<i>Jazz</i>	Toni Morrison
<i>One of Ours</i>	Willa Cather
<i>To the Lighthouse</i>	Virginia Woolf

Other possibilities include: George Eliot's *Silas Marner*, Shakespeare's *King Lear*, Charlotte Brontë's *Jane Eyre*, and Zora Neale Hurston's *Their Eyes Were Watching God*. We will also read many poems, and we may view the occasional film.

## Literature Of Disorientation

*(Darrow)*

It's a vast, messy, hard-to-read world out there, people. We are always trying to orient ourselves. We develop a sense of self, find points of view, embrace identities, and affiliate with family, friends, partners, schools, jobs, neighborhoods, even nations. For better or worse, though, these identifiers don't always last.

We will examine how a variety of authors have captured life's continual disorientations. We'll unpack the interior, social, political, and other tensions that can frustrate our sense of clarity, order, or direction. We'll read about all kinds of people who get lost—and some who get found.

A few authors of longer works being considered include Atwood, Baldwin, Dostoevsky, Hamid, Ishiguro, Kushner, Lori-Parks, Pinter, Puig, Morrison, NDiaye, O'Connor, Robinson, Shakespeare, and Wolff.

We will also read plenty of shorter works: poems, stories, articles, and literary excerpts.

## Literature and the Natural Environment

*(Rosinberg)*

*Books! 'tis a dull and endless strife:  
Come, hear the woodland linnet,  
How sweet his music! on my life,  
There's more of wisdom in it.*

—William Wordsworth, "Expostulation and Reply"

In an imagined poetic dialogue with his former schoolteacher, William Wordsworth gives his readers a seemingly paradoxical bit of advice. Put down your books, he tells us, and commune directly with the natural world. It might seem easy enough to follow such directions until we remember that we are encountering them in a book—in this case, the famous *Lyrical Ballads* of 1798. Why, then, does Wordsworth appear to protest his chosen form of expression, his own life's calling? More broadly, how do direct encounters with the sights and sounds of the natural world relate to the pleasures of literary experience?

In this class, we will examine how and why we turn to literature in order to make sense of our relationship to the natural world. Our guiding idea: writing about nature is also a way of writing about human community. Large, philosophical questions about how we exist with others, and with the world we have inherited, should emerge. Are we observers of the nature around us, or an inextricable part of it? Is nature a civilizing force, a place of solace and seclusion, or a Darwinian embodiment of a disordered world, "red in tooth and claw?" Where and

how do we locate nature, in rural spaces and in cities alike? How do gender, class, race, and culture impact the way these questions are asked and understood over time? And, not least, how may literature help us in a time of environmental crisis? The urgency of global climate change and the meaning of environmental justice will drive our discussions of the literature we read, both old and new.

As we explore these questions and more, we'll pay close attention to the way each text is imagined and constructed—to the organic relationship between a work of literature's content and its form. Novels may include some (but not all) of the following: Thomas Hardy's *Far From the Madding Crowd*, Virginia Woolf's *Between the Acts*, Willa Cather's *O Pioneers!*, Upton Sinclair's *The Jungle*, Octavia Butler's *Parable of the Sower*, Louise Erdrich's *Tracks*, and Julian Barnes' *England, England*. Shorter readings by John Muir, Rachel Carson, Annie Dillard, Leslie Marmon Silko, Jamaica Kincaid, and Raymond Williams and poetry by Wordsworth, Emily Dickinson, Robert Frost, Elizabeth Bishop, William Carlos Williams, Derek Walcott, Lucille Clifton, Robert Hass, and Joy Harjo will also give us a rich variety of styles and strategies to consider.

## **Love and Power in American and British Literature 19th Century to the Present** (Bosworth)

In this course we will study the links between sex, love, marriage, and the power structures that help to define these. Issues of gender, sexual preference, class, race, and religion will inevitably arise; we will examine these topics through the lens of the texts in question. Moreover, we begin with the premise that most great books are only as right-minded as their eras, and authors, permit. We will examine literary portrayals of desire, ranging from, say, the struggles of Kate Chopin's protagonist in *The Awakening*, to the seductive storytelling of Angela Carter's quasi-heroine in *Nights at the Circus*. Other texts may include (depending on students' prior readings): Jane Austen's *Sense and Sensibility*, Thomas Hardy's *Tess of the D'Urbervilles*, Edith Wharton's *The Age of Innocence*, E.M. Forster's *Howards End*, Jeannette Winterson's *Oranges Are Not the Only Fruit*, Zadie Smith's *On Beauty*, Raymond Carver's *What We Talk About When We Talk About Love*, Jamaica Kincaid's *Lucy*, E.L. Doctorow's *Ragtime*, and more. Poets—we will read a slew of poems—will include: Walt Whitman, Frank O'Hara, Rita Dove, Anne Sexton, Tracy K. Smith, Yusef Komunyakaa, and Robert Lowell. We will inform our discussions by reading essays and excerpts by: Margaret Fuller (*Woman in the Nineteenth Century*), Audré Lorde (*Uses of the Erotic: The Erotic as Power*), Virginia Woolf, James Baldwin, Kimberlé Crenshaw, Junot Diaz, and Carmen Maria Machado.

## 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 (I note each author's most famous work, not necessarily the work we will read): Isaac Asimov (*The Foundation Series*), 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 (*Lord of Light*). We will, of course, read a number of short stories; as all sci-fi readers know, the short story is a favorite medium of practitioners of the genre.

## Self and Place

(Bodner)

Our identities are slippery things: who we think we are shifts in relation to our memories, our surroundings, our friends. As Bernard puts it in Virginia Woolf's *The Waves*, "I am made and remade continually. Different people draw different words from me." In this course, we'll immerse ourselves in texts that throw the notion of one stable identity out the window. How do relationships with others redefine and break open conceptions of the self? And how do experiences of the natural world inform this pliable construction of selfhood?

A sample of transcendentalism will start us off in the fall. With Ralph Waldo Emerson, we'll explore what it means to "become a transparent eye-ball" in the woods, and with Margaret Fuller, we'll engage with her prescient understanding of gender as a bell curve rather than a binary. Walt Whitman and Henry David Thoreau will also make cameo appearances. Next, we'll read Virginia Woolf's *Mrs. Dalloway* or *The Waves*, Toni Morrison's *Sula*, and Joan Didion's *The Year of Magical Thinking*. While each text is utterly distinct in style and form, all contain characters who contend with—and maybe even celebrate—the malleability of their own identities. Other likely authors and poets include Annie Dillard, Octavia Butler, Frank O'Hara, and Maya Angelou.

## Telling War Stories: Writing And Art That Remember War

(Chapman)

Western literature begins with a war story. Homer sings of valorous fighters who prove their heroic culture and character on the permanent-red battlefields of the *Iliad*. Achilles, isolated by loss and murderous anger, fights a war that tests and consumes him. The last two centuries have delivered conflicts that cross into realms unimagined by Homer. The Trojan War lasted ten years. The United States is now well into its eighteenth year of war in Afghanistan—a war largely sidelined because it's out of sight and fought against faceless others.

We'll confront the cultural values that create war and the enduring consequences of winning and losing. What are they fighting for? Whose war is it? At times we'll experience the conditions of battle, but we'll often approach war at a slant. After seeing how Greek culture extols the godlike fighter, we'll listen to stories about modern wars and try to surface in their narrative wake. Many of our characters won't be on the battlefield; they'll fight solo, learn about war through relatives and stories and hand-me-down beliefs; they'll sift questions about values while they experience aftermaths. We'll persistently ask how family, tribe, and nation bond to create war, see or deny its consequences, and sometimes transcend it. We'll explore what happens to individuals and the community in the shadow and undertow of war. Our central topics will include epic Troy, America before and after the Civil War, the World Wars, and the Vietnam War. We'll look at paintings and prints, photographs and film.

Probable texts include selections from: *The Iliad*, Morrison's *Beloved*, Ozick's *The Shawl*, Sebald's *The Emigrants*, and O'Brien's *The Things They Carry*. Possible texts include: Woolf's *Mrs. Dalloway*, Heller's *Catch 22*, and Ishiguro's *An Artist of the Floating World*. Writers may include: Shakespeare, Brecht, Bao Ninh, Le Ly Hayslip, Wilfred Owen; Lincoln, Michael Herr, Susan Sontag, and Ta-Nehisi Coates. Artists and filmmakers include: Euphronios, Goya, Brady, Grosz, Kollwitz, Coppola, Renoir, Kubrick, Jewison/Fuller, and Waad al-Kateab.

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# HEALTH

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## **9th Grade Health**

*(The Department)* (Fall semester)

9th grade health focuses on substance use, sexuality, consent, body image, eating disorders, and adjusting to the high school experience. We explore how we make health-related decisions, discuss prevention as a cornerstone to wellness, and examine contemporary issues in health.

## **10th Grade Health**

*(The Department)* (Spring semester)

10th grade health is interdisciplinary in focus and weaves in voices from around our school community in order to closely address issues of physical and reproductive health and wellness, identity, relationships, and adolescent development, among other topics. The class focuses on the practical application of health knowledge.

## **11th Grade Health**

*(The Department)* (Fall semester)

This class looks at health as both a personal and social issue. Weaving in current events, media, and recent research, 11th grade health does a deep dive into mental health and tries to help students navigate their increasing independence as they prepare for adulthood. We look at bystander intervention and the creation of safer communities. 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.

## **High School Mentoring**

*(The Department)*

(Please see Seminars)

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# HISTORY

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## **World History: The Age of Revolutions 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.

## **African-American History**

*(Johnson)*

This course will cover African-American history from the Atlantic Slave Trade to the rise of the Black Lives Matter movement. The class will focus on the social, cultural, political, and economic circumstances that arise from the 17th–21st centuries. We will use *Freedom on My Mind: A History of African Americans with Documents* as our main textbook, for the purpose of contextualization. There will also be an emphasis on primary sources to magnify the voices of African-Americans that are often ignored in the larger and more popular narratives of American history. Some of the themes we will explore include forms of African resistance against chattel slavery, the Early Black Medical Movement, African-American labor unions during the 1940s, the political activism of heterosexual women like Fannie Lou Hamer and Rosa Parks during the 1960s, along with lesbian activists like Audre Lorde and Pat Parker. This class aims to illustrate the diversity within the African-American community throughout the centuries. The class will culminate with a final research paper, and may also include a trip to some important civil rights sites in Alabama.

## **Cinema of Youth: History and the Art of Film**

*(Dobski/Goldberg)*

(See Interdisciplinary Studies)

## Democracy and Dictatorship

(Kang)

How do human societies organize themselves? What is the difference between social and political authority? What about civic and just laws? Are humans equal? And so on....

There are many questions presented in this course. In our examination of the wide range of political theories that have transpired since ancient times, we will attempt to address a few. A successful exploration of political theory will both formulate a question that is appropriate to the context in which it is studied, and utilize a well-reasoned and systemic response.

Our exploration of political theory will begin with the art of asking the right questions. The formulation of these questions will cover three broad categories: First, what is human nature? Second, what is the relationship between human nature and society? And, finally, what are the variables that will affect this relationship? In looking at this final category, we will study specific outcomes of theories - so called "democracies" and "dictatorships" - that transpired throughout the last millennia of history. Ranging from an investigation of the Hindu vision of life and the Socratic notion of truth to the influences of religion during the Middle Ages and the changes in the world order of the last two centuries, we will both examine our questions and assess the historical contexts of various theoretical applications. Be prepared to explore these questions and contexts in probing discussions, debates and written analyses.

Readings may include: *The Bhagavad-Gita*; Sophocles' *Antigone*; Plato's *Last Days of Socrates* and *The Republic*; Aristotle's *The Politics*; The Koran; The Bible; Machiavelli's *The Prince*; J.J. Rousseau's *Basic Political Writings*; Erich Fromm's *Marx's Concept of Man*; Marx and Engels' *The Communist Manifesto*; Sigmund Freud's *Civilization and its Discontents*; Emma Goldman's *Living My Life* and *My Disillusionment in Russia*; Adolf Hitler's *Mein Kampf*; Mohandas K. Gandhi's *Basic Political Writings*.

## 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.

## **New York City History**

*(Swacker)*

New York City History will provide a broad overview of our city. The course will examine the lengthy history of New York City from the Dutch colonial period (1625-1664), through the English period (1664-1783), and up to the present. The history of the city will be examined from different perspectives: economic, spatial, immigration and demography, religion, ethnicity, race, politics, and the arts (including architecture and popular culture). The course will go beyond the period of master builder Robert Moses (1930s-1960s) to include the building boom and population growth of the past thirty years. An area of general emphasis will be large public projects: water service through reservoirs and aqueducts, bridges, canals, roadways, subways, airports. There will also be opportunities to research and write about selected neighborhoods.

## **A Peoples' History of Disease**

*(Bertram)*

This class will examine the variety of ways in which human society and culture shape and have been shaped by sickness, following Johanna Hedva's critique that illness is simultaneously social, cultural, and biological, and it behooves us to ground ourselves in the historical relationships between human populations and disease. We will investigate the impact of epidemic diseases like plague, cholera, and influenza, endemic diseases like Hansen's disease (leprosy), tuberculosis, and measles, and how these categories are fluid. We will strive to understand the relationships between illness, colonialism, and structural oppression. We will also be looking at the fields of critical theory, disability studies, medical anthropology and sociology, medical jurisprudence, and public health. Readings may include Foucault's *Security, Territory, Population*, Day's *Consumptive Chic*, Garrett's *The Coming Plague*, Brandt's *No Magic Bullet*, Fenn's *Pox Americana*, Johnson's *The Ghost Map*, and Edmond's *Leprosy and Empire*. Writing and research of a concomitant level will be expected of all participants.

## **Politics and the Media in Modern America**

*(Kapp)*

*One reason that cats are happier than people is that they have no newspapers.*  
poet Gwendolyn Brooks

We live in a media-driven society—a world practically unthinkable without the media—and yet many Americans distrust, even hate the media. Instead of creating a global sphere, digital media seems to splinter public discourse into countless echo chambers. How did we get here? Would we be happier without newspapers, Twitter, and all our mass media? Would we be more democratic or less? Would there be more social justice, or would we be even further behind in our movements for equality?

In this course we will seek answers to these questions through a historical study of mass media and its effect on the dynamics of democratic politics, using the presidential election

and protest movements as two broadly construed case studies. As we approach to the 2020 election, we will provide crucial historical perspective by examining the changing role of the media in modern American politics in cases ranging from FDR's fireside chats to Donald Trump's digital "Twitterstorms."

Beyond electoral politics, we will also consider how social media has given new life to public activism and protest movements, a counter to popular politics. From #BlackLivesMatter to the Youth Strike for Climate, young activists have taken the world by storm, using the media as a megaphone. These technologies and platforms are creating new opportunities and new risks. Our goal is to understand their ideas, tactics, and challenges by examining them against the backdrop of past protest movements that might include Black Power, Gay Liberation, and Feminist Movements from Suffrage to #MeToo.

There will be lots of reading and writing in this course, and you can count on becoming a smarter consumer of the news. Alongside conventional writing assignments and a research paper, there will be at least one project challenging you to express your ideas in the very media being considered (blogs, DIY print media, podcasts).

## **Postwar America: From Rosie the Riveter to the Age of Reagan**

*(Schrager)*

This course examines the political, economic, social, cultural, and intellectual history of the United States from World War II to the present. Topics covered include political milestones such as Watergate, the shifting political parties, and the election of 2000; social developments such as suburbanization, the Civil Rights Movement, the New Left, feminism/women's rights, the AIDS crisis, and the rise of the New Right/neo-conservatism; economic issues such as the War on Poverty and Reaganomics; 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), *Fault Lines: A History of the United States Since 1974* (Kruse & Zelizer), 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 throughout the year.

## **Sexuality, Gender, Christianity**

*(Higa)*

Celibate monks, virgin saints, homophobia, “traditional” marriage—the Christian tradition has had an enormous influence on Western (and now often global) systems of sexuality and gender. In this class, we will investigate the intersections of sexuality, gender, and Christianity in various historical, social, cultural, and spiritual contexts. Beginning in antiquity and ending in the present day, we will explore a number of themes, including: biblical foundations, chastity and virginity, the Virgin Mary and other female saints, male relationships and male bodies, erotic mystical literature, medieval views of homosexuality, gay spirituality and queer theology, evangelical ex-gay ministries, and the discussion around same-sex marriage. Students will be expected to read carefully and write regularly. A midterm paper and a final paper or project are required.

## **Social Movements in Latin America**

*(Robiolio)*

*The Latin American cause is above all a social cause: the rebirth of Latin America must start with the overthrow of its masters, country by country. We are entering times of rebellion and change.*

—Eduardo Galeano, in *Open Veins of Latin America* (1971)

Despite popular portrayals of Latin America as culturally and politically homogenous, the region is home to distinct racial, ethnic, language, and religious groups. This course will examine social and activist movements in the region, and will be organized thematically to investigate different types, or “branches” of movements. Specifically, we will investigate anti-colonial movements, such as the Colombian Revolution, anti-authoritarian movements, such as the 14th of June Movement in the Dominican Republic, and identity-oriented movements, such as Afro-Latinx, indigenous, LGBTQ, and women’s organizing. While acknowledging the intersectional nature of many of these movements, a thematic approach will allow students to draw connections between different movements and time periods.

The course will rely on a variety of source materials including secondary and primary source texts, film, and artistic works. In addition to regular readings and written work, the course will culminate with a final research paper on a topic of the student’s choice. English translations will be provided for all works.

## World War II

*(Mellon)*

Conventional narratives of World War II begin in 1939 with the simultaneous invasion of Poland by Germany and the USSR. This class will challenge that narrative by starting much earlier in 1931 with the first Japanese incursions into China and then trace the developments that happened around the world including the Italian invasion of Ethiopia, the Spanish Civil War, and further Japanese aggression in China that was followed by the formal outbreak of the war in 1939 at the end of what W.H. Auden called “a low, dishonest decade.” We will then go on to trace the events of the war itself, with an emphasis on the everyday experiences of those who were caught up in it, from the colonial troops of the various empires—British, French, and others—to female soldiers fighting for the Soviet Union to Japanese-Americans interned here in the United States. The class will also examine the way that this war openly and explicitly targeted non-combatants through bombing campaigns, occupation, and genocide. This is not a journey for the faint of heart but the end goal of the class is to better understand the period from 1931–1945 when it seemed that the world was determined to tear itself apart.

Readings will include but are not limited to: Martin Gilbert, John Keegan, Vasily Grossman, Gail Lumet Buckley, Primo Levi, Svetlana Alexevich, Karen Yamashita, Rick Atkinson, George Orwell, Nikolas Wachsmann, and Iris Chang. Expect lots of reading and writing, including a major research paper.

## 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 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. **Note:** Preference will be given to juniors and seniors. The maximum enrollment for this program is 16 students.

## Independent History Research: Doing Archival Research on Slavery in the History of St. Ann's Church & Holy Trinity Church

(Townsend)

During the 2020-2021 school year, the Rev. Dr. Craig Townsend, Visiting Scholar at Saint Ann's School and Associate for Faith Formation at St. Ann & the Holy Trinity Episcopal Church, will pursue archival and other primary-source historical research into whether and in what ways early members of the two original and separate congregations of St. Ann's Church (founded in 1784) and the Church of the Holy Trinity (opened 1847), were involved in profiting from slavery and/or the slave trade (or, alternatively, in any anti-slavery movements or activities). He invites students interested in learning how to do such research, and interested in pursuing this topic, to assist him in the research. This will require a minimum of one hour of research per week, attendance at the regular weekly class meeting, a final writing project that will be part of Dr. Townsend's report to the parish, and a class presentation to the school about our findings. Preference will be given to juniors and seniors. **Note:** This course is limited to 6 students.

Dr. Townsend is the author of *Faith in Their Own Color: Black Episcopalians in Antebellum New York City* (Columbia University Press, 2005), which grew out of his Ph.D. dissertation in American Religious History at Harvard University. The book involved precisely this same sort of research, in some of the same period, as it explored the history of St. Philip's Church, the second black Episcopal congregation in the United States.

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# INTERDISCIPLINARY

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## **Art, Science, and Nature**

*(Arnold/Zayas)*

What do frogs and mushrooms have in common? What connections can be made between an amoeba and a lobster? What transformative processes occur as grain becomes bread or caterpillar becomes butterfly? And...what are the scientific foundations of these commonalities, connections, and transformations? In this course, art, science, and anthropology will intersect as students investigate the natural world through experience and theory. Following in the steps of famed naturalists Carolus Linnaeus and Charles Darwin, students will use the intense focus and concentration required in art to make detailed observations of the structures of living things in an effort to understand the functions of these structures. Students will draw and paint mushrooms, protists, flowers, and plants, as well as various animals using several different techniques—watercolor and oil paint, pen and ink. They will simultaneously learn about the evolutionary histories, phylogenetic relationships, reproductive strategies, and embryological development of these organisms as they investigate their functional adaptations. Laboratory assignments will require active participation in the observation and dissection of various specimens in order to help students further understand the functions and origins of biological structures. Lab assignments will also allow students to practice and improve their microscope techniques and behavioral observation methods. On the anthropological side, students will explore the roles these organisms have played throughout human history, for example by cooking root vegetables, extracting ink from squid and walnuts, and planting seedlings—all while being introduced to great artworks about nature by da Vinci, Durer, Audubon, Rubens, Van Gogh, O'Keefe, and others, and considering the ways in which these artists viewed nature. **Note:** This course will meet two double periods per week, and may be taken for Science, Art, or Interdisciplinary Studies credit.

## **Cinema of Youth: History and the Art of Film**

*(Dobski/Goldberg)*

World cinema meets world history in this course, combining the disciplinary methods of cultural history and cinema studies to examine the complex lives of young people in dark times and moments of hope. What has it meant to be a child—to *grow up*—over the past century? How has that varied by time and place? Across the globe, the 20th century art form of cinema has uniquely explored the experiences and meaning of childhood in modern life, especially during times of crisis and change. Through a selection of significant films, each one placed and contextualized within the history of youth and the art of cinema, we will make this unique exploration our subject for the year. While we analyze these films' representations of children and situate them in their historical moment, we will simultaneously consider the history of film itself—as a business, a technology, and an art. Topics we might consider

include war and revolution, coming of age, and children on their own—to be explored through films directed by Victor Erice, Satyagit Ray, Leni Reifenstahl, Louis Malle, Tian Zhuangzhuang, Charlie Chaplin, Rungano Nyoni, and many more. Complementing each film will be readings in the history of childhood, including journal articles, academic books, and assorted primary sources. Please note that this course will require significant reading as well as film viewing each week outside of class time. Assignments include frequent response papers, multiple presentations, and a major research paper. **Note:** This course is open to 11th and 12th grade students and may be taken for History or Interdisciplinary Studies credit.

## **Life/Afterlife: Slavery in US History, Politics, and Culture**

*(Mackall)*

This course will explore the history and legacy—the life and afterlife—of the enslavement of people of African descent (sometimes described as an “original sin”), present from before the founding of the United States and evident today in politics, economics, popular culture, and other aspects of American life. Drawing on primary sources—including the national founding documents, narratives of enslaved people, historical news accounts and legal documents—as well as historical analysis, literary theory, and contemporary works of poetry, fiction, journalism, and film, we will endeavor to center the work, voices, and scholarship of people of African descent in our course materials.

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 that might include written research, oral presentation, performance, or other creative expression.

Possible texts include works by Phillis Wheatley, Jupiter Hammon, Olaudah Equiano, Frederick Douglass, Harriet Jacobs, Thomas Jefferson, W. E. B. Du Bois, Coleson Whitehead, Octavia Butler, Michelle Alexander, Thavolia Glymph, Saidiya Hartman, Henry Louis Gates, Angela Davis, Annette Gordon-Reed, Nell Irvin Painter, Nikole Hannah-Jones, and Ibram Kendi. **Note:** This course may be taken for History or Interdisciplinary Studies credit.

## **Page to Screen: Analyzing Cinematic Adaptations of Literature**

*(C. Smith)*

The word “derivative” gets a bad rap. It has come to mean “trite” or “contrived” or “unoriginal”—but what if we were to flip this idea on its head? What if we approached the derivative as a unique opportunity to translate and even transform a story across media? In this course will we destigmatize the derivative and explore the challenges inherent to creating films and television shows that are based upon literary works. In reading source materials and watching their cinematic counterparts, we will work towards defining what makes an adaptation a success or a failure. We’ll need to be somewhat vicious in this pursuit, as any true adaptation is comprised of both what ends up on the screen and on the cutting room floor. Armed in the late spring with our class-defined formula for successfully adapting a literary work, the course will culminate in individual short-form adaptation-related projects based upon a short story or graphic novel of each student’s choosing. These projects can take the form of a screenplay, a detailed storyboard, or another creative interpretation of source material.

We will watch numerous films and read a variety of works of literature, including novels, short stories, and graphic novels. We will also examine some of the screenplays that they inspired. Works to be read/screened include, but are not limited to: *If Beale Street Could Talk*; *Mrs. Dalloway*/*The Hours*; *Sense and Sensibility*; “Rita Hayworth and Shawshank Redemption”/*Shawshank Redemption*; and *Frankenstein*. **Note:** This class will meet for one double period per week, and may require additional screening time outside of class. This course provides Interdisciplinary Studies credit.

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# LANGUAGES (CLASSICS & ASIAN)

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## ASIAN LANGUAGES

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### Chinese

Chinese classes at all levels are aimed at developing communication skills in listening, speaking, reading, and writing. Our goal is to lay solid foundations in language form and accuracy for students, which can help students use Chinese to exchange information and to communicate their ideas. We first start to introduce Pinyin, the four tones, characters, and basic sentence structures. Gradually, we more intensively study 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. We use *Chinese Made Easy Book 1* for the first year of Chinese, and continue with the four volumes of *Integrated Chinese*. A connected storyline in *Integrated Chinese* about a diverse group of students strings together all of the dialogues and narratives throughout each volume.

#### 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.

#### 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 both orally and in writing. Students study more grammar, sentence structures and vocabulary. The topics include school life and class subjects, shopping, making an appointment, and transportation. Students are encouraged to initiate and carry on conversations to exchange information and express opinions about related topics.

#### Chinese 3

*(The Department)*

Chinese 3 is designed to help students solidify their grasp of grammar and vocabulary. The emphasis is on increased ease and accuracy in speaking Chinese and on reading comprehension. Students are expected to give oral presentations about topics such as schools and places in China. The topics include weather, dining, asking for directions, school life, etc.

## **Chinese 4**

*(The Department)*

In addition to introducing more vocabulary and grammatical points, Chinese 4 concentrates on more complex sentence structures 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 at greater length on the geography of China, the relationships between parents and their children, and the differences and similarities between Chinese medicine and Western medicine.

## **Chinese 5**

*(The Department)*

Students learn to express their personal views and exchange opinions about the social issues introduced in Chinese 4 in more complex language. They complete exercises like responding to e-mails and writing personal letters, and reading complicated signs, public announcements, and newspaper clippings, as well as giving presentations and conducting interviews in more fluent and accurate Chinese.

## **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 challenges 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 in Chinese.

## **Chinese Conversation**

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

Through the use of various practical scenarios, this course 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 the use of markers. Numerous patterns that are needed to construct sentences to function in various social situations are also introduced. Additionally, through extensive examinations of history, philosophy, and the arts, students continuously explore Japanese culture and traditions from ancient periods to the current “pop” trends. 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 topics 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 laid in the third, but explores reading more extensively. The reading materials include stories, cultural episodes, manga style texts, etc. and include a number of new and old kanji. Students continue to build their vocabulary.

## Japanese 5

*(Otsue)*

The fifth year continues with an emphasis on reading, but features 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 of history and current social issues. In addition, students will learn to express their opinions and thoughts in the formal style of writing with a stronger command of the language. In order to facilitate students' fluency, more sentence patterns, formulaic expressions, idioms, and the use of onomatopoeia are introduced.

## **Japanese Conversation/Composition**

*(Otsue)* (2x per week)

Students further develop their abilities to express themselves effectively, and 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

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### **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 the rational and irrational on individual and societal levels. We read from Plato and Euripides, then 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**

*(Mason)*

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 5/6: Oedipus Tyrannus**

*(Connaghan)*

The Oedipus cycle tells the story of a family desperately trying to escape its fate. Yet the further you run from fate the closer you come to it. Think of the Babylonian tale where a man bumps into Death in Baghdad and flees to Samarra to escape. Death is surprised to see the man in Baghdad for she has an appointment with him in Samarra.

The central character in the Oedipus cycle is of course Oedipus. We will read Sophocles' Oedipus Tyrannus, a story of power and control, the bleakest of murders, and incest, and the drive for knowledge which is better left alone. Maybe the world's first whodunnit, Sophocles delves into existential issues and the heart of a person driven to extremes: the obsession with pollution and purity, guilt and shame, blindness and sight, ignorance and knowledge, memory and reality, and of course freedom and fate.

In reading Sophocles' Oedipus Tyrannus we will also reflect on the play's centrality to Aristotle's theorizing on tragic drama in his Poetics—is a widely read and equally widely misunderstood text. We will read Aristotle's account of tragedy, its structure, and its function in the terse Greek of the Poetics. We will assess what Aristotle is saying in this text and use the Poetics as a key—provided by perhaps the greatest literary theorist of antiquity—into the

Oedipus Tyrannus. We will be critical in our assessment and decide whether or not we agree with Aristotle's analysis of the Oedipus Tyrannus and if we do, to what extent.

What will we think of Aristotle's approach to tragedy? What of his interpretation of the Oedipus Tyrannus? What indeed will we think of the Oedipus Tyrannus or of Sophocles' treatment of the myth and its themes? Be ready to think hard and wrestle with Aristotle's challenging Greek and even more challenging ideas and, as for the Sophocles, it will get ugly.

**Prerequisite(s):** Greek 4

## 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 a poem with everything in it. Famously, it represents a distinctively Roman contribution to the tradition of epic poetry inaugurated in the ancient Mediterranean by the Iliad and the Odyssey of Homer, but that is only the beginning. And this course is the end of the beginning. Whereas in our introductory Latin courses (including PPDN) we focus on developing the linguistic skills required to read Latin texts in the original, in this course, these skills become the foundation for a broader, deeper, and grander journey—learning not only to translate, but to truly read. Reading, naturally, requires us to pay attention to contexts. This includes the social and political context of Vergil's own day—the world of the early Roman Empire. It includes formal contexts like meter and rhetorical technique, and it also includes the literary context that infuses Vergil's text with allusions ranging from Homer, to Hellenistic poetry, to early Latin verse, and even to Greek Tragedy. Arguably, however, the most important context to consider in this course is the context of the individual reader. You. The reason for this is simple: throughout its two-thousand year history *The Aeneid* has hung precariously balanced, at times even ambiguously, between the competing claims of

different contexts. We have a tendency to think of the “canon” as a place of fixed meaning, but in fact it is always a place of dispute and change. Indeed, what perhaps began as a work of imperial poetry in the court of Augustus became, in the hands of St. Augustine, an object of devotion second only to the Bible. In the hands of Servius, it then became a philological treasury, while at the same time it became, in hands of early Christian poets, the raw material for hexameter “remixes”, chronicling the heroism of the risen Christ. In the Middle Ages Vergil becomes Dante’s guide in Hell. In early Modern England, Aeneas sings opera. For the Romantics Vergil is an icon of the heroically isolated poet. The story continues. Even into the 20th-century Vergil’s layered text continued to unfold, and not always in ways that are easy for us to celebrate. On the one hand, *The Aeneid’s* influence on T.S. Eliot’s probing, grief-stricken reflections on the global tragedy of worldwide war may move us to reverent appreciation, but then how do we make sense of the fact that, on the other hand, Vergil’s text was—and has always been—in the hands of others, an affirmation of empire at all costs? How can we connect the disturbingly decontextualized use of *The Aeneid* on the great stone wall of the 9/11 Memorial to the private experience of Helen Keller, who read the poem in early Braille?

Since at least the time of Hadrian, *The Aeneid* has been imbued with the power to predict the future (the so-called, *sortes vergilianae*). Its incredible history, however, reminds us that the future is always being written in the present moment, which is why, ultimately, it occupies the place of honor which it does in the Classics curriculum at Saint Ann’s. This is the context, and the spirit, in which we present it to you. At the heart of *The Aeneid* are not only the gates of war, but also the bells of change, waiting upon the next set of readers to be rung.  
**Prerequisite(s):** Latin Poetry, Prose, Drama & The Novel

## Latin: Forbidden Fruit

(Connaghan)

Curiosity is complex, attractive and repellant. It’s been around (in one form or another) since the earliest times—think Gilgamesh, Eve, Prometheus, Pandora. It’s the desire to know what is taboo, forbidden, unclean, maybe even dirty. It’s dangerous: it killed the cat, don’t you know. Yet it’s also incredibly positive. It’s what makes us human—science, discovery, breaking new ground, knowledge for knowledge’s sake (where have we heard that before?). It’s contradictory: emotional and intellectual, moral and immoral. So what’s the problem with curiosity? The motivation (excessive desire?), the method (good questions approached in the wrong way?), the object (a desire to know bad things?)?

In class we will unpack the early history of ‘curiositas’: coined as a nonce word by Cicero in a letter, to then lay dormant until taken up by the fabulous North African writer Apuleius (and Middle Platonist to boot). In Apuleius’ Roman novel (or is it a Greek novel or African or maybe Carthaginian or Numidian or, at that, Gaetulan!), the hero, Lucius, driven by curiositas to discover what should not be discovered is turned into an ass (so much for curiosity!), is then forced to see what should not be seen (humans behaving as they do when no one is around—except an ass, that is) and gains enlightenment (so much for curiosity!). The theme of curiositas is then picked up by Apuleius’ African compatriot Augustine and woven into a complex ethical framework. In his early, yet utterly brilliant autobiography, the *Confessiones*,

Augustine wants to be oh so good but *curiositas* just keeps on getting in the way. This theme is passed from him into the Middle Ages and from there undergoes a transformation in the Early Modern period in France, Germany, and England, and so to us. Think Frankenstein or Faust, or any number of contemporary Marvel villains or, at that, heroes. Curiosity, the human experience in all its messiness, continues to defy simple categorization.

In class we will focus on the wonderfully outrageous *Metamorphoses* by Apuleius and what may be the birth of a concept (can literature really give birth to concepts or is it the other way around?). We will then consider its development by Augustine, the greatest philosopher of the Roman world and an individual deeply troubled by *curiositas*. We will look back to the Greek philosophical tradition in translation and, given time, will cast an eye forward to more recent manifestations of curiosity.

Curious? You're an ass if you are, an ass if you're not. **Prerequisite(s):** Vergil

## **Latin: Lucan's Civil War**

*(Siebengartner)*

The civil war (49-45 BCE) between Julius Caesar and Pompey the Great, culminating in Caesar's victory at the Battle of Pharsalus, was Rome's defining moment, the death rattle of the Republic and the birth of the Empire. It occupied the minds of Romans—and later thinkers—for centuries to come and its story has been told many, many times. Never, though, has it been told quite like it was by Lucan, a deeply intelligent, shockingly talented, and very pissed off twenty-something poet of Spanish birth living under Nero's rule (54-68 CE) and yearning for a Stoic simplicity that, he seems to feel, died with the Republic. For Lucan, there are no great heroes in this war, no savior gods, and no happy ending. The brutal realities of war, instead, are laid bare in excruciating, gut-wrenching detail, the poem somehow still never shedding its stark beauty.

In reading selections from Lucan's ten-book epic we will get comfortable with Lucan's notoriously difficult, yet strangely beautiful, poetic style while also trying to understand what it meant to him to write Latin epic about a historical (rather than mythological) topic in the shadow of Vergil's *Aeneid*, in the court of a famously cruel, erratic, and tyrannical emperor. Students will take from the course not just an appreciation of this raw, angry, gory (but gorgeous) protest poem, but also of the social, political, and intellectual context—that of Nero's Rome—that influenced its author. To that latter end, we will be supplementing our reading of Lucan with excerpts from his contemporaries, notably his uncle, the Stoic moralist Seneca the Younger. **Prerequisite(s):** Vergil

## Latin: Falling into Love: A Survey of Ovid's Elegies

*(Henneman)*

At sixteen years old, Ovid announced himself to Rome with a collection of elegies. He presented himself as love's soldier, able to use his verse to conquer any obstacle between him and his beloved and eager to help all Romans accomplish the same. His early poems teem with subversive humor and confidence, carefully balancing a healthy respect for the god's power and supreme faith in his ability to harness that strength. At the end of his life, however, his elegies are devoid of these attributes. He is a broken man, living in exile, bereft of any hope to return to Rome and reclaim his place among the famous poets. The poems are raw, hopeless, and express a love much closer to modern-day sensibilities than the proud, self-indulgent pieces that mark his early career. In this class, we will read elegies that span Ovid's writing (*Amores*, *Ars Amatoria*, *Tristia*, *Ex Ponto*), tracing the arc of his rise to prominence to his fall from grace, charting his course from teacher to victim of love along the way.

**Prerequisite(s):** Vergil

## Additional Courses

### Introduction to Linguistics

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

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 be conducted mostly 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.

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# LANGUAGES (ROMANCE)

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## 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 write coherently in French, and speak and understand the language with relative ease.

## 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, short writing assignments, and hands-on activities. Cultural themes pertaining to life in the French-speaking world are presented through French-language films, short readings, songs, 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 to consolidate previously-acquired language skills and enable students to enjoy increasingly complex literature. While 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 may include, but are not limited to: La Fontaine, Maupassant, Deharme, Camus, Sartre, Lahens, and Miano.

## Cultural Topics in the French-Speaking World

*(The Department)*

Designed for students who have completed French 4, this course will focus on cultural and political topics in the contemporary French-speaking world through the study of film, literature, art, music, news sources, and other media. Class discussions, reading, writing, and individual and group projects (including, potentially, plays or musical performances) will develop students' skills in every area of expression in French while expanding their knowledge of the diverse cultures of Francophone countries in Africa, Europe, the Caribbean, and North America. Special attention will be paid to idiomatic expressions and the way French is used in everyday life. Possible topics to be considered are protest movements, racism, integration and exclusion, language politics, sexual and cultural identities, religion, education, food, and fashion. **Prerequisite(s):** French 4

## Modern and Contemporary Literature in French

*(The Department)*

*“L’alphabet est quelque chose de magique, c’est un code, on peut mettre ces lettres ensemble, qui littéralement nous indiquent la fenêtre par laquelle on passe pour entrer dans un monde nouveau.”*

—Dany Laferrière, interview on France Culture, 2016

“Qu’est-ce que la littérature?” “Qu’est-ce qu’écrire?” “Pour qui écrit-on?” These were some of the questions asked by Jean-Paul Sartre in a celebrated essay of 1947. While Sartre was not the first to ask these questions, such questions took on particular urgency for writers in French in the colonial and post-colonial contexts. From romanticism, realism and surrealism through to Negritude, existentialism, oulipian experimentalism, and the diverse contem-

porary scene, literature in French has assumed many forms over the last two centuries. The purpose of this course is to dig deeply into a wide variety of modern and contemporary writers in French from Europe, Africa, and the Americas. We will sample many genres—poetry, short stories, novels, plays, and autobiographical writing. In addition to reading, discussion, and oral reports, students will be invited to try their hand at creative writing, essays, and group projects. Possible authors include Nau, Flaubert, Baudelaire, Desbordes-Valmore, Proust, Césaire, Duras, Condé, Camus, Beauvoir, NDiaye, and Laferrière, among others. We will complement our readings with occasional forays into the world of painting and cinema. Open to students who have successfully completed French 4.

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

*(The Department)*

Open to juniors and seniors who have successfully completed the Modern and Contemporary Literature in French 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: Language & Culture

*(The Department)*

This course exposes students to a variety of materials, textual as well as audio-visual, and emphasizes communication skills through conversation, short writing assignments, and hands-on activities. Cultural themes pertaining to life in the Spanish-speaking world are presented through Spanish language films, short readings, songs, and other appropriate materials. 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.

## Spanish 4: Language & Composition

*(The Department)*

This course is designed to consolidate previously-acquired language skills and enable students to enjoy increasingly complex literature. While 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 may include, but are not limited to: Allende, Borges, Cortázar, García Márquez, Sábato, García Lorca, and Neruda.

## **Cultural Topics in the Spanish-Speaking World**

*(The Department)*

Designed for students who have completed Spanish 4, this course will focus on cultural and political topics in the contemporary Spanish-speaking world through the study of film, literature, art, music, news sources and other media. Class discussions, reading, writing, and individual and group projects (including, potentially, plays or musical performances) will develop students' skills in every area of expression in Spanish while expanding their knowledge of the diverse cultures of hispanophone countries in Latin America, Europe, and the Caribbean. Special attention will be paid to idiomatic expressions and the way Spanish is used in everyday life. Possible topics to be considered are protest movements, racism, integration and exclusion, language politics, sexual and cultural identities, religion, education, food, and fashion. **Prerequisite(s):** Spanish 4

## **20th and 21st Century Literature in Spanish**

*(The Department)*

The prose and poetry studied in this course provide 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 regions, 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.

## **Creative Writing in Spanish**

*(The Department)* (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 Marquez, Cristina Fernandez Cubas, and Luis Sepúlveda, among others. **Prerequisite(s):** Spanish 4

### **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 interactional use of the language, we try to build each student's self-confidence and facility in speaking Spanish.

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# MATHEMATICS

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## 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 presented 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 both 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)*

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. **Note:** This course is open to sophomores and above. Freshmen may take it with the permission of their grade dean and the department chair.

## Sequential 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 fall semester course Trigonometry, this course is a prerequisite for Calculus. **Prerequisite(s):** Trigonometry

### Statistics

*(The Department)*

*They use statistics to decorate their articles. They use statistics as a club in the battle for what they believe intuitively to be correct. That is why [they] often believe that you can prove anything with statistics, an obscene and ludicrous position, but one which is the natural outgrowth of the way that they themselves use statistics. What I wanted to do was teach people instead to use statistics as a sword to cut toward the truth.*

—Bill James

In this class, we will design and perform experiments, analyze and visualize data, build models, play and study card games, run simulations, summarize data, and write chunks of code (absolutely no prior programming experience is expected). We'll see how probability

underlies our understanding of science, grapple with uncertainty, and become fledgling data scientists. This class will be partially project based including a substantial (individual) end-of-the-year project of your choosing. **Prerequisite(s):** Algebra 2

## **Advanced Statistics**

*(The Department)*

This course will delve deeper into the world of statistics. Students will refine the techniques learned in the first year of Statistics and will continue to discuss the derivations and ramifications of the formulas used. Students will formally explore the realm of regression; touching upon various types of non-linear regression analysis. Throughout the year, students will be analyzing large data sets, often as parts of independent projects. Other topics can include: hypothesis testing, various types of sampling distributions, Bayes' theorem, probabilistic analysis, the central limit theorem and confidence intervals.

**Prerequisite(s):** Statistics

## **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 and Analysis

## **Techniques in Integral Calculus**

*(The Department)* (Fall semester—same period as spring semester course

Further Explorations in Calculus)

In this class, we will continue the exploration of calculus with advanced integration techniques, such as integration by parts, partial fractions, and 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—same period as fall semester course Techniques in Integral Calculus)

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 offer 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 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):** Techniques in Integral Calculus

## Additional Electives

### 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 take part 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 said clever tricks and also to have wider exposure to mathematics beyond our 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 tackle a math contest as a class. **Prerequisite(s):** none

### Advanced Topics in Mathematics

*(Hanisch)*

Among the various branches of higher mathematics are analysis and algebra. Too often in advanced coursework, perhaps as a result of the natural tendency towards specialization, sharp yet artificial boundaries are placed between them. Indeed, prominent mathematician John Stilwell lamented, "Algebraists do not discuss the fundamental theorem of algebra because 'that's analysis' and analysts do not discuss Riemann surfaces because 'that's topology' ...."

This course aims to remedy this by providing a unifying study of the deeper aspects of both analysis and algebra. The topics we cover will be influenced by the students, and may include the foundations of our number system, leading into ring and group theory, some set theory and logic, probability theory, and the foundations of calculus. This latter topic should appeal to students who have taken or are currently taking calculus, as well as those who will take calculus in the future. **Prerequisite(s):** none

## Linear Algebra

*(Aroskar)* (One Semester)

Linear algebra is the common denominator of mathematics, with uses in pure as well as applied branches of mathematics. In itself, it is a profoundly enriching field of study that has also developed into a universal tool. While linear algebra is broadly the study of structure-preserving operators on linear (vector) spaces, these concepts are extremely useful in a variety of disciplines ranging from physics and engineering to economics and computer science. In this introductory course, we will study matrix algebra and learn to solve linear systems in several variables. There will be an emphasis on topics useful in other disciplines and various applications will be discussed. We will also aim to gain a deeper understanding of abstract vector spaces and linear transformations by exploring interesting examples and examining isomorphic structures. Proficiency in concepts and skills from Algebra 2 will greatly benefit students taking this course. **Prerequisite(s):** Geometry

## Formal Logic

*(Aronson)* (One Semester)

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

## Number Theory

*(N. Fiori)* (One Semester)

What did Leopold Kronecker mean when he famously said, “God made the natural numbers; all else is the work of man?” Even those who take the more humanistic stance that “math is created” rather than “math is discovered,” sometimes admit that the counting numbers seem to transcend humankind. How could earthlings have invented the idea of “1, 2, 3, 4, 5...?” Even more compelling, and somewhat surprising, is that this seemingly simple set of numbers provides mathematicians with some of the deepest problems. Many of these questions are so basic to state that they can be understood by a five year old, yet they remain unsolved by anyone on Earth. In this course, we will take a deep dive into this set of numbers. We look for attractive properties and patterns, attempt to describe them, ask questions, venture answers, and, when we can, prove our conjectures. We will explore questions that range from the elementary, “Which combinations of integers make Pythagorean triples?” to the more difficult, “Which numbers are the sum of two squares?” to the unsolved, “Are all even numbers the sum of two primes?” and we will see that the most elementary set of numbers provides enough depth to leave us inspired, puzzled, bemused, and humbled.

**Prerequisite(s):** None—Number Theory is about elementary arithmetic, after all. But it gets deep and difficult quickly! Only those who won't balk at conceptually mind-bending arguments and technically demanding swamplands should take this course.

## **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.

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# MUSIC

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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. The Music Department is committed to helping students thrive in our ensembles. Students enrolled in any ensemble are required to practice regularly outside of class. The Music Department provides additional support to individual students by offering a Music Resource Room where students can practice during the school day, and we offer a wide-ranging list of private lesson options for those students who wish to support the ensemble experience by studying privately.

### Large Ensembles

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

Symphonic Ensemble—(string, winds, brass, percussion)—*Baeza/Clark/Gilbert/Pickering*

High School Chorus—*Asbury*

Jazz Performance—*Elliott/Coe*

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

\*requires audition/approval of director

### Advanced Percussion Techniques (The Percussion Section)

*(Lazzara/Bollinger)*

This class builds skills required to play in a percussion section of the larger Saint Ann's ensembles. Advanced study of timpani, bass drum, crash cymbals, snare drum, triangle and various other percussion instruments is emphasized. Later in each term, students are invited to play in the percussion section of any number of the larger ensembles like the Brass Choir or Symphonic Ensemble. Percussion ensemble music compliments percussion section work.

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

*(Gilbert/Williams)*

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. Brass Choir will also be combining and collaborating with Symphonic Ensemble and Chorus to perform major orchestral works. Ensemble members are encouraged to take private lessons/seek outside practice assistance. **Prerequisite(s):** permission of the instructor

## **Chamber Players**

*(The Department)* (3x a week)

Historically, chamber music has been the pastime of the aristocracy, yet it is as democratic as music-making can get! This class is for students interested in the challenge of chamber music performance. Chamber Players groups are organized based upon enrollment, and 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/seek outside practice assistance. The refined musical skills cultivated in chamber study will be put to wonderful use in the large groups as well. Students enrolled in the Chamber Players program will also play in one of the large ensembles (i.e. Symphonic Ensemble, Brass Choir, Jazz Performance, HS Chorus). Chamber Players students will meet once a week as a group with their coach and also attend either the Symphonic Ensemble double-period or another appropriate large ensemble. This is a new undertaking for the department and an exciting opportunity for our music community. **Note:** An audition is required for all students who will be participating in the chamber music program for the first time. Students currently participating will be placed at an appropriate level.

## **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. Chorus will also be combining and collaborating with Symphonic Ensemble and Brass Choir to perform major orchestral works. No previous singing experience is required.

## **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

## **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, and good reading ability. **Prerequisite(s):** Jazz Techniques (or the equivalent, as determined by the instructors). Students in this class are encouraged to take private lessons/seek outside practice assistance.

## **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. **Note:** Interested students should prepare an audition demonstrating a grasp of major and minor scales and chords. Students in this class are encouraged to take private lessons/seek outside practice assistance.

## **Symphonic Ensemble**

*(Baeza, Clark, Gilbert, Pickering)* (3x a week)

Symphonic Ensemble is a new Saint Ann's ensemble which will combine all of the orchestral instruments (strings, woodwinds, brass, percussion) to perform symphonic repertoire in the winter and spring choral/instrumental performances. High School musicians (and advanced middle school players) will meet for one double period and one single period sectional each week. Repertoire will be chosen to the level of the players (some pieces may be just for winds), and will give everyone the unique experience of playing larger scale orchestral masterworks in a community of dedicated musicians. This is a new undertaking for the department and an exciting opportunity for our music community.

## Vocal Study and Ensembles

*(Clark)* (3x per week)

Vocal study at Saint Ann's is comprehensive. Our goal is to build better singers, as both 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. **Note:** 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. Students are encouraged to take private lessons/seek outside practice assistance.

**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

### Bassoon

*(Henderson)*

The bassoon is a relatively rare instrument that can play music from the Renaissance to the present. It is most commonly heard in orchestra, chamber music, and new music. In this course students will learn the fundamentals of playing the bassoon with the goal of creating a beautiful sound and building solid technique that can be used in any musical setting.

### 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

maximally effective practice strategies are the focus of class assignments. Prior string playing experience is a plus. **Prerequisite(s):** permission of the instructor

### **Percussion: The Drum Set**

*(Lazzara)*

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

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

### **Musicianship**

*(Elliott)*

This class will thoroughly explore the basic elements and fundamentals of all music. Through this exploration we train our ears, improve music notation skills, explore instrumental and vocal practice, and learn how pitch and rhythm work in music of all kinds. This is a class for those students who are eager to learn an instrument, sing, or write songs or instrumental music but want to build understanding and skill in the basics.

### **Composers-Performers Workshop**

*(Elliott)*

Calling all those with open ears and an eagerness to explore creating with sound! In this studio-based workshop all participants will act as both composer and performer. We welcome all instrumentalists/vocalists/musicians who are willing to be challenged, who wish to find new ways of structuring sound into formal shapes with open-mindedness to form and language, and distrust of genre and category. Some familiarity with music theory—scales, basic chords, and so on—will be helpful but is not required. Open your ears and your mind and explore musical creativity from new vantage points. All instruments and vocalists welcome.

### **Composition**

*(Elliott)*

Welcoming all composers—beginners to those more advanced—who are dedicated to creating original music. We work with acoustic and digital instruments to explore techniques, approaches, and conceptions. We will emphasize the creation and realization of written scores; students will use professional music notation and sequencing software. Experience as an instrumentalist and ability to read bass and treble clefs are recommended. We will explore music of many traditions as windows into creative approaches.

## **Composition Studio**

*(Elliott)*

This class is recommended for the composer who is able to conceive of individual creative projects—from inception to performance—thus notation skill is required. Familiarity with composing software, including both notation/sequencing and production software, is recommended. Student work will be performed as the ultimate goal of the composition process. The class will meet as a group twice a week, with additional individual meetings scheduled as needed.

## **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 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 will the musical desires of each student. Previous experience with composition is desirable, though not necessary.

## **Music & Computers 2**

*(Langol)*

This advanced class continues to explore the ideas covered in Music & Computers 1, while solidifying skills established through previous music lab experience. This class is a guided learning environment set up for students to pursue personal musical goals and share their ideas with others. 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. Strengthening harmonic knowledge, keyboarding skills and ear training are encouraged throughout the course.

An overview of synthesis and a variety of sound design techniques are shared as well as a focused look at effects processing. A number of approaches to using sampled audio and drum programming are developed in an effort to open up creative options. All of this may be looked at through the exposure to the history of electronic music making in all musical idioms. **Prerequisite(s):** Music & Computers 1 or adequate 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 original compositions in support of other art forms that include film and dance. Exploring various compositional approaches and various electronic music making methods opens a door to endless musical and sonic possibilities. The development 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):** Music lab experience, facility on an instrument, and permission of the instructor

## Music Literature

### Music History

*(Elliott)*

Understanding the history of musical language is infinitely valuable for any musician, music lover, or musical scholar. We will examine the origins of musical cultures in the west and throughout the world with a goal of understanding how musical languages and traditions have evolved, intertwined, and transformed over the centuries. We will consider western art music, jazz, as well as the classical traditions of Asian cultures, Africa, and South America. We will consider how music communicates, how it represents belief systems, and how it expresses cultural commonalities.

### Opera

*(Clark)*

The extravagant art. We will look at opera from the ground up, from Monteverdi through contemporary works. Class work involves libretto reading, audio listening, and DVD watching. We will take occasional forays into the scandalous lives of the great composers and opera stars. Class participation includes three daytime trips to the Metropolitan Opera and some written work. (And maybe even some HD Broadcasts!). There is no need to be afraid of opera anymore!

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# REC ARTS

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## **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)*

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 may include a three-day camping trip which includes rock climbing and a ropes course.

## **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 fencing 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**

*(Schirrippa)*

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**

*(Magnes)*

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**

*(Magnes)*

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/Bolton)*

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 upon 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. Upper body, core strengthening, warm down, and stretching 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.

## **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**

*(Yamond)*

This course introduces the student to the merits of weight and fitness training. Workouts will include free-weight, body weight, and cardiovascular exercises. Other areas to be explored include flexibility (through stretching) and the value of aerobic training.

## **Workout of the Day (W.O.D.)**

*(J. Zerneck)*

This class is a group exercise class which incorporates a variety of workouts. Each class will be unique and will make use of different equipment including, but not limited to, dumbbells, suspension trainers, physioballs, BOSUs, and resistance bands.

## **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. **Note:** 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.

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# SCIENCE

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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! **Note:** Students are expected to have a thorough grasp of ninth grade biology topics. The class meets one seminar period each week in addition to regular class time. **Prerequisite(s):** Biology and Chemistry

### Advanced Physiology and Biomedical Ethics

*(Levin)*

Do you want to learn how to read an EKG? How a bone marrow transplant works? What makes carbon monoxide gas so dangerous? How human T cells can be reprogrammed to fight cancer? Or about surgeries that can be performed on a fetus 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 learn about medical therapies such as defibrillators, ventilators, antibiotics, organ transplantation, cancer immunotherapy, gene therapy, and CRISPR. 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

## Modern Genetics

*(Radoff)*

Genetics has changed incredibly since Gregor Mendel first established the rules of heredity by planting his pea plants at St. Thomas's Abbey in Brno, Czech Republic. Now, we can spit in a tube to find our ancestors, make glow-in-the-dark rabbits, and treat diseases with mutated viruses. And the future is both bright and terrifying, potentially enabling us to change parts of our entire genomes to cure hereditary diseases or eliminate certain genes from the population.

In this class, we will take a deep dive into present-day genetics, focusing on historical perspectives and logic, current experimental techniques, and potential ethical dilemmas that can arise from this uncharted territory in which we find ourselves. We will perform labs and statistical analyses, and make use of computer programs to help us in our endeavor to understand the underlying mechanisms behind how genetics is used today.

Further topics may include CRISPR/Cas9 technology, evolutionary relationships, understanding how genetic testing works and what it's used for, the search for the genes which encode complex traits with genetic links like schizophrenia, homosexuality, and personality. We'll likely even look at how inbreeding and environmental trauma can affect a population's genetics. And we'll do a lot of it using logical, mathematical, and statistical rigor.

In short, Modern Genetics will be an enjoyable and detailed journey on the path to understanding how this fascinating field of biology affects our lives on a daily basis. **Prerequisite(s):** Biology

## Neuropsychology

*(Lerman)*

Why do we behave the way that we do? We will tackle this question through the lenses of psychology and neuroscience. We will begin the course by exploring the classic works of Freud, Skinner, and the Cognitive Revolution. We will contrast these thinkers with the lens of neuroscience, as we dive into the biology of neurotransmitters and drug interactions. Students in this course will develop a deeper understanding of the machinery of the mind and apply our lessons to their own lives. We will be reading classic texts, journal articles, and textbook chapters—serious readers only please! **Note:** This course will meet in a non-traditional format of two double periods per week. **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. **Note:** This course is open to sophomores and above. Freshmen may take it with the permission of their grade dean and a science department chair. **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 while exploring the applications of some Chemistry 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 they participate in. 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—and eventual explosion and collapse—while noting the methodological breakthroughs that allow us to tell such a bizarre (and true!) story. **Prerequisite(s):** none

## The Physics of Consciousness

*(Pelzer)*

Look inward... and you find pure experience. What is its origin? What are its qualities? How can we maximize our experience, open possibilities, and map the patterns of existence through as many avenues as possible? In *Physics of Consciousness*, we will utilize the laws of physics as our tools, looking at the teachings of spacetime, force and momentum, gravity, light, electromagnetism, interaction fields, efficiency and the fundamental patterns of nature to study the properties and patterns of how consciousness operates. And we will employ certain aspects of physics—such as how quantum particles interact to form structures up to the macro-level—to explore how complex systems interact with their environment, studying phenomena such as emergence and self-organization.

The primary goal is to begin to understand the fundamental core of the conscious experience. Here, the students are the teachers, where variables are identified, hypotheses generated, and various experiments tested and explored on the self, where data is recorded, and patterns are examined. Here is a taste of what this endeavor will involve: by observing how light bends and disperses its colors through a prism, we can watch how the patterns on the physical level match how truth is distorted through our layers of thought and mind. We can test how an awareness practice and conscious creation can teach us about the source of information, the mechanism of the lens, and the feelings that result. For every experience: there is a physics to that. There is a mechanism and reason you feel what you feel and do everything you do. Let's find that source, map those patterns, and see how we are a significant part of a wonderful, complex tapestry we call the universe. **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 philosophical 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. This class will serve as a prerequisite for Electricity and Magnetism. **Prerequisite(s):** Physics

## **Introduction to Quantum Mechanics**

*(G. Smith)*

It turns out that our fundamental physical reality is exceedingly strange. For example, on the microscopic level, there are no trajectories of particles. Actually, there aren't particles either, at least not in any conventional sense. Whatever these "particles" are, there are no certainties associated with them, only probabilities that in some cases can be very bizarre. If our everyday world behaved quantum mechanically, a roller coaster could get from one side of a hill to the other even if it couldn't make it over the peak, or a car might skitter around ceaselessly if someone tried to fit it into a tight parking space.

In this class we will seek to understand these and many other fascinating aspects of quantum mechanics. We will begin our exploration with the two-level quantum mechanical system, which exhibits much of the richness of the larger subject in a relatively compact package. We will delve into operators, eigenvalues and eigenvectors, expectation values, and thorny questions surrounding the seemingly straightforward concept of measurement. We will next move on to quantum computing and quantum cryptography. The year will culminate with students completing independent projects driven by their particular interests.

Quantum mechanics relies on advanced mathematical techniques, including aspects of linear algebra, probability, number theory, and calculus. A significant amount of class time will go toward developing these techniques so that we can effectively apply them. Our mathematical explorations won't be completely rigorous, but a keen interest in getting into the weeds, so to speak, would be a huge plus. This class will serve as a prerequisite for Electricity and Magnetism. **Prerequisite(s):** Physics, Trigonometry/Analysis

## **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 OR Introduction to Quantum Mechanics AND Calculus. **Co-requisite(s):** second-year Calculus

## Additional Courses

### Art, Science, and Nature

*(Arnold/Zayas)*

(See Interdisciplinary Studies)

### Environmental Science

*(Reed)*

There's been an uptick in climate talk. From climate strikes to the Green New Deal, environmental issues are getting more airtime than ever before. But what does climate change mean for us in New York City? How do we un-numb ourselves to the problems we know are around us? In this course, we will break down the relationship between humans and the planet and shift our lens to climate resilience. In this solutions-oriented course, topics will include climate basics, energy, waste, agriculture, transportation, and biodiversity, with space to explore topics that are most urgent to you. Expect a rigorous mix of lab experiments, policy investigation, research projects, occasional tests, and fieldwork. You will emerge on the other side of this course able to articulate the complexity of sustainability. **Prerequisite(s):** Biology

### Oceanography

*(Richards)* (Fall semester)

Dive into the exciting world of physical oceanography! We'll examine myriad topics, from the geologic processes that created the oceans and continue to modify the seafloor and our coastlines, to the unique chemical properties of seawater and the role that currents, tides and waves play in the ever-changing, glorious oceans. We will also discuss the role that oceans play in helping us to understand the earth's history, and consider a variety of renewable and non-renewable marine resources. In addition to in-class lab activities, students will participate in a boat trip on Long Island Sound to learn how to collect and analyze oceanographic data. **Prerequisite(s):** none

### Meteorology

*(Richards)* (Spring semester)

Weather impacts our lives every day, from influencing what we wear to helping us decide how much time to leave to get to the airport. Severe weather—hurricanes, tornadoes, and winter storms, for example—obviously impacts lives on a much more significant scale. In this course, students will learn the basics of what causes weather. For example, how do barometric pressure, warm and cold air masses, dewpoint, and the Coriolis Effect interact to influence jet streams, El Niño conditions, nor'easters, and category-5 hurricanes? We'll also learn how forecasters use online data and various weather instruments to predict short-term and long-range weather conditions. **Prerequisite(s):** none

## 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 will be matched with potential mentors based on mutual research interests and expertise. 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, i.e. every week. 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 **MUST** submit a research proposal to the Science Department by June 1 to be considered for approval by the department. Proposal guidelines are available in the Science Office and High School Office.

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# SEMINAR

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## **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.

## **The Aeneid**

*(Connaghan, Henneman, Hill, Kingsley, Mason, Milov-Cordoba, and Siebengartner)*

Vergil's Aeneid tells the story of the flight of the Trojans from Troy after its destruction by the Greeks and their search to find a new home. Aeneas is the person blessed, or perhaps cursed, with the task of leading them—and with changing the course of history in the Mediterranean and beyond. The reader is carried breathlessly along through the misfortunes faced by these refugees on their wanderings to find a new homeland—divine wrath, doomed lovers, a trip to the land of the dead—only to arrive in Italy with the Trojans facing hostility and violence at the hands of the local population. It seems that the lot of immigrants is little changed.

The Aeneid is a poem concerned with the establishment of the Roman people in Italy and the birth of a long, remarkable, and bloody history. Yet, even as perhaps the greatest achievement of Latin literature, it is so much more. In class we will attempt to plumb the depths of this gloriously complex and illusive work. We will read the epic poem in its entirety in translation, devoting about three classes to each of its books: one to delve into the book itself; one to reflect on Vergil's use of the Greco-Roman tradition, looking back to Homer, Greek tragedy, Apollonius of Rhodes, Lucretius, Catullus, etc.); and one to look forward to the reception of the Aeneid by later generations of artists and writers. Our exploration of the reception of the Aeneid may include: Vida, Dante, Ursula Le Guin, Henry Purcell, Joseph Conrad, Gwendolyn Brooks, Toni Morrison, Derek Walcott, Phillis Wheatley, Santonge, Léopold Sédar Senghor, and Baccar. No Latin language experience is required.

## **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. For most weeks, but not all, the House breaks up into two committees. Generating and debating resolutions in those committees, students learn about the world and practice engaging each other through argumentation. Crafting speeches both prepared

and extemporaneous, they attend to skills in areas such as logic, listening, persuasion, and delivery. Through researching topics, they build fluency and analysis, and through self-governance, including the election of chairs and the implementation of Robert's Rules of Order, they exercise democratic processes. Rule by majorities depends on the assent of minorities, so the seminar commits to the exploration of differences of opinion and the production of discourses that weigh an argument's merits. Through specific exercises in legislating, via model congress format/trips, students engage in advocacy that can be creative, respectful, strident, challenging, and cooperative. Participation in the dialogue being so central to the class, attendance is important enough as to preclude those whose extracurricular commitments would create many conflicts with the class periods. Enrollment may be limited.

## **The Art and Practice of Fly Fishing**

*(Rumage)*

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. The seminar will include travel upstate for a tour of the Catskill Museum of Flyfishing and to fish upon the legendary waters of the Beaverkill Stream and Delaware River.

## **Asian Pop Dance**

*(Gu)*

In Asian Pop Dance class, students will learn various dance styles, such as hip hop, jazz funk and house. Each class we start with a warm-up, and then learn Asian pop dance choreography from trending songs. Students will work on their energy, posture, coordination, endurance and confidence. We will film a dance cover video for each dance that we learn, and will perform at a dance concert and/or an assembly in the second semester. We may have a field trip to a K-pop concert.

## **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. **Please note:** all reading will be done in class—there will be no homework.

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 303/404 (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!

## **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

## **High School Literary Magazine**

*(The English Department)*

The High School Literary Magazine is created by a board of students and faculty advisers whose goal is to find and publish excellent high school writing. The Board (about eighteen students selected by the English Department and the Head of the High School) meets once a week during a seminar period to discuss and select poetry and prose. In addition, board members prepare all selections for layout and, in April, help compose the magazine. Because the work is heaviest in February, March, and April, students should expect to give several extra hours a week during this period.

## **High School Mentoring**

*(Friedrichs/Garber-Brownel/James)*

High school mentoring is a program for juniors and seniors interested in working with middle school students.

Interested students complete a letter of interest and attend a series of trainings and check-ins throughout the year in order to participate. The mentors then meet regularly in small groups, along with a health teacher, to plan monthly sessions for 8th graders. These sessions occur in the 8th graders' regular health classes and offer an opportunity for the younger students to hear from a fellow teen who is not so far removed from their own experiences.

During the sessions, mentors cover everything from their memories of middle school to navigating social situations and friendships, and dealing with social media. They provide an ear for the middle schoolers who may have questions and concerns they don't want to share with a teacher, and they make an effort to engage with the younger students around school. After each session the mentors debrief with a health teacher about the class.

Interested students should contact Ellen Friedrichs prior to registering.

## **Mock Trial**

*(Hill/Heller)*

The Mock Trial Seminar is designed to teach students about the legal trial process and the skills needed to be effective courtroom advocates. The seminar operates on a “learn by doing” principle, in which students actively practice techniques of effective persuasion. The skills of thinking on one's feet, preparing arguments and analyzing fact patterns are emphasized. The first semester is devoted to learning and perfecting courtroom rules in order to prepare the students for the New York State Bar Association Mock Trial Competition against other NYC schools in the spring. Students work on practice cases to gain facility with preparing direct and cross examinations, making objections, introducing evidence, and learning trial procedure. Attendance and engagement are critical to forming a cohesive team for going to trial. Although the seminar is first semester only, extra meeting times during the beginning of the second semester in late January and February will be required as the competition approaches.

## **Model Arab League**

*(Kang)*

Arab League was formed at the end of WWII (actually, seven months before the formation of the UN) to work towards future stability in the region. In May 1945, the six original members signed the Pact of the League of Arab states to, “draw closer the relations between member states and coordinate collaboration between them, to safeguard their independence and sovereignty, and to consider in a general way the affairs and interests of the Arab countries.” The Arab League has since grown to include 22 member states which each have equal voting powers, and have further subdivided into various councils: Joint Defense Council, Council on Political Affairs, Palestinian Affairs, Social Affairs, Environmental Affairs, Court of Justice, and Additional Specialized Council.

In this seminar, we will first learn of the history of the Arabic world generally, and then of the Arab League specifically. As the term progresses, we will simulate council sessions representing the various member states. Ultimately, we will prepare to participate in Model Arab League conferences as a school team. **Please note:** This seminar will require regular attendance. In order to participate in a conference, delegates must not miss more than two classes.

## Model UN

*(Anderson)*

The United Nations was established in the aftermath of World War II, when the world lay at the nadir of destruction, to prevent future tragedies. Its singular goal (essentially, to save humanity from itself) is so broad as to make the organization laughable in the eyes of many of the world's more jaded cynics. And yet, in the last 75 years, there has been no additional period of widespread, inter-state conflict. The Universal Declaration of Human Rights has been a guidepost that has increased worldwide quality of life through application of soft-power and economic pressure. The Security Council defused the Cold War. UN Peacekeepers, while known for several tremendous failures, have also ushered in the state of South Sudan and keep a close watch on the simmering conflicts between India and Pakistan; Israel, Syria, and Lebanon; and within Libya. The UN has a track record of doing the most good that it is politically capable of and even its most shocking moments of impotence are only that: the UN has never committed an atrocity.

This Seminar will encourage students to engage with many of the UN's inherent contradictions (how do you enforce international law while respecting state sovereignty) without losing the idealism that made it such an appealing post-war prospect. We will spend much of our time in class representing large and small state actors in lively, parliamentary debate on topical global issues. Some research will be expected of the students in the class in order to best imitate the real challenges facing UN delegates.

Students will also get the opportunity to take on a large role organizing the SAMUN conference. Our time will be dedicated to planning committees and crises, writing background guides, and organizing non-debate, periphery events (including dances, lunches, fundraisers, and opening and closing ceremonies). By the end of the year you will be able to say that during your time in High School you helped to organize a full-fledged conference for hundreds of middle school attendees!

## NYC '77

*(Flaherty)*

We know some of the highlights and lowlights to this era: "Ford to City: Drop Dead." The blackout. The Mayor's race. Reggie Jackson hitting three home runs in one World Series game while the Bronx burned around him.

But so much more. Not only the urban policy—or lack thereof—behind these stories, but the demographic shifts in America, an old, white, urban political structure cracking at the seams, and the definitive ending of "the 60's" as a touchstone. These are some of the larger backdrops we will strive to understand.

The center of our endeavour? The great artistic ferment in what many called a dying city. This is where we can dig deepest: the emergence of minimalism, hip hop, loft jazz, New Wave, disco, dance music, and punk rock. A 70's cinematic gaze on the metropolis that encompasses the dystopian - "The Warriors," "Dog Day Afternoon," and "The Taking of Pelham

1,2,3,” as well the willfully nostalgic “Annie Hall” and “The Goodbye Girl.” We will dig into the emerging new experimental sensibility centered at the Anthology Films Archive, and video art as a new lingua franca. We will delve into such landmark art shows as “The Pictures Generation” as well as graffiti to see how a new conceptualism was being born. This will take in not just the visual but grapple with the continental theory—postmodernism, post structuralism, post Marxism—that was entering the zeitgeist through crucial journals such as “October.”

What will we do? Talk a lot about ideas and the city, listen to music and watch film, and take trips around New York. The requirement is to come with a love of our wondrous city, and an eagerness to explore how from the ashes, a wild and many hued phoenix arose.

## **“The People United Will Never Be Defeated”—Activism and Community Organizing Today**

*(Pickering)*

Our work will be grounded in a study of activism in America by drawing from major social reform movements including LGBTQIA rights, Black Lives Matter, and the Women’s Rights movement. Course content covers principles of grassroots organizing, game planning, coalition building, meeting protocols, rapid response, and more. We will gain a deeper understanding of government at the local, state, and federal levels. Based on student interests and passions, we will create and implement at least one civic action each semester. Markers, posters, clipboards, and other materials are provided. Students should plan on wearing well-soled shoes.

## **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.

## **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)*

“What a surprise!” the Fog Man exclaims when two children arrive at his door on Fog Island in the book by Tomi Ungerer. “What brings you here? Who are you?” We will discover what brings you to the preschool as you play in the classrooms and get to know these children and their teachers and the enchanted place they inhabit. “Anyway, whoever you are, come inside and be welcome.”

## **The Ram Seminar: Creating Your Student Newspaper**

*(Bodner)*

The Ram has been the student voice of Saint Ann’s for more than twenty years. During that time, it has published everything from crossword puzzles and movie reviews to student and faculty opinions that challenge the status quo. News writers cover major school milestones, opinion writers address issues in and outside of the Saint Ann’s community, and all staff writers share a commitment to upholding journalistic ethics. If you’re interested in journalism, join us for our weekly seminar meeting. Besides putting together the current issue and holding pitch meetings for future issues, we’ll look at what other news outlets are doing, debate what constitutes a newsworthy story, and conduct writing workshops. Anyone with a passion for writing, photography, videography, or layout is welcome. **Note:** This seminar is required for all Ram senior staff: editors-in-chief, associate editors, and staff writers. Contributing writers and editors can attend on an as-needed basis or as they desire.

## **Space Colonies**

*(Roam)*

Could some of that limitless solar energy in outer space be safely beamed down to Earth, making us less hungry for oil and less reliant on gas-burning cars and coal-burning power plants? Couldn’t this be a boost for health, environment, prosperity, you name it, if it worked? Since the 1970s, some physicists have been suggesting that colonies floating in space could build huge solar collectors, using minerals from the moon, and using microwaves to send down cheap (?) energy. This seminar asks whether space colonies are a possible, desirable investment in the future, and how they might realistically work. Issues include safety, health, life in space (artificial gravity, radiation), energy, cost, basic physics, and even political philosophy (Colonialization? Independence? Weapons in space?). We study models (simulations) of life support, ecosystems, financial investments, and world population vs. hunger vs. resource trends. The “Civilization” game, with its “manage a country” role-playing, might

give us a way to design a “civ in space” scenario. We read works by technology philanthropist Buckminster Fuller and works by Ray Kurzweil, who is forecasting a rapidly approaching technological “singularity”—an escalating collection of breakthroughs in everything from genomics to artificial intelligence, robotics, nanotechnology and energy. This is also a chance to participate in NASA’s annual space colony design contest for high school students. See “[tinyurl.com/saccspace](http://tinyurl.com/saccspace)” for more information. **Prerequisite:** No spacesuit necessary, no programming experience necessary

## **Space Is Illmatic**

*(Collins)*

This class will use Nas’ 1994 rap album “Illmatic” as a departure point for a study of art, race, gender, and spatial politics. The class will proceed by listening track-by-track, while incorporating readings and viewings from other media to provide context and color. Though our main resource is musical, this seminar will be somewhat reading-intensive. By studying texts from a variety of disciplines (among them performance studies, architecture, history, and urban studies), we’ll work toward understanding the album and its context. Why has Illmatic been lauded as one of the greatest hip-hop albums of all time? What were the conditions that produced this work of art? What historical and social forces produced the city as it was in 1994, and how do these same entities operate on space and place in our time? And, more than anything: how might we live together today?

Writers we’ll study include, but are not limited to: Michelle Alexander, Michel Foucault, bell hooks, Fred Moten, Jane Jacobs, Robert Caro, Henri LeFebvre, Isabel Wilkerson, and Ta-Nehisi Coates.

## **Student Internship in Technology @ Saint Ann’s**

*(The Department)*

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.

## **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

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# THEATER

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

## **Acting**

*(The Department)*

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. We may have visits from special guest artists and workshop leaders, and we may 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, Washburn 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! **Note:** Scene rehearsals with partners often take place outside of class time.

## **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 may take trips to productions of note and have guest workshops! Bring your focus, verve, dreams, and goodness to your art! **Prerequisite(s):** open only to advanced students with the permission of the instructor

## **Actor's Voice**

*(Osborn)* (1x per week)

The wonderful world of dialects, speech, and vocal production awaits you. Funny voices, accents, and more are explored in this class in which the vocal side of acting is stressed. Poetry and contemporary and classical texts are used, and we work on several class projects including improvisation and scene and monologue work. Past years' material included *The Importance of Being Earnest*, *Riders to the Sea*, *Monty Python and the Holy Grail*, and *The Enchanted*. We incorporate relaxation techniques, voice building, and breathing to help actors deal with the demands of auditions and performance. This dynamic and practical class is tailored to the specific needs of its students.

## **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 after school rehearsals.

## **Character, Song, and Story**

*(Lamazor & The Department)*

Enjoy: VANILLA ICE CREAM, HOT PIES, A GLIMPSE OF STOCKING, A RING OF KEYS, THRILLING COMBINATIONS, COFFEE BREAKS, MIRACLE OF MIRACLES AND SYMPATHY AND TRUST ABOUNDING. "Life is a cabaret" and "who tells your story?" So, "come hear the music play", "join us" in exploring and acting in great musicals and in creating authentic new musical theater works. Connecting -the -dots or totally dotty, your life and passions, your comedy and drama can be transformed into a collaborative musical. The class will explore and perform an array of musical theatre characters, scenes and songs. And time will also be dedicated to song creation exercises, improvisations, games, character building and storytelling. You and your fellow ensemble members will sort/ sift, share and perform material that will become your musical workshop performance piece. We will make use of the world around us from the lyrical to the political: objects, visual art, poems, dreams, daily life, plays, stories, primary sources, periodicals, people, places, favorite books, world history, memories and different forms and genres of music and dance/movement. We will have visits from guest artists and take trips to see productions "on the town." *Sondheim*, *Miranda*, *Rodgers & Hammerstein*, *Russell/Willis/Bray*, *Porter*, *Wolfe*, *Tesori*, *Larson*, *Weill* and others will become "a part of your world." We will perform in different spaces. Open to all Grades and no prior musical experience is necessary. We "have magic to do" in "seasons of love"—and our "corner of the sky" will be a fun, meaningful place! "Children will listen!"

## Costume Production

*(Bevans, Chae-Lawrence, Shand)*

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 video. 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

*(Jackson)*

We continue our study of dance technique, improvisation, and composition. Emphasis is placed 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. 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. Join in the Puppet Parade!

## 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 course requires constant participation and much out-of-class work.

**Note:** This class is open to sophomores, juniors, and seniors.

## Moving Image 2

*(The Department)*

This workshop is an advanced auteur filmmaking course that covers all aspects of directing, cinematography, screenwriting, editing and sound design. Students write, direct, and shoot one sync-sound color digital short that is entirely their own, unique vision that they will edit and screen at the end of the year. We delve deeply into direction of the camera, film narrative, camera technology, editing, and directing actors for the screen. The class is exposed to inspiring clips and films from classic and contemporary cinema from around the world.

**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**

*(The Department)*

This 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, editing, and sound design. In the second semester each crew of three will write, cast, and independently shoot an HD, color short film. 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**

*(Kaluzal/Wyron)*

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. **Note:** All students are required to work on at least one production which will require time outside of class.

**Prerequisite(s):** One year of Technical Theater, or permission of the instructors

## **Playwriting**

*(Exavier, Posner)*

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**

*(Exavier, Posner)*

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, 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 revenge tragedians like 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 skills with musical instruments both modern and old fashioned. And in our scene studies, everyone plays a leading role.

## **Student-Directed Plays**

*(Lamazor)*

You will pick a one act or short play that inspires you to conceptualize, cast, direct, rehearse and produce it for our Student-Directed Play Event. of one act and short plays toto The plays will be presented in The Lobby, The Rotunda, or, possibly, the Theater, in the second semester. We will explore texts such as “The Empty Space”, “Directors on Directing”, “A Director Prepares”, “An Actor Prepares” and “Respect for Acting”. You will genuinely walk the walk and talk the talk and do the hard and rewarding work of a director of theater. You will be responsible for all of the activities, from the banal to the sublime, that will get your play to happen in an authentic, organized, joyful and collaborative mode. This is a course in which preparation and rehearsals will take place outside of class time as well as during class time on a consistent basis. Note: open to juniors and seniors only. This class will take place during the seminar period.

## **Technical Theater**

*(Kaluza/Wyron)*

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 which—it should be noted—will require time outside of class.

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# HUMANITIES COURSE PERIODS

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## **Period C (English)**

The Fall (*Avrich*)  
Literature of Disorientation (*Darrow*)  
Literature of the Natural Environment  
(*Rosinberg*)  
Science Fiction (*Aronson*)  
Self and Place (*Bodner*)

## **Period C (History)**

African-American History (*Johnson*)  
Democracy & Dictatorship (*Kang*)  
Media & Politics in Modern America (*Kapp*)  
Postwar America: From Rosie the Riveter to  
the Age of Reagan (*Schragger*)  
World War 2 (*Mellon*)

## **Period D (English)**

Big City Lit (*Donohue*)  
Global Women's Lit (*Mooney*)  
The Great American Novels (*Khoury*)  
The Kids are Alright? (*Fodaski*)  
Love and Power in Britain & America  
(*Bosworth*)  
Telling War Stories (*Chapman*)

## **Period D (History)**

Modern Greek Thought (*Deimling*)  
New York City History (*Swacker*)  
A People's History of Disease (*Bertram*)  
Sexuality, Christianity, & Gender (*Higa*)  
Social Movements in Latin America (*Robiolio*)

**Non C/D:** Cinema of Youth; Life/Afterlife: Slavery in US History, Politics, and Culture

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# SCIENCE COURSE PERIODS

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## **Period A**

Biology  
Chemistry  
Physics  
Physics of Consciousness  
Advanced Physiology  
Environmental Science  
Modern Genetics  
Mechanics and Relativity  
Astronomy

## **Period B**

Biology  
Chemistry  
Physics  
Introduction to Quantum Mechanics  
Analytical Physics  
Advanced Chemistry  
Organic Chemistry  
Oceanography/Meteorology

**Non A/B:** Art, Science, and Nature; Electricity and Magnetism; Chemistry of Cooking;  
Neuropsychology

**TBD:** Advanced Biology

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# HUMANITIES RANKING WORKSHEET FOR RISING JUNIORS AND SENIORS

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## Section 1:

	Period C	Period D
1st Choice		
2nd Choice		
3rd Choice		

## Section 2:

Humanities Ranking			
1		4	
2		5	
3		6	

## Helpful Hints:

Each line of section 1 must include an English and History class; one that meets in C period, and one that meets in D.

- NO REPEATS (i.e. you may not list the same class twice)
- Every class you choose must be a class that you are prepared to take, it is possible that you will receive any course you list.
- In section 2 rank all courses listed above in order of overall preference. Don't worry about what period it meets or which department it is in.





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