



## Upper School Course Catalog 2017-18

### Community Action Courses:

#### Community Action

Teacher: Debbie Aronson

As community members and citizens, we have the opportunity to develop partnerships and create positive change in the world. Many of us, however, feel that we cannot do anything to solve problems that we see around us. This class will help students to become change agents. Students will decide on the focus of their advocacy or community-service project based on their personal interests. They may choose, for example, to teach or mentor children, to interact with senior citizens, to advocate for the environment or animal rights, or to fight against injustices such as hunger and homelessness. Students will keep a journal, participate in activities designed to encourage reflection, and discuss and share their experiences with each other.

Lowest Grade Allowed: 9

No prerequisite needed

#### Community Action: Hunger & Homelessness

Teacher: Debbie Aronson

Students will have the opportunity to explore different types of organizations that support people who are struggling with homelessness and hunger in New York City. The class will help at food pantries, shelters and other organizations around the city. Students will keep a journal, hear from speakers, watch documentaries, participate in reflections, and share and evaluate our experiences as a group. The class will

investigate such issues as affordable housing, food insecurity, fair wages, substance abuse, domestic violence, education inequality, and child welfare. Participants will investigate the facts and misconceptions about homelessness, raise awareness, and advocate for the issues they care about.

Lowest Grade Allowed: 9

No prerequisite needed

## Community Action: Students Teaching Students

Teacher: Debbie Aronson

What is it like to teach? This course will explore the challenges that schools, students and teachers face today. We will meet with people in the field to better understand how the education system works in New York City. The class will share and analyze information gathered and decide how to take action on an issue of their choice. Students will work at Calhoun, a public school, pre-school, daycare or other type of educational program. Our goal will be to have opportunities where students can help schools, teachers and children in the classroom. Each student will choose an aspect of education to focus on which interests them such as literacy, special education, experiential learning, social action, the arts, or academic subjects. Based on their interests, students will create a project which will benefit the school or classroom they are working with such as assisting a teacher, leading a project, creating a lesson plan, or organizing a trip. Perhaps education will become an interest that students will pursue in the future!

Lowest Grade Allowed: 9

No prerequisite needed

## English Courses:

### English 9

Teacher: Phil Tedeschi & Lyda Ely

English 9 is intended to introduce students to the expectations of high school English.

The study of vocabulary, punctuation and grammatical usage, and writing skills will progress systematically across the four mods. In literature, each mod will constitute a unit and focus on a different text. Texts may include the following: *Julius Caesar*, *Fahrenheit 451*, *My Antonia*, *A Lesson Before Dying*, *Lord of the Flies* and *The Joy Luck Club*. There will also be a focus on the short story and lyric poetry.

Lowest Grade Allowed: 9

No prerequisite needed

## English 10A

Teacher: Kristen McElhiney

"It's possible, in a poem or short story, to write about commonplace things and objects using commonplace but precise language, and to endow those things—a chair, a window curtain, a fork, a stone, a woman's earring—with immense, even startling power?" (Raymond Carver). Carver, the editor of the contemporary short story collection we will study, emphasizes the power of precise language to move and invigorate the reader. In this course, we will read and write with this goal in mind: reading with attention to specific language, and writing as a process of focusing on a clearly defined topic and selecting and ordering simple, carefully chosen words in compelling ways. The study of grammar and vocabulary will be essential touchstones along the way. After studying stories as a group, each student will work with a partner to teach a story to the class.

Lowest Grade Allowed: 10

No prerequisite needed

## English 10B

Teacher: Kristen McElhiney

Writer and Vietnam War veteran Tim O'Brien explains the purpose of fiction as "getting at the truth when the truth isn't sufficient for the truth." This comment speaks to the unusual form that *The Things They Carried* takes—blending fact and fiction, story and history, past and present in a collection of interrelated, non-linear stories related to the Vietnam War. The course builds upon the first-mod course in its emphasis on close

attention to language in both reading and writing as it takes on the pleasures and challenges of wrestling with a demanding text. Students will write a creative paper and an analytical essay and create a final presentation on one of the shorter stories.

Lowest Grade Allowed: 10

No prerequisite needed

## English 10C

Teacher: Kristen McElhiney

The third segment of English 10 will challenge students to understand and interpret Shakespeare's "Scottish Play" as both readers and artists. We will read the play together, both collectively in class and individually outside of class. As readers, our goal will be to understand Shakespeare's language literally and figuratively, his construction of characters and their relationships, the central ideas with which the play wrestles, and, finally, the conception of tragedy the play presents. Students will write several short analytical and creative pieces. Final projects may take several forms, including live performances, films, and original scenes or stories.

Lowest Grade Allowed: 10

No prerequisite needed

## English 11A

Teacher: Ellen Kwon

In this required introduction to English 11, we will investigate the vision of the colonists and the ways in which the first settlers created a foundation of values as well as the historical legacy with which we live today. Through readings from some of the first European immigrants, including John Winthrop and William Bradford, we will start to understand the culture and mindset of the first settlers. Morrison's *A Mercy* will illustrate the early stages of slavery in colonial America and bring the rawness of the "new world" to life. Hawthorne's "Young Goodman Brown" and excerpts from *The Scarlet Letter* will plunge us into Puritan society. Excerpts from Emerson and Thoreau will reflect the 19th century desire to turn away from the American Dream as immortalized by Horatio Alger in *Ragged Dick*. Further, Melville's "Bartleby, the

Scrivener" will illustrate the tragic outcome for an individual living willfully on the periphery of the Dream. The emphasis of this course is on close reading and discussion. Students will demonstrate their understanding through analytical and creative assignments.

Lowest Grade Allowed: 11

No prerequisite needed

## English 11B

Teacher: Ellen Kwon

In this course, we will continue many of the ideas that we began discussing in the first module of junior English, including that of access to the American Dream. This time, we will approach this idea through the lens of race and coming of age. Through close analysis in discussion and writing, creative writing assignments, and other projects, students will broaden their understanding of what issues can be a part of "coming of age." Included in this module is a unit on persuasive language and students will write and deliver a persuasive speech. Other assessments include an essay and a reflective journal focusing on beauty. Possible texts include *The Bluest Eye* and *The Catcher in the Rye*.

Lowest Grade Allowed: 11

No prerequisite needed

## English 11C: Gender in American Literature

Teacher: Ellen Kwon

In this English 11 third module elective, we will focus specifically on the theme of gender as a way to examine what it means to be American. Do all Americans dream the same Dream? Just how deep do gender differences run? How do sexuality and gender roles play into our ability to make our lives our own? In an attempt to respond to these big questions, we will take a look at some of the following: Hawthorne's "Rappaccini's Daughter" and "The Birthmark," Wharton's "Ethan Frome," Gilman's "The Yellow Wallpaper," Cather's "O, Pioneers!," Proulx's "Brokeback Mountain," Hemingway's "The Short Happy Life of Francis Macomber" and Williams' *Streetcar*

*Named Desire*. This class is intended to provide an opportunity to take a close look at one set of factors which may or may not play a significant role in who we are as Americans. These readings and related discussions will depend upon students' deep understanding of the notion of the "American" as constructed from previous English 11 and U.S. History classes. Assessments include an essay and creative projects.

Lowest Grade Allowed: 11  
No prerequisite needed

## English 11D: Literary Views of the 20th & 21st Centuries

Teacher: Ellen Kwon

In this English 11 elective, we will examine political and social issues of the 20th and 21st Century through fiction. Although it is entirely possible to read literature purely on its own merits, here, we will do that and more. Through the study of works such as Fitzgerald's *The Great Gatsby*, Vonnegut's *Slaughterhouse-Five*, Tomine's *Shortcomings*, and Miller's *Death of a Salesman*, we will discover how fiction writers illuminate and enrich real-life issues of their times. It is entirely possible that we will continue our discussions of the American Dream, its definition and the ways in which some of us have access to it or are excluded from it. Assessments include one essay and a number of creative analyses.

Lowest Grade Allowed: 11  
No prerequisite needed

## English Electives:

### Broadcast Journalism

Teacher: Lyda Ely

We've been sharing "news" with each other since we first gathered around the campfire during man's early days. As we've evolved, so too has our news delivery

system. Now we are able to share the details of daily events "live" and instantaneously. We are taking in images, words and sounds with great speed. This class is designed to step back and to examine the message in the media we absorb, to consider where we are getting our stories, and how we might find the "truth." It will be a hands-on, introductory class in which students study newsgathering techniques; they will find stories, and report those stories. As they do so, they will consider bias and practice a variety of approaches in an effort to create thorough and compelling short pieces. They will write, shoot and edit, and ultimately share their work with a larger audience.

Lowest Grade Allowed: 10

No prerequisite needed

## Documentary Storytelling

Teacher: Lyda Ely

How do you successfully craft and sustain a story with pictures and sound? In this class, we will analyze a variety of non-fiction, visual stories from award winning documentaries to reality television shows and selected news reports. The focus of the course will be on the longer format—the documentary, and its unique construction. We'll discuss what's popular and why. We'll also view time-honored classics to consider their relevance and staying power. When applicable, we will invite professionals in the news and film business to join our class discussion and to share their valuable insight. The examination of others' work will ultimately focus on the stories we ourselves want to tell and the best way to approach those topics. What research will we need? With whom might we speak? How will our films look and sound? Who is our intended audience? By the end of the mod, everyone will have conducted research and completed an initial script for a selected topic.

Lowest Grade Allowed: 10

No prerequisite needed

## Getting Personal: The Memoir and Autobiography

Teacher: Lyda Ely

As author Isak Dinesen noted, "To be a person is to have a story to tell." This class will

explore the re-telling of individual journeys through memoirs and autobiographies. What can we learn about ourselves when focusing on the stories of others? Is there both a "truth" and a constructed "story" in these non-fiction genres? While reading mentor texts for inspiration and guidance, we will turn the focus inward and will write personal narratives of our own. The goal is to consider our pasts, our inherited traditions, our pivotal moments so far, and how those collectively contribute to our individual outlooks and the futures we hope to lead. Shared texts may include *The Glass Castle* by Jeanette Walls, *The Color of Water* by James McBride and *Autobiography of a Face* by Lucy Grealy; plus, excerpts from *Angela's Ashes*, *I Know Why the Caged Bird Sings*, *Hunger for Memory*, *Dreams from my Father*, *Breaking Night*, and selected podcasts from "The Moth."

NOTE: 10th graders need teacher permission to sign up for this class.

Lowest Grade Allowed: 10

No prerequisite needed

## Immigrant Stories

Teacher: Ellen Kwon

In this 10th grade English elective, we will examine immigrant stories, building upon work that you did in 9th grade, including gathering and documenting the stories of your own family cultures (Lyda's sections). Shared texts for this course may include Junot Diaz' *Drown* and Gene Yang's *American Born Chinese*. We will have the chance to select films about immigrants to view and analyze alongside the texts that we will share. Please join this class if you love to read and discuss!

NOTE: Instructor approval is required.

Lowest Grade Allowed: 10

Prerequisite: English 9

## Microfiction

Teacher: Jarrad Nunes

Microfiction is a compelling subgenre of narrative fiction, and features very short stories that are low in word count yet often packed with deep meaning. These works, typically composed of 500 words or fewer (yet sometimes as brief as one sentence), have emerged indirectly from the traditions of parable and myth, and parallel such modern non-literary forms as popular songwriting, commercial advertising, and social media. The purpose of this class is twofold: to expose students to a large sample of microfiction writing and critical essays about the form, in order to refine critical reading, thinking and response to the subgenre and to cultivate connections with other genres of writing and communication; and to provide space for creative and critical writing, using the constraints dictated by the form to isolate and hone the concepts of subtext and narrative voice. The final cycles of the course will focus on the compilation and publication of an anthology of our own microfiction works, and the creation of short film adaptations of student work.

Lowest Grade Allowed: 10

Prerequisite: English 9

## Coming of Age and Making of a Hero

Teacher: Ellen Kwon

Adolescence can be a time of confusion and struggle. In the limbo between childhood and adulthood, we work to define ourselves on our own terms as we navigate the often-murky way to independence. So often, Coming of Age literature depicts teens as troubled and troubling. In this class, we will examine the opportunity that adolescents have to move through the challenges of teen-age years to become heroes. As a Calhoun student proclaimed in a persuasive speech:

"Actually, as much as I need to respect my elders, you should respect me as well. You need to respect the triumph I can and will achieve, the revolutions I can create with my thoughts and these hands." Proposed texts include *Hamlet*, *Persepolis*, *Antigone* and *When the Emperor was Divine*.

Lowest Grade Allowed: 11

No prerequisite needed

# Documentary Storytelling II

Teacher: Lyda Ely

In this class, the ideas and the scripts from the introductory class will take final shape. Students will refine their stories and explore all the facets of non-fiction filmmaking—from interviewing subjects on camera to editing and presenting the completed films to an audience. This class requires students to make the hard choices about what to leave in and what to lose; and in doing so, to recognize the deliberate shaping of a film's message. Students must look inward to determine their own biases and unique perspectives toward their chosen subject matter.

Lowest Grade Allowed: 11

Prerequisite: Documentary Storytelling

# Odysseys

Teacher: Phil Tedeschi

The Merriam-Webster Dictionary defines the word odyssey in two ways: "a long journey full of adventures" and "a series of experiences that give knowledge or understanding to someone." The first definition refers to Homer's *Odyssey*, the archetypal story of a hero's quest to return home. This course will not deal with Homer, but instead look at three contemporary works that connect with the second definition of odyssey. We will study three novels: Ernest Hemingway's *A Farewell to Arms*, Kate Chopin's *The Awakening*, and Saul Bellow's *Seize the Day*.

Lowest Grade Allowed: 11

No prerequisite needed

# Outsiders in American Film

Teacher: Kristen McElhiney

What was going on in American cinema when you were too young to know? We will focus our inquiry on films that feature rebel/outsider/outlaw figures, many of them

young adults, who seem to define themselves against mainstream cultural expectations. The 1990s produced a plethora of serious films centered on controversial forms of rebellion and self-expression from drug addiction to transgenderism. Films may include *Boys Don't Cry*, *Donnie Darko*, *My Own Private Idaho*, *Thelma and Louise*, *Dead Man*, *Heathers*, and *High Art*. Students will be asked to read film as they would be asked to read literature, with careful attention to subtleties of representation in image and narrative. The course will be writing intensive. Students will read and respond to current academic work in film studies and film reviews and teach a scene from a film at the end of the course.

Lowest Grade Allowed: 11  
No prerequisite needed

## Shakespeare: A Prince and a King

Teacher: Phil Tedeschi

In this course students will read two plays by Shakespeare: *Hamlet* and *Henry V*. Each play focuses on a young aristocrat, but the two protagonists have little in common. As we read the plays, we will explore their differences and try to discern why one is destined to rule and the other not.

Lowest Grade Allowed: 11  
No prerequisite needed

## The Other in Literature

Teacher: Ellen Kwon

Concepts of "the other" are used to differentiate groups of people for all kinds of reasons, ranging from a "simple" categorization for efficiency's sake to fear to an overt, hostile separation of "them" from "us." Our essential questions for this course will revolve around the motives and modes of creating the Other: why do we feel the need to do so? Are there innocuous reasons for differentiating "us" from "them"? How is the Other created and how are the myths around Otherness maintained? Readings may include works from Toni Morrison, Joseph Conrad, Shakespeare and Claudia Rankine. Other shared works may include *Cabeza de Vaca* and *Stage Beauty*. Students will work

on an essay as well as a reflective journal and a creative project.

Lowest Grade Allowed: 11

No prerequisite needed

## Theories of Truth

Teacher: Robert Rue

Is the accused guilty of murder? Does God exist? Are photographs always depictions of reality? To what degree are humans causing climate change? What factors led to the rise of fascism in 1930s Germany? This cross-disciplinary (English/Social Studies) course will not attempt to answer these questions, but rather will ask you to explore some of the ways in which various professions, institutions and academic disciplines define and pursue truth. We'll look at the way Sherlock Holmes does it in a fictional depiction of the detective's profession. We'll also examine some of the tools and principles used by real detectives, historians, judges, journalists, scientists and philosophers. Finally, as we learn what psychological experiments have told us about the human brain's tendency to misperceive reality, we'll also consider the role of embracing uncertainty, even as we pursue the comfort of conviction.

Lowest Grade Allowed: 11

NOTE: This is an interdisciplinary course in both English & Social Studies

No prerequisite needed

## Eugene O'Neill

Teacher: Phil Tedeschi

From the beginning of his career as a playwright in the 1920s, Eugene O'Neill revolutionized the American theater and remains today the greatest playwright the United States has produced. This course will look at four of O'Neill's plays, ranging from his early experimental dramas to the autobiographical plays he penned in the last ten years of his life.

Lowest Grade Allowed: 12

No prerequisite needed

# Family in Modern American Drama

Teacher: Phil Tedeschi

So many great American plays written in the 20th century focus on the family. While it might be difficult to determine why the family plays such prominent role in American theater, reading the plays and examining what aspects of family life give playwrights their inspiration can give one insight on American society and its mores. It is from the vantage point of society and mores that we will discuss four plays: Thornton Wilder's *Our Town*, Eugene O'Neill's *The Iceman Cometh*, August Wilson's *Fences*, and Edward Albee's *Who's Afraid of Virginia Woolf?*

Lowest Grade Allowed: 12

No prerequisite needed

# Franz Kafka and Gabriel Garcia Marquez

Teacher: Kristen McElhiney

In our current historical moment, the word "Kafkaesque" has gained new relevance, but what does it mean? The adjective is used and misused, but this class will offer us a way to get to the bottom of its meaning and how it pertains to and helps us understand our own cultural moment: reading Kafka's work! Franz Kafka was a late 19th-early 20th-century Jewish writer born in Prague and known for his artistically innovative and psychologically harrowing stories about surreal and nightmarish injustice and alienation in which the world no longer makes sense to the individual within it. Kafka wrote, "A book must be the axe for the frozen sea within us," and both he and Garcia Marquez, a Nobel-prize winning Colombian writer who died in 2014, wrote in accordance with this principle. Inspired by Kafka as a young writer, Garcia Marquez said, "When I finished reading *The Metamorphosis* I felt an irresistible longing to live in that alien paradise." Garcia Marquez created a literary world that builds upon and relocates the "alien paradise" he found in Kafka. We will read their work in translation from the Spanish and the German, respectively. The course will require commitment to serious reading and inquiry and participation in a seminar-style class as well as two formal essays and a creative piece that engages the philosophies and artistic styles of the writers. Texts will include some combination of the following:

Kafka's *Metamorphosis and Other Stories*, Kafka's *The Trial*, and Garcia Marquez's *Collected Stories*.

Lowest Grade Allowed: 12

No prerequisite needed

## *Moby Dick*

Teacher: Kristen McElhiney

Combining fiction, philosophy, religion, history, humor, politics, science, and environmentalism (among other disciplines and concerns), Melville's classic novel challenges reader expectations at every turn. The story of Captain Ahab's mad pursuit of a fierce and elusive white whale is the well-known part of the text, but that plot is only one dimension of Melville's profoundly rich novel. *Moby Dick* is a demanding read that calls for commitment and a willingness to feel a bit at sea on occasion. Fully engaging and completing this book is one of the most rewarding accomplishments an avid reader can claim. If you are not sure if this task is for you, consider reading Columbia Professor Andrew Delbanco's piece on the continued relevance of *Moby Dick* to the contemporary moment. The class will require attentive, thoughtful, thorough reading; one sustained analytical essay; several short analytical and/or creative pieces; and a culminating project based on students' interests.

Lowest Grade Allowed: 12

No prerequisite needed

## The Happiness Project

Teacher: Lyda Ely

What does it mean to be happy? And how does one achieve it? Students in this class will explore the social constructs of happiness and the effect on our mental health and wellness on both a physical and a personal level. With a focus on the transition from high school to college, from adolescent to adult, we will work to define and assess goals as a way to create positive change. Together, we will consider various studies in the field of positive psychology and neuroscience (as reported in articles, documentaries and expert interviews). Literature, music and art will serve as a guide in

an exploration of artistic expression and personal satisfaction as well as mindfulness and self-esteem. We will conduct our own research, write our own stories, and use our collective experience as a catalyst for change within the community.

Lowest Grade Allowed: 12

No prerequisite needed

## The Western

Teacher: Kristen McElhiney

The Western film is an engaging and artistically rich genre, but it is also a form that addresses cultural questions such as the meaning of "American," the mythology surrounding the frontier, definitions of manhood and womanhood, the cultural significance of race and language, and the role and meaning of violence. This course will consider several western films that were produced over a period of 50-plus years, exploring their artistic and political visions. The course will require reading as well as viewing, and central to our understanding will be American scholar Richard Slotkin's notion of "regeneration through violence" -in essence, his argument that American civilization has engaged in "sacrificial bloodshed" whereby national mythology has been historically defined by a white patriarchal ideology that asserts and knows itself largely through violence against and sacrifice of the "other." Since our country seems currently to inhabit one of these moments, it feels important to examine how and why we got here, and the western film is a useful point of inquiry. Films will include selections from the following, some traditional westerns, others "revisionist" westerns, terms we will address further in class: Howard Hawks' *Rio Bravo*; John Ford's *Stagecoach* or *The Searchers*; Nicholas Ray's *Johnny Guitar*; Sergio Leone's *The Good, the Bad, and the Ugly*; Georgy Roy Hill's *Butch Cassidy and the Sundance Kid*; Sam Peckinpah's *The Wild Bunch*; Ridley Scott's *Thelma and Louise*; Clint Eastwood's *The Unforgiven*; Jim Jarmusch's *Dead Man*; Quentin Tarantino's *The Hateful Eight*; John Sturges's *The Magnificent Seven* (1960) and/or Fuqua's 2016 remake. Requirements will include one or two major analytical essays with the option of a creative piece in one case and at least one presentation. Serious and committed preparation should go without saying: this will be a class that pushes you to higher levels of inquiry, both in conversation and in writing. For seniors only or by permission of the instructor.

Lowest Grade Allowed: 12

No prerequisite needed

# Math Courses:

## Algebra I

Teacher: Cathy Dault

This process begins by taking a closer look at the tools of arithmetic, i.e., the real numbers and their properties. A bridge to algebra will begin with the idea of substituting these real numbers into algebraic expressions in order to determine their values. As students become more comfortable with the abstract use of symbols to represent unknown quantities, they will be able to solve first-degree equations and inequalities, literal equations, absolute value equations and inequalities, and compound inequalities. This will be followed by the study of polynomials and how to predict the outcomes of performing the four basic operations with them. Students will become familiar with the process of factoring these expressions, which in turn will help them to solve quadratic equations and problems associated with them. Radical expressions will also be studied. The course will finish with solving systems of equations, both algebraically and graphically, and a close look will be taken at the important concept of slope. Students will be working individually and in groups and will be expected to express their understanding both orally and in writing.

Lowest Grade Allowed: 9

No prerequisite needed

## Algebra II

Teacher: Cathy Dault, Taylor White

This course in intermediate algebra builds upon the foundation established in Algebra One and expects the student to work with more complex operations and ideas. Some topics will be direct extensions of previous work: after having learned the simpler methods of factoring, students will now be exposed to more advanced methods; after having solved systems of two equations with two variables, students will now solve systems of three equations with three variables; the study of square root radicals will now lead to the study of cube roots; the basic work that was done with exponents will

be expanded upon to involve more complex expressions and logarithms; previous work in solving quadratic equations will lead smoothly into solving cubic equations and quadratic inequalities; the study of factoring will now allow students to work with more complicated rational expressions. Completely new topics will include matrices and determinants, imaginary and complex numbers, and conic sections. Students will be working individually and in groups and will be expected to express their understanding both orally and in writing.

Lowest Grade Allowed: 9

Prerequisite: Passing grade in Algebra I OR placement test

## Geometry

Teacher: Erika Zamfirescu

This course will combine algebra, two-dimensional geometry, and logic in order to help students view mathematics as an interconnected continuum of ideas instead of many isolated topics. Students will begin the year by reviewing the necessary vocabulary of points, lines and planes. They will be introduced to two-column proofs, and they will practice solving problems in small, logical steps. Students will learn about parallel lines and how they can be used to discover the nature of certain angles. Proofs will appear again when we cover what it means for two triangles to be congruent, and we will delve deeply into the various methods to prove that two triangles are congruent. After studying quadrilaterals (including rectangles, rhombuses and squares), we will return

to triangles when we talk about similar figures. We will end the year with trigonometry and the nature of circles. Throughout the year, Geometer's Sketchpad (software to create and measure geometric objects) will be used as an investigative tool. At the end of the course, students should be able to explain their trains of thought in small, logical, mathematically accurate steps. We will use *Geometry*, by Jurgensen and Brown.

Lowest Grade Allowed: 9

Prerequisite: Passing grade in Algebra I OR placement test

## Precalculus

Teacher: Inna Tokar

Precalculus starts with a review of Algebra 2. The remainder of the first mod is spent studying functions and relations, especially focusing on slope and transformations. During the second mod, we focus on polynomial functions, rational functions, exponential functions, the unit circle as well as trigonometric functions. In the final mod, we focus on analytical trigonometry as well as limits, which leads into an introduction to Calculus.

Lowest Grade Allowed: 10

Prerequisite: Algebra II (B grade)

## Single Variable Calculus

Teacher: Inna Tokar

Before Sir Isaac Newton changed the world with his theory of gravity, he invented a new branch of mathematics in order to help him represent his scientific concepts. He called this new math "calculus." In Single Variable Calculus, we will explore various techniques to find the slope of curves (derivatives) and how they can be applied to science and economics. We will then move on to integrals (anti-derivatives), and we will discuss how they can be used to find areas under curves. Treating integrals as "infinite sums", students will use the concepts they learned in previous classes in order to find the volume of three-dimensional solids. The course will end with a large unit on applications (both real world and scientific) of derivatives and integrals, and students will be challenged to come up with scenarios where calculus could be used in their daily lives. Texts will include Larson, Hostetler, and Edwards' *Calculus of a Single Variable* (7th Edition) *Calculus: Early Transcendental Functions* (4th Edition).

Lowest Grade Allowed: 11

Prerequisite: Precalculus (B grade)

## Introduction to Precalculus

Teacher: Taylor White

This is an introduction to precalculus with an emphasis on the principles of

trigonometry and solving triangles. This course is for students who wish to continue with mathematics beyond geometry, but who want to work on these principles with less Algebra involved.

Lowest Grade Allowed: 12

Prerequisite: Geometry

## Multivariable Calculus

Teacher: Inna Tokar

Imagine that you lived in a two-dimensional world, utterly ignorant of the fact that there was, in actuality, a third dimension. This should not be too difficult because every topic students have covered in algebra and precalculus has solely involved the two-dimensional  $xy$ -plane. Enroll in Multi-Variable Calculus and add depth to your understanding while adding depth (the  $z$ -axis) to the previously flat  $xy$ -plane. For all those who thought that calculus was the end of mathematics, this class will prove to you that it is actually the beginning. This class is for the few brave souls who are interested in combining all the seemingly unrelated mathematical topics they have learned throughout their lives into one, all-encompassing, comprehensive, mathematical narrative. Due to the plethora of information and topics that can be covered, students will have some say in the curriculum, and we will have the luxury of delving deeply into topics that peak their interest. Topics may include infinite series, advanced integration techniques, double integrals, triple integrals, dot products, cross products, and various applications. Texts will include Larson, Hostetler, and Edwards' *Calculus: Early Transcendental Functions* (4th Edition).

Lowest Grade Allowed: 12

Prerequisite: Single Variable Calculus (B grade)

## Math Electives:

### Geometrical Design & Technical Drawing

Teacher: Taylor White

Before most products are made, an engineer designs what it will look like. The goal of this course is to learn the basics of how the design process works by learning to draw objects that have already been designed and produced. We will start by drawing objects with basic geometric shapes and progress to more complex objects. To do this we will learn how to draw perpendicular lines and parallel lines using a straight edge and a compass, how to correctly mark measurements on our drawings, and how to choose how many "views" are necessary to fully represent the object. As with all things, there are different ways to do each of these steps and students will be encouraged to come up with their own solutions. The final project has the added dimensions of creating a 3-D projection using Tinkercad, a Computer-Aided Design program, and of printing it on the 3-D printer. In the end, the students will have a better understanding of geometry and how it is used to design products.

Lowest Grade Allowed: 9

NOTE: This is an interdisciplinary course in both Math & Visual Arts

No prerequisite needed

## Intro to Programming

Teacher: TBD

This course will explore object-oriented programming using the Java development platform. The course is an introduction to problem analysis, algorithm design, and the implementation of algorithms through the use of an object-oriented, high-level language. Students will study the fundamentals of writing well-designed software and the principles of object-oriented programming while discovering concepts and constructs of software engineering and development. The course will follow a natural progression of computer science/programming topics covering everything from IDE's to data expressions & variables to conditionals & loops. Class time will include discussion of concepts and topics followed by lab time to put theory into practice. No prior programming/computer science education is necessary; however, interested students should be self-motivated and have a healthy interest in technology, science, and math. Programming I is a pre-requisite for Programming II.

Lowest Grade Allowed: 10

No prerequisite needed

# Math in Sports

Teacher: Taylor White

"If a tie is like kissing your sister, losing is like kissing your grandmother with her teeth out" - George Brett. Do you ever wonder why some hits in baseball are pop-ups and others are homers? Why your team misses free throws at the end of the game? Or why you always get the seven-ten-split in bowling? In this course, we are going to look at the math behind the sports. We will look at one sport each six-day cycle. On top of learning why a homerun flies so far or the correct arc and velocity for a basketball free throw, we will have a day dedicated to the statistics in each sport. So, by the end of the Mod, the students will know both the statistical probability of and the reason why the Mets and their fans will not play this and every October.

Lowest Grade Allowed: 10

Prerequisite: Algebra II

# Experimental Probability and Statistics

Teacher: Inna Tokar

Do you know why a poker hand with three of a kind beats a hand with two pair? The answer lies in the theory of probability, which predicts the likelihood of various outcomes in situations for which more than one specific outcome is possible, as happens in the case of drawing five cards from a deck. Even if only one outcome is possible in a situation, say the measurement of the length of a room, measurement errors can lead to slight differences, and these are described by the theory of statistics. Both probability and statistics will be studied in this course, with experiments done to compare with theoretical predictions. At the end, you will be better equipped to assess errors in your measurements in science labs and to understand the operation of games of chance.

Lowest Grade Allowed: 11

NOTE: This is an interdisciplinary course in both Math & Science

Prerequisite: Precalculus

# Precalculus the Debugging Way

Teacher: Erika Zamfirescu

This course is an interdisciplinary course designed to combine mathematics with programming. Students will apply the principles of trigonometry to complete several coding projects. An example of such a project would be writing a menu driven program that graphs any trigonometric function, changing its period and amplitude.

Lowest Grade Allowed: 11

Prerequisite: Precalculus

## Music Courses:

### Beginning Strings

Teacher: Meighan Stoops

This yearlong E-block course meets three times in a rotation. Beginning students from ninth to twelfth grades may choose instruction in violin, viola, cello, or bass. Students are taught privately or in groups of two or three, allowing them to quickly improve their skills (playing a variety of material from folksongs, fiddle tunes, pop tunes, classical melodies, Suzuki exercises, scales and etudes). Music for ensemble playing is also introduced. Students participate in a variety of public performances, including a winter and a spring concert. Students are expected to practice daily so their skills improve quickly, permitting them to play with more facility and ease. In order to achieve the highest level of success, students will be expected to participate in the starting strings program for the entire year. It is necessary for students to own or rent instruments. In the cases of students receiving financial aid, the school will provide financial assistance with rentals.

Lowest Grade Allowed: 9

No prerequisite needed

### Chamber Winds

Teacher: Meighan Stoops

This yearlong E Block course meets three times in a rotation and is open to experienced woodwind and brass (flute, oboe, clarinet, saxophone, trumpet, trombone and baritone horn) players at the discretion of the instructor. Students are expected to participate in a variety of public performances throughout the year. In this ensemble, musicians each have unique parts and, therefore, greater individual responsibility. Students will be encouraged to assess and critique their daily performance and participate in discussions of stylistic interpretation of the music as they prepare for concerts. Students will also gain knowledge of technical skills (scales, articulation, rhythm, and intonation) and practical rehearsal techniques (how to play with OR without a conductor, what creates a balanced and satisfying ensemble sound, how to have greatest impact on an audience) involved in preparing chamber music performances. The group, along with students in the Wind Ensemble, will perform together in a large ensemble. It is necessary for students to own or rent instruments. In the cases of students receiving financial aid, the school will provide financial assistance with rentals.

Lowest Grade Allowed: 9  
No prerequisite needed

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

## Chorus

Teacher: Meighan Stoops

This yearlong E Block course meets three times in a rotation. The chorus studies a variety of genres, including Classical, Jazz, Pop, Broadway, Madrigals, and Doo-Wop and students are encouraged to suggest repertoire. Singers study vocal technique (including diction, breathing technique, pitch matching, vowel modification, blending, etc.). The chorus studies three- to five- part harmonies in various configurations, but is not limited to group work, as members often pursue individual interests that lead them to perform in smaller configurations. Concerts, which occur in January and May, are therefore rich in variety and highlight individual achievement as well.

Lowest Grade Allowed: 9  
No prerequisite needed

# Introduction to Jazz Improvisation

Teacher: Meighan Stoops, Victor Lin

What is improvisation? What is jazz? In this course, students will explore these two questions. They will be introduced to the world of jazz improvisation by listening and discussing recordings, dissecting the inner workings of basic music theory and considering how it relates to their instrument, and putting improvisational concepts into practice. We will explore improvisation on one- and two-chord progressions, diatonic improvisation, and the blues and the idea of the blues scale, and we will develop a greater understanding of the universal concepts of harmony, melody, and rhythm.

Lowest Grade Allowed: 9

No prerequisite needed

# Jazz Improvisation

Teacher: Meighan Stoops, Victor Lin

What makes one soloist sound better than another? How do you measure your growth as an improviser, and what is it that makes any work or performance of music compelling to the listener? In this class, students will delve more deeply into understanding their own improvisational skills as well as the world of jazz improvisation by exploring a wide array of styles and sounds of jazz music. Different styles within the genre of jazz will be explored and played; swing, Latin jazz, fusion, free jazz, soul, and funk styles. Students will be expected to have a degree of familiarity with the music of established jazz greats such as Miles Davis, John Coltrane, Duke Ellington, Dave Brubeck, and Charles Mingus. Students in this course will also be challenged with extended song forms and increased harmonic complexity so that they may gain a greater degree of awareness of their own improvisational tendencies and skills.

Lowest Grade Allowed: 9

Prerequisite: Introduction to Jazz Improvisation

# Percussion I

Teacher: Meighan Stoops

This yearlong E Block course meets three times in a rotation. Students enrolled in the Percussion Ensemble will get to play objects they can strike, scrape or slap. Students work together as a large ensemble as well as in smaller groups for collaborations and concerts with the chorus, wind, jazz and string programs. Mastering proper technique on all instruments will be strongly emphasized. Students will get to play many percussion instruments, including drum set, congas, bongos, marimba, vibraphone, glockenspiel, triangle, finger cymbals, tambourine, and more. Students get the chance to immerse themselves in and perform many different genres of music including Jazz-Fusion, Rock, Latin and Classical.

Lowest Grade Allowed: 9

No prerequisite needed

# Percussion II

Teacher: Meighan Stoops

This yearlong E Block course meets three times in a rotation. Students enrolled in the Percussion Ensemble will get to play objects they can strike, scrape or slap. Students work together as a large ensemble as well as in smaller groups for collaborations and concerts with the chorus, wind, jazz and string programs. Mastering proper technique on all instruments will be strongly emphasized. Students will get to play many percussion instruments, including drum set, congas, bongos, marimba, vibraphone, glockenspiel, triangle, finger cymbals, tambourine, and more. Students get the chance to immerse themselves in and perform many different genres of music including Jazz-Fusion, Rock, Latin and Classical.

Lowest Grade Allowed: 9

No prerequisite needed

# Strings Ensemble

Teacher: Meighan Stoops

This yearlong E Block course meets three times in a rotation as a full ensemble. Violin, viola, cello or bass students participate in a variety of public performances including a winter and a spring concert. Students are expected to practice daily so their skills improve quickly, permitting them to play with more facility and ease. In order to achieve the highest level of success, students will be expected to participate in the string ensemble for the entire year. Ensemble students are encouraged to join the Tuesday afternoon Calhoun Community Orchestra (CCO). The CCO includes professional and semi-professional musicians, faculty, staff and students from throughout Calhoun community. The CCO gives more advanced students an opportunity to be featured in concertos with the group. Recent student-soloists have included pianists, string and wind players. It is necessary for students to own or rent instruments. In the cases of students receiving financial aid, the school will provide financial assistance with rentals.

Lowest Grade Allowed: 9  
No prerequisite needed

## Wind Ensemble

Teacher: Meighan Stoops

This yearlong E Block course meets three times in a rotation. Woodwind and brass (flute, clarinet, oboe, saxophone, trumpet, trombone and baritone horn) students participate in a variety of public performances throughout the year. The course is designed for both beginning students and students who have been playing for some time. Ensemble experience and technique (scales, articulation, rhythm, and intonation) will comprise a major focus of classes. Repertoire is chosen with the aim of exposing students to a wide variety of musical styles and also to present progressive technical challenges. The group, along with students in the Chamber Winds, will perform together in a large ensemble. It is necessary for students to own or rent instruments. In the cases of students receiving financial aid, the school will provide financial assistance with rentals.

Lowest Grade Allowed: 9  
No prerequisite needed

# Vocal Workshop

Teacher: Meighan Stoops

This yearlong E Block course meets three times in a rotation. Vocal Workshop challenges students to explore vocal collaborations beyond chorus. Members of the workshop will choose the genres that may include: Jazz, Gospel, Classical, Pop, Musical Theater, etc. In a master class format, singers may also opt to have their work peer reviewed. Students can use this class as an opportunity to work on vocal technique and interpretation, improve on their performance presentation, work on solving performance issues, or simply share recordings and listen to different vocal arrangements. The group may perform together with various other school ensembles. While performances are optional, process and participation in discussions are essential.

Lowest Grade Allowed: 10

No prerequisite needed

# Music Electives:

## Advanced Music Theory

Teacher: Victor Lin

Building on the foundations of Practical Music Theory, this course will progress into the arena of improvisation, a deeper understanding of how music works, and it will challenge students to utilize compositional and performance skills while also allowing for conceptual exploration. The class will explore concepts such as song form, harmonic behavior and it will provide a larger framework for understanding Western music.

Lowest Grade Allowed: 9

Prerequisite: Practical Music Theory

## History Through Popular Music

Teacher: Victor Lin

Popular music is and always has been a powerful medium through which culture has historically been expressed, challenged, appropriated, commodified, and understood. Thanks to constant advances in technology, the typical high school student today experiences music in a vastly different way than previous generations have. In this course, we will explore the historical connection between the popular music of today and the immediate and distant predecessors of the music that is currently considered pop. The course will cover a broad spectrum of topics, including discussions centered around technical aspects of music, historical precedents within movements and genres in music, music and technology, the Internet revolution and how it has affected the current climate of popular music culture, as well as a general awareness of the timeline created by over 100 years of popular music's evolution in America. Students can expect to learn a great deal in this class about current trends in popular music, the economic climate surrounding the music industry, and an overview of the history of modern pop music.

Lowest Grade Allowed: 9

No prerequisite needed

## Practical Music Theory: How Music Works

Teacher: Victor Lin

There is a mysterious set of "rules" that governs the whole of Western Music. Have you ever wondered why a guitar chord sounds the way it does? Have you ever dabbled on the piano and picked out a tune and wondered how it works? Or experimented with any sort of musical instrument? In this course, students will explore what the mysterious "rules" of music are and begin to break them down into understandable parts. Students will be introduced to the basics and fundamental elements of music theory by exploring how the simplest and most familiar songs and compositions utilize common things like the major scale, major chords, minor chords, and time signatures. The class will juxtapose theoretical knowledge with practical application, showing how nearly everything that we listen to is subject to the same set of governing principles that can be understood and applied in making your own music.

Lowest Grade Allowed: 9

No prerequisite needed

# Race, Culture and Music In 21st Century America & Beyond

Teacher: Victor Lin

Today, music is a convergence of multiple social sciences and art forms that is growing at an unprecedented, explosive rate. More than ever, students and teachers alike have the ability to select and choose whatever it is in the world they want to listen to and possess individually, something that was unheard of and nearly impossible to even imagine as recently as 20 years ago. Amidst the chaotic industrial revolution that is responsible for the creation and distribution of music that is being produced and marketed in the present day, it is absolutely essential for the informed 21st century student to learn about, critically analyze, and make arguments about the volatile and controversial history of music in America from the perspective of multiple cultures, races, and viewpoints. Beginning with the advent of recorded music at the turn of the century, this course aims to engage students in an ongoing and in-depth dialogue and exploration of the myriad human experiences that are woven through the tapestry of a century's worth of American music history. The music that we listen to and experience today is inextricably linked to the lives and culture of the people who made it - this course aims to allow students to explore the different cultural landscapes surrounding the origins of the popular music of the present via means of historical discovery, analytical projects, interview questions, article readings, and individual research in addition to the classroom dialogues that are initiated.

Lowest Grade Allowed: 10

No prerequisite needed

## Science Courses:

### Active Physics

Teacher: John Roeder

Employing a thematic, inquiry-based approach to understanding the behavior of objects in the physical world, Active Physics sets the scene for learning science in

Calhoun's Upper School.

**ACTIVE PHYSICS 9A:** In the first mod of Active Physics, students learn about motion at constant speed, at constant acceleration, and around curves, and its relationship to forces in terms of Newton's laws of motion. They do this in the context of the important topics of safe driving and safety devices on automobiles, and they demonstrate what they have learned by making presentations at a hypothetical driving school and by creating a device to protect an egg in a collision. Students also begin a study of the structure of the atom, designed to serve as a bridge to the Chemistry course they will take as sophomores.

**ACTIVE PHYSICS 9B:** In the second mod of Active Physics, students learn the physics of things in their everyday lives. Using their knowledge of electric circuits and ways to heat water, students write a manual for a family to meet its electrical needs using three kilowatt-hours per day. Using the knowledge acquired about what produces sound, the pitch of a sound and its transmission, light reflection and the refraction of light rays, students produce a short sound-and-light show. Students also continue their study of the structure of the atom, which is completed in Active Physics C.

**ACTIVE PHYSICS 9C:** In the third mod of Active Physics, students apply what they learn to flights of fancy. From what they learn about gravitational and kinetic energy, and using their knowledge about force, they redesign a roller coaster for a particular audience of their own choosing. They also apply what they learn about human motion in a gravitational environment one sixth as strong as that on Earth, to design a sport to be played on the Moon. Finally, students conclude their study of the structure of the atom.

Lowest Grade Allowed: 9

No prerequisite needed

## Chemistry

Teacher: Hadda Conte

Did you know that you are exposed to chemical principles every day? From the tea you drink in the morning, to the exhaust emitted from buses, you are witnessing chemical reactions and chemistry all around you. This class will explore how chemistry affects your life through labs, projects, research, and lectures. This three-mod course will start with an examination of the atom and its subatomic particles. We will then study

compounds and molecules, examining how they are arranged, learning the new "language" of Chemistry and ending with a look at how compounds react with each other. As we move through the subsequent mods, topics we will investigate include Organic Chemistry, Nuclear Chemistry and Acids and Bases. Some questions we will answer throughout the year include: How do scientists date fossils? How does nuclear power work? Why does a lemon taste sour?

Lowest Grade Allowed: 10

No prerequisite needed

## Biology

Teacher: Francesco Filiaci

**BIOLOGY 11A:** Bio-Diversity, Evolution and the Origins of Life: What were the first experiments that looked at the origins of life and spontaneous generation? How do scientists design experiments? How did life originate on our planet four billion years ago? What is evolution? What is happening to bio-diversity in this sixth major mass extinction? These questions and many more will be answered in the first mod of Biology. In this mod, students will work with single-celled organisms (Protista: i.e. stentors and paramecium). They will run some simple and elegant experiments with mold (on coffee) and seed germination. Evolution will be investigated extensively through three to four visits to the American Museum of Natural History. We will spend many hours in the museum, exploring the Hall of Human Origins, the Hall of Dinosaurs, the Hall of Ocean Life, and the iconic wall of life, found in the Hall of Bio-Diversity.

Students will also spend time with a partner investigating any topic in the world of biology and then present this to the class.

**BIOLOGY 11B:** Anatomy, Research and the Cell: How is urine made in the mammalian body? What does the liver and gallbladder do for our body? What is a neuron and how does the somatosensory cortex and motor cortex help us navigate through this world? These are some of the many questions that students explore in this second mod of biology. In this mod, we dive into the world of anatomy and each student (with a partner) dissects a fetal pig. We compare and contrast the pig's anatomy with our own body systems. During this module students also write a research paper on any biological concept that means something to them. After having completed a co-presentation in mod I the students see many examples of how the study of all living

systems relates to their own lives. At this point, they are ready to research a topic on their own. In the final two weeks of this mod students make a 3-D cell model (some choose to make specific cell models: like neurons or cone cells in the eye) others make models of a plant or animal cell. They then present this to Middle or Lower School Calhoun students in a classroom, effectively teaching the organelles of living cells.

**BIOLOGY 11C:** Genetics- What is DNA? Who is Mendel? How is DNA copied and how do organisms distribute DNA in specific cells like sperm and egg? How are proteins built, assembled and shipped in our cells? What is a gene? What will the future of Homo sapiens look like? How does the complex interaction between nature and nurture help to construct and create the world in which we live in? In this mod, we discuss the discovery of DNA and build models, watch films and extract DNA out of E. coli cells. Genetics, DNA, transcription/translation along with cutting edge DNA technology are topics we investigate and perform in this final mod of 11th grade biology. Students also have the opportunity to teach other students, presenting the paper they wrote in mod II of this course to their peers.

Lowest Grade Allowed: 11

No prerequisite needed

## Science Electives:

### The Universe and Our Place in it

Teacher: John Roeder

Ever since they could look at the sky, humans must have wondered what was out there, how it came to be, what it would become, and how they and their planet related to it. This would make astronomy the oldest of all of the sciences, and this course will explore what it has taught us as it has evolved through the years. In addition to learning how the universe has developed and is expected to develop, students will be asked to investigate one particular aspect of the structure or evolution of the universe in the context of its relevance to humanity.

Lowest Grade Allowed: 9

Prerequisite: Active Physics

# Uses and Misuses of Scientific Evidence in Policy Making

Teacher: John Roeder

This course will focus on the uses and misuses of scientific evidence, particularly as they relate to policy making. After participating in reading and discussion about the way science is designed to work, students will research and report on an example in which scientific evidence was misused in a way that affected society.

Lowest Grade Allowed: 9

NOTE: This is an interdisciplinary course in both Science & Social Studies

No prerequisite needed

## Physics A

Teacher: John Roeder

This course develops student understanding of the concepts underlying electricity and magnetism in terms of four topical units: electric charge and field, electric potential, electric circuits, and magnetism. After engaging with the relevant physics concepts and performing laboratory experiments and solving conceptual and numerical problems, students demonstrate your understanding in laboratory reports and quizzes.

Lowest Grade Allowed: 10

Prerequisite: Algebra II

## Physics BC

Teacher: John Roeder

Students begin this course by learning about motion and forces in the context of four specific models: 1) the constant velocity model; 2) the constant acceleration model; 3) the zero-force model; and 4) the constant force model. They then learn how force can do work to transfer energy to an object and the different forms of energy that are known. They also learn what determines the force needed to keep an object moving in

a circle and apply this to a study of gravitation and what can be learned from the circular motion of objects in space. After engaging with the relevant physics concepts in performing laboratory experiments and solving both conceptual and numerical problems, students demonstrate their understanding in laboratory reports and quizzes. (Geometry and concurrent enrollment in Precalculus recommended)

Lowest Grade Allowed: 10

Prerequisite: Algebra II

## Advanced Chemistry

Teacher: Hadda Conte

Do you love chemistry labs? Do you want to learn how to mix chemicals, perform reactions and be able to discuss your results? Advanced Chemistry has three main purposes: to build upon concepts covered in General Chemistry; to introduce you to new, more challenging topics; and to develop strong, inquiry-based lab skills. The course will be mostly lab based, with occasional activities and lectures mixed in. Through these labs and lectures, we will cover topics such as reaction rates, equilibrium and electrochemistry. You will also be exposed to current theories, ideas and research in the chemistry field by studying and reading scientific articles and journals, while still studying the classic theories and laws upon which our current theories are based.

Lowest Grade Allowed: 11

Prerequisite: Algebra II

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

## Bioethics

Teacher: Hadda Conte

Bioethics is a subsection of the field of ethics that focuses on issues in the biological and medical fields. The course will allow you to approach ethical issues in the biological sciences in a well-informed, unbiased way and allow you to look at all sides of an issue to make an informed decision about your personal view on each matter.

Some possible topics for discussion include stem cell research, genetic technology, drug development, and other cutting edge debates.

Lowest Grade Allowed: 11

No prerequisite needed

## **Biology II: Black Rock Forest, Comparative Anatomy**

Teacher: Francesco Filiaci

How can we see evolution happening today? What is sexual selection? Sexual dimorphism? What does the liver of a shark look like? What about the pen of a squid, the fat in frogs or the reproductive organs in a mouse? How are Bonobo's and Chimpanzee's different in behavior and how did this evolve? When and in what ways did we evolve in terms of language, our tool use, our brain size and bi-pedal nature? These are some of the important questions we will ask and answer in this advanced biology elective. In this one-mod course (two block carrier) we will spend time at American Museum of Natural History exploring the Hall of Human Origins, special exhibits and films, the fourth-floor dinosaur halls, the space show at the Hayden planetarium, and investigate other hidden treasures. We will also spend time re-exploring the past 4.1 billion years of evolving living systems, recalling what we began in 11th grade biology. Philosophy and biology will intersect as we ask how organisms such as ourselves are able to know what we know. Finally, we will study molecular machines such as chloroplasts and mitochondria. We will manipulate DNA by transforming bacterial cells, making them fluoresce green light.

Lowest Grade Allowed: 12

Prerequisite: Biology

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

## **Social Studies Courses:**

**World History 9**

Teacher: Jonas Hamilton

This required 3-mod course introduces students to history in the Upper School. By analyzing documents, movies, architecture and art-objects, writing, drawing, conversing, exploring the city, and engaging in other performances of learning and understanding, students will explore basic questions confronted by historians of the ancient world.

**WORLD HISTORY 9A: ROOTS** "Dust thou art (Genesis 9:13):" Never have these words rung truer than in the alluvial clay of ancient Sumer and Egypt. Writings such as Gilgamesh and artifacts like the Stele of Vultures evoke the fiercely contested flood plains of the Bronze age: Like the "wild laughter" of Thoreau's loon, these artifacts reveal a tantalizing world, alien from and akin to our own. The glittering theocracies of the fertile crescent, properly understood, hold useful lessons for students facing challenges as daunting as the floods and famines which flummoxed our forebears.

**WORLD HISTORY 9B: REGIMES AND RELIGIONS** In this course students study unfettered political power: the centralization, organization and muscle of the Qin; the mellower yet mightier Han; the Realpolitik of Chandragupta Maurya. Did the ends justify the means? Students consider three responses: Legalism, Taoism and Confucianism. The tension between politics and ethics is epitomized by Ashoka, the Emperor and Buddhist convert who repented of bloody conquest. Meanwhile, each student researches ancient or medieval documents about a chosen historical personage.

**WORLD HISTORY 9C: REPUBLICS** Following the growth of democracy from the time of Draco to the Peloponnesian War, students examine the Athenian experiment from different angles in this class: How can the harmony of the Parthenon be reconciled with the well-documented brutality of which Athens showed itself capable at Melos? How democratic was fifth-century Athens, really? Was Athens, as Pericles claimed, a "school for Greece"? Meanwhile, students will finally write a research paper about an ancient or medieval historical figure.

Lowest Grade Allowed: 9  
No prerequisite needed

## World History 10

Teacher: Nicole Nemergut

This course will explore key themes in Modern World History from approximately 1500 to the present. Each mod will be organized both chronologically and around a central theme. The first mod will explore the existence of multiple centers of power in the Early Modern period and Western Europe's later hegemony. The second mod will explore the long 19th century in a global context. We will explore the links between imperialism, industrialization and nationalism. The third mod will focus on new global realignments.

Lowest Grade Allowed: 10

No prerequisite needed

## United States History 11

Teacher: Jason Tebbe

The eleventh-grade United States History course examines American history from the antebellum period to the present. Throughout the class students will learn to do the work of history: interpreting primary sources, weighing the interpretations of scholars, doing research, and writing history. In this class students will not only gain a deeper understanding of the events and trends of American history, but also of the practice of history itself. Throughout the course, we will take a critical view on American history, exploring topics such as social class, race, gender nationalism, and historical memory, among others. We will also use the city as a classroom, and take trips to explore various aspects of the city's history as they intersect with broader American history.

**Mod A:** In the first mod, we will explore the United States from the antebellum period to the end of the nineteenth century. The theme is revolution, and looking at the Civil War, Reconstruction, and Industrial Revolution as contentious and influential events.

**Mod B:** In the second mod, we will look at American history from around 1900 to the end of World War II. We will do so through the themes of America's growing role in world affairs, and in examining the various calls for reform and revolutionary change.

**Mod C:** In the third mod, we will investigate American history from 1945 to the present. In doing so we will focus on the themes of America's role as a super power, as well as that of social justice. This includes deep explorations of the war in Vietnam and the civil rights movement and other movements for equality.

Lowest Grade Allowed: 11

No prerequisite needed

## Social Studies Electives:

### Anthropology II

Teacher: Hilary North

This course will engage students in the design and implementation of an intensive anthropological research project. Using the theory covered in *Introduction to Anthropology* as a foundation, students will further investigate intersections between material culture and social norms and values, specifically examining the regulatory categories of race, class and gender.

Lowest Grade Allowed: 9

Prerequisite: Anthropology I

### Anthropology of Material Culture

Teacher: Hilary North

Objects, artifacts, possessions, "stuff," this course explores and analyzes what all of these things can tell us about who we are, who we wish to be, and what we value in relation to the constructs of race, class and gender. We will spend time defining what material culture is and what can be included in this category. We will talk about some theoretical approaches to interpreting material culture, and how these tools can help us derive meaning from objects. Mostly, we will have numerous opportunities to explore our own material worlds, and to examine both how we define the objects around us, as well as how those objects play a role in defining us along racial, class and gender lines.

Lowest Grade Allowed: 9

No prerequisite needed

# Child Welfare, Family, and Community

Teacher: Andrew Hume

Every year, hundreds of thousands of American children are removed from their homes and taken care of by people who aren't their parents. This course will examine the child welfare system through readings, films, site visits and meetings with guest experts. We'll investigate the history from 19th century "orphan trains" to mass institutionalization of children to foster families and community care. We'll think about the role of race, class and gender in child welfare choices, and the impact of those choices on children, families and the broader community. Most of all, we'll meet and listen to people involved in today's messy New York City child welfare system: kids in foster care, parents, community organizers, social workers and judges. Our hope is that their stories will inspire awareness and activism.

Lowest Grade Allowed: 9

No prerequisite needed

# Environmental Justice

Teacher: David Hyman

The goal of the environmental justice movement is not only to fight pollution but also to promote decent paying and safe jobs, quality schools and education; decent housing and adequate health care; healthy, ecologically-sustainable and locally produced foods; democratic decision-making and personal empowerment; poverty eradication; and respect for biological and cultural diversity. In this course, we will survey the history of the environmental justice movement and then examine current legal, policy, and political issues with which the movement is struggling, including land use planning and climate change. Source material for the course will include: clips from several documentaries, articles from the United States Dept. of Agriculture, *Canadian Journal of Environmental Education*, Global Development and Environment Institute, Environmental Protection Agency, and others. Our text will be *Climate Changed* by Philippe Squarzoni. We will also look at selected readings from books by Naomi Klein, Rachel Carson, Edward Abby and others.

Lowest Grade Allowed: 9

No prerequisite needed

## Feminisms I

Teacher: Nicole Nemergut

This class will introduce students to contemporary feminist theories and practices while engaging with feminist pedagogies. We will explore some key feminist texts in the first two weeks and then students will work together to team teach a class on a topic of their choice. Grades are determined in a conference between student and teacher.

Lowest Grade Allowed: 9

No prerequisite needed

## Feminisms II

Teacher: Nicole Nemergut

This course will be a continuation Feminisms I. It is for students who wish to read and teach more deeply around the topics that emerged in our first class. The topics will largely be student led and directed but there will be more focus on theoretical readings. Students will also explore tensions in feminist thought more closely. As with Feminisms I, grading and assessments will be student directed and discussed in conferences.

Lowest Grade Allowed: 9

No prerequisite needed

## La Frontera: Northern Mexico

Teacher: Jonas Hamilton

If proximity to the United States has brought Mexico terrible suffering, nowhere is this misery more acute today than in the north and the border. Nevertheless, from this tragic and troubled region has emerged a literature, which commands our attention because of its singularity, innovation, beauty, imagination, and violence. It is a literature notable not only for its artistic quality, but also because it bears witness to the

effects of imperialism, globalization, and other signal historical processes of our time. Through the lens of literature and the social sciences, this class will attempt to arrive at an understanding of the frontera which goes beyond sound-bites and sensationalism to address themes of identity, power, corruption, and greed, not only in broad political terms, but also in the daily lives of individual people. Contemplating the injustices and problems they confront should yield lively conversations about fairness, justice, and possible solutions. This class will accommodate students who speak and read only English, as well as those who are fluent in Spanish. In order to introduce as many authors as possible, and to give each student scope for personal exploration, students will research particular writers, and present their findings to the class. In keeping with the interdisciplinary spirit of the course, exposure to these unique literary voices should bring students to a deeper awareness of a critical region's tensions, challenges, and accomplishments.

Lowest Grade Allowed: 9

NOTE: This is an interdisciplinary course in both Social Studies & World Language  
No prerequisite needed

## Race and Social Theory

Teacher: Hilary North

This course will create a space where students have the tools and language to make sense of racialized phenomena around them. This class will introduce students to social theory and particularly social theorists of color. We hope that students will be able to use the lenses provided by different theorists to analyze the world around them and eventually develop their own theories and ideas. This class will require students to shape their own learning experiences and be accountable to a learning community.

Lowest Grade Allowed: 9

No prerequisite needed

NOTE: 2 Mod Course, and you should get permission from the instructor.

## Strategic Thinking

Teacher: Jonas Hamilton

Beginning with an introduction to Chess and Go, the profoundest of all strategic games, this class asks students to examine their strategic decision-making by collecting and annotating their own games. Then, moving beyond the game board, students explore real-life scenarios and cinematic masterpieces (*Dr. Strangelove* and *The Maltese Falcon*, inter alia), probing the recurring impasses which wreak so much havoc in our world: Can game theory, long associated with Kissingerian Realpolitik, disarm the seemingly intractable social dilemmas caused by the logic of rational self-interest?

Lowest Grade Allowed: 9

No prerequisite needed

## Dissent

Teacher: Jason Tebbe

America has long considered itself a nation founded on the principles of freedom and equality, but reality has often been much different. Throughout America's history, brave men and women have voiced dissent against oppression and inequality, often risking their lives and livelihoods in the process. Even though they faced punishment for their beliefs, these dissenters have helped move American society towards being a freer and more equal place. This course will explore the history of dissent mostly in America but also abroad by exposing students to the writings and art of dissenters, grappling with their ideas, and considering the relevance of what these dissenters had to say to our lives today.

Lowest Grade Allowed: 10

No prerequisite needed

## America In The 1970s

Teacher: Jason Tebbe

The decade of the 1970s has endured in the popular mind as an era of bad clothes, funky music, and general malaise. Many proclaimed it an empty decade; the first general history of the 1970s was titled *It Seemed Like Nothing Happened*. During the last decade, however, a wave of new studies has reinterpreted the 1970s, and has redefined it as a "pivotal decade" when our current way of social, political, cultural,

and economic life was born. In this class, we will read excerpts from the growing and exciting historical literature on the 1970s, and we will explore primary sources from the time, especially music and film. Although the class will focus primarily on American history, time will be spent on the global nature of many of the phenomena changing American life.

Lowest Grade Allowed: 11  
No prerequisite needed

## American Democracy in Theory, in Practice and in Film

Teacher: Robert Rue

Students in this cross-disciplinary (English/Social Studies) course will explore some of the major structures and principles of American democracy and then examine the ways in which these structures and principles have been portrayed in popular films. Our work together will be part Civics 101, part history and part advanced film analysis. The course assumes that popular films both react to and shape their historical moments by making powerful-and usually emotional-arguments in story form. Our job will be to lay those arguments bare and to evaluate them against reality. Topics explored in the films will include the principle of "innocent until proven guilty" in the justice system, the role of the press as a check on presidential power and the ability of a democracy to respond to a moment of imminent threat.

Lowest Grade Allowed: 11  
NOTE: This is an interdisciplinary course in both Social Studies & English  
No prerequisite needed

## Calhoun Social History

Teacher: Lavern McDonald

How does The Calhoun School fit into the domestic and international arc of the progressive movement generally and progressive education specifically? How might current school practitioners be guided by our history? We will work on developing a social history project on The Calhoun School using still images, Calhoun archival materials, NY Times historical archives, school materials and oral histories. We will

focus on the founding stakeholders and their intellectual and social investments. How were these individuals? What were the social and political influences that shaped their lives? What work did they perform in the world? How might they have influenced Calhoun? How does Calhoun sit inside this historical movement? What are the international variables that informed philosophy and practice at Calhoun?

Lowest Grade Allowed: 11

No prerequisite needed

## Exile and Homecoming

Teacher: Nicole Nemergut

Exile and Homecoming offers an interdisciplinary study of the history and continuing narrative of people whose cultural background hail from nations still struggling with the long-term effects of imperialism.

Imperialism and decolonization produced massive social dislocations that sent people far from home, and the prodigal sons (and daughters) of the formerly colonized nations often transmigrate to and from the former seat of colonial rule and their cultural homelands. By studying three late 20th century novels and a selection of critical essays, students in the course will examine the complicated economic and political structures that intimately affect people's lives and sense of identity in the transnational, post-colonial world.

Lowest Grade Allowed: 11

NOTE: This is an interdisciplinary course in both Social Studies & English

No prerequisite needed

## Layers and Webs of NYC

Teacher: Lorenzo Krakowski

Taking an interdisciplinary, place-based approach, this class will be an exploration and examination of selected neighborhoods in New York City. We will examine the city through a variety of lenses using multiple observational methods. There will be extensive field work in this class, and students will be expected to shape their learning

and develop their own understanding and interpretation of the city through this experience. We will pay particularly close attention to the relationships and interconnections that exist within the city, with a focus on the 20th century.

Lowest Grade Allowed: 11

No prerequisite needed

## Political Philosophy

Teacher: Jonas Hamilton

This elective class offers an introduction to selected monuments of philosophical literature dealing with politics, from Plato, Aristotle and Thucydides to John Rawls and Robert Nozick. Through these authors students wrestle with core questions of Western political philosophy: What is the purpose and proper scope of government? What is justice? Should individual rights be sacrificed for the common good? Finally, who are we? The deepest thinking about politics? Hobbes, Rousseau serve as examples-often begins with the attempt to understand human nature itself.

Lowest Grade Allowed: 11

No prerequisite needed

## Punishment, Politics, & Culture

Teacher: Lavern McDonald

This course will explore approaches to punishment in the United States and North Atlantic countries in the modern era. We will also look at comparative systems, including restorative justice approaches practiced in non-Western societies. Some questions we will consider include: What is punishment and why do we punish as we do? Is punishment consistent across groups in our society? In view of current social and scientific understandings about human development and socialization, are our systems of punishment consistent with our current thinking? What can we learn about politics, law, and culture in the United States from an examination of our practices of punishment? What are the appropriate limits of punishment? In addition to rich readings, talks, and field trips, students will be expected to keep a weekly journal. They will engage critically with current events articles from newspapers of record as well as

journals of opinion.

Lowest Grade Allowed: 11

No prerequisite needed

## Revolutions!

Teacher: Jason Tebbe

The modern world has been a history of revolutions bringing violent and unexpected change. In this class students will examine revolutions in a comparative way, understanding them in contrast to each other. While we will start with a deep dive into the French Revolution, after that point the students themselves will determine which revolutions we examine. In the process, we will gain insight into how our world came to be. Throughout we will read both primary sources as well as historical scholarship, and students will do self-directed research.

Lowest Grade Allowed: 11

No prerequisite needed

## Sigmund Freud

Teacher: Alison Foster

This course will introduce students to the life and work of Sigmund Freud and the ways in which his ideas helped to shape the field of psychology and modern America. Freud studied individuals and developed psychoanalytic theories suggesting new ways to explain love, sex, aggression, childhood, families, the mind and emotions. We will investigate Freud's work and the questions that motivated him: How did psychological trauma transform itself into physical illness? How could a person become ill from a memory? The course will rely on historian Peter Gay's *Freud, a Life for Our Time* and Pamela Thurschwell's *Sigmund Freud*. We will also read two case studies central to Freud's work: *Anna O.* and *Dora, an Analysis of a Case of Hysteria*.

Lowest Grade Allowed: 11

No prerequisite needed

## Sugar and Death

Teacher: Nicole Nemergut

This class will explore the site of the sugar cane field as a space of colonial death and haunting. We'll explore the history of sugar production in the Caribbean and read novels that explore the legacies and aftermaths of plantation slavery. We will explore how the sugar cane field in contemporary literature functions as a site of trauma and historical memory. Possible novels include Jean Toomer's *Cane*, *Conquistadora* by Esmeralda Santiago and *The Brief and Wondrous Life of Oscar Wao* by Junot Diaz. We will include readings by Fernando Ortiz and Sidney Mintz.

Lowest Grade Allowed: 11

No prerequisite needed

## The Historical Novel and Imperial Rome

Teacher: Jonas Hamilton

This class offers a close look at imperial Roman politics and culture through two historical novels, Marguerite Yourcenar's *Memoirs of Hadrian* and Gore Vidal's *Julian*. The last of the "good emperors," Hadrian, and Julian "the Apostate," who tried to turn back the clock by restoring paganism, are brought to life by two famous prose stylists and masters of the genre. Students will encounter here sparkling prose, extensive research, philosophical reflection, and finally, inspiration for their own literary-historical creations.

Lowest Grade Allowed: 11

No prerequisite needed

## Understanding Nazi Germany

Teacher: Jason Tebbe

The history of Nazi Germany is constantly invoked in political discussions, but often

little understood. In this class, we will try to understand the horrible realities of Nazi Germany and make sense of them. We will examine the reasons for Hitler's rise to power, the organization of Nazi society, the Holocaust, and the ways that "ordinary" Germans played a crucial role in the regime. The class will read both works by scholars with rival interpretations as well as primary sources from the time.

Lowest Grade Allowed: 11

No prerequisite needed

## US-China Relations

Teacher: Lavern McDonald

This course will examine key topics in modern and contemporary China and their implications for relationships with North Atlantic nations including the United States. Through readings, films, talks and site visits, we will learn about the rich-and often fraught-relationship that has existed between the North Atlantic countries, especially the United States and China in the era when global trade emerged. Students who enjoy foreign policy, current events, comparative history and Chinese language studies will find this course intriguing.

Lowest Grade Allowed: 11

No prerequisite needed

## Theater Courses:

### Acting & Directing

Teacher: Marjorie Duffield

How do you direct a play or develop a character? What do you do, where do you begin? The goal of this course is to give students the tools they need to help them perform in the role of both a director and an actor. In order to do that, we'll explore and practice various directing and acting techniques, methodologies and styles ('The Method,' The Meisner Technique and more). Members of the class will work in alternating teams as directors and actors, studying a step-by-step process for both, as

well as working in an organic and ensemble style. In addition, each week we will address issues of performance and direction through theatre games, improv and ensemble building activities. At the end of the semester, the class will create a group final project that will be presented at the end of the term. Plays we will explore include: *The Bald Soprano* by Eugene Ionesco, *The American Dream* by Edward Albee, and *365 Days/365 Plays* by Suzan-Lori Parks. In addition, students will be using chapters from *Respect for Acting* by Uta Hagen, and Constantine Stanislavski's *An Actor's Handbook*.

Lowest Grade Allowed: 9

No prerequisite needed

## Charlie Chaplin: Silent Films

Teacher: Marjorie Duffield

In this class, we will study the short works of Charlie Chaplin and analyze the genre and style of silent film comedy. From narrative set-up, stock characters and the role of the underdog, to slapstick and exaggerated facial/body expression, we will break down the elements of his silent film performance. Simultaneously, we will deconstruct Chaplin's famous "Little Tramp" character by examining the historical context of his work in an attempt to understand the on-going worldwide appeal of this character. From there, we will collaboratively write, perform and film a short script featuring a "Little Tramp"-inspired character set in a world of adversity - all in the silent movie style of Charlie Chaplin.

Lowest Grade Allowed: 9

No prerequisite needed

## Comedy Performance I

Teacher: Marjorie Duffield

"I'm not funny. What I am is brave." - Lucille Ball. In Comedy Performance, we will explore what makes "funny" and why. Students will study and analyze numerous types of comedy and comics from Charlie Chaplin and Vaudeville to Commedia dell'arte and screwball comedy. We will also read plays that deal with issues through humor such as *Parallel Lives* by Mo Gaffney and Kathy Najimi. Simultaneously, members of the class

will hone their performance abilities through improv and short-scene writing. As the term progresses, students will develop humorous pieces in multiple forms including a short Vaudeville, a screwball sketch and a silent comedy, and will present their creations in a term-end presentation.

Lowest Grade Allowed: 9

No prerequisite needed

## Comedy Performance II

Teacher: Marjorie Duffield

In Comedy Performance II we will further explore what makes "funny" and why. Students will delve deeper into various historic and modern comedy styles (from Roman Comedy to Charlie Chaplin and Lucille Ball to Dave Chappelle). We will also read and view various scenes and clips to analyze the construction of satire, parody and lampoon. Simultaneously, members of the class will hone their performance abilities through improv and short-scene writing. As the term progresses, students will develop those pieces in performance - live and filmed - and will show their creations in an informal term-end presentation.

Lowest Grade Allowed: 9

Prerequisite: Comedy Performance I

## History of Musical Theater

Teacher: Marjorie Duffield

Students will study the history of musical theatre from its earliest roots through to the modern day. We will sing, act and dance, fully exploring the repertoire, its impact and its influences throughout history in order to better understand how it has contributed to the modern-day "Broadway" musical form. By embodying the material, students will gain a unique perspective, helping them to be thoughtful and insightful about the evolution of musical theatre. If you like to perform, if you like theatre, music and history, you will love this class.

Lowest Grade Allowed: 9

No prerequisite needed

## Lyric Writing

Teacher: Marjorie Duffield

"The difference between the right word and the almost right word is the difference between lightning and a lightning bug." - Mark Twain.

This class is for writers, composers and singers (though you don't have to sing if you don't want to!). Together we will study and write lyrics, set them to music, and ultimately present the songs that we have created. Using the American musical theatre tradition as a backdrop, we will read and listen to a number of master works including *Company* and *Rent* to examine what makes an effective song. We will also look at the art of the pop song. Simultaneously, we will study lyric craft and write our own lyrics. These lyrics will be handed to composers who will set them to music in collaboration with the lyricist. Ultimately, these songs will be presented informally at the end of the mod.

Lowest Grade Allowed: 9

No prerequisite needed

## Playwriting

Teacher: Marjorie Duffield

The goal of this course is to intensively explore the craft of playwriting and to write dramatic pieces for the theatre. Through the study of conflict, character, dramatic structure, as well as the analysis of a number of plays, we will study what makes an effective play. At the same time, through in-class and take-home writing assignments, writing "crashes," re-drafts and an extensive lab process, we will develop our own ideas into compelling and interesting theatre. By the end of the term, students will have written a monologue, a series of two and three person scenes, and a ten-minute play. Plays we will read for class will include *Who's Afraid of Virginia Woolf* by Edward Albee, *How I Learned to Drive* by Paula Vogel, *365 Days/365 Plays* by Suzan-Lori Parks, *Picnic* by William Inge, and *For Colored Girls Who Have Considered Suicide When the Rainbow Is Enuf* by Ntozake Shange.

Lowest Grade Allowed: 9

NOTE: This is an interdisciplinary course in both Theater & English

No prerequisite needed

## Playwriting II

Teacher: Marjorie Duffield

The goal of this course is to intensively explore the craft of playwriting by writing a one-act or full-length play. We will review the elements of conflict, character, and dramatic structure. Then, through in-class and take-home writing assignments, writing "crashes," re-drafts and an extensive lab process, students will develop their ideas into compelling and interesting theatre. By the end of the term, students will have completed a 30-90-minute play.

Lowest Grade Allowed: 9

NOTE: This is an interdisciplinary course in both Theater & English

Prerequisite: Playwriting

## Screenwriting

Teacher: Robert Rue

In this course, students will learn what screenwriters call "the classic three-act structure" for feature-length films. They will be asked to consider whether the movies they love adhere to or defy that structure. We will also seek to discover the secrets of irresistible dialogue. Each person in the class will set out to write the first act (about twenty-five pages) of a movie script. Throughout the mod, students will read and critique professional screenplays as well those of their classmates.

Lowest Grade Allowed: 9

NOTE: This is an interdisciplinary course in both Theater & English

No prerequisite needed

# Spring Workshop Production

Teacher: Marjorie Duffield

The Spring Workshop Production class focuses on developing and performing new work. In years past we collaborated as an ensemble to adapt and devise an original and experimental piece of theater based on a short story by Haitian-American writer Edwidge Danticat. Other years we produced a festival of new work written and directed by Calhoun students. And this year we are bringing in NYC theater professionals to work with the company to polish and hone a new play and a new short musical. The idea is that the spring theater season focuses on process and new work, and is open to inspiration and possibility from around the world. Students who take this class will need to be available for after-school rehearsals two to three times a week as well as a Saturday work call. Performances are in late April.

Lowest Grade Allowed: 9

No prerequisite needed

# Theater 101

Teacher: Marjorie Duffield

Do you love theater? Or do you want to give it a try? Want to try acting and directing, or improvisation and playwriting? Maybe you aren't sure and want to experiment. In Theater 101, you can explore many different aspects of theatre craft all in one class! Over the course of the term students will intensively explore ensemble theater, improvisation, comedy, site-specific theater, environmental theater, acting, playwriting, musical theater, set design, costume design, directing, and Vaudeville—working energetically for a week or two in each area and then moving on. This overview will provide the foundation for the other theater courses offered in the Upper School. During the mod, we will work with various plays including *The Laramie Project* by The Tectonic Theatre Company, *365 Days/365 Plays* by Suzan Lori-Parks, *The Bald Soprano* by Eugene Ionesco, *Interview* by Jean-Claude van Itallie, and *For Colored Girls Who Have Considered Suicide When the Rainbow Is Enuf* by Ntozake Shange.

Lowest Grade Allowed: 9

No prerequisite needed

# Theater for Change

Teacher: Marjorie Duffield

This course will explore examples of social justice and social service theatre/plays as well as explore the various methodologies for developing these kinds of work. Plays we will read/analyze/do scenes from will include *Sunday Morning in The South* (a 1925 anti-lynching play by Georgia Douglas Johnston), *How the Vote Was Won* (a 1914 suffragette play by Cicely Hamilton, and Christopher St. John), *The Laramie Project* (a 2000 play by Tectonic Theater Project about the reaction to the 1998 murder of University of Wyoming gay student Matthew Shepard), *Emotional Creatures* (2011 plays by Eve Ensler that offers fictional monologues and stories inspired by girls around the globe), and more. We will also look at the radical social service performance pieces by groups like Circus Amok and explore performance methodologies like Forum Theatre and Theatre for the Oppressed. We will actively engage in analyzing how theatre can be used to address social injustice and inequality. We will also attempt to develop a short piece of theatre that addresses an issue that the class feels passionate about.

Lowest Grade Allowed: 9

No prerequisite needed

# Theater Tech

Teacher: TBD

The goal of this technical theater course is to orient students to the technical aspects of conceiving, designing and implementing a stage design in cooperation with the actors and a theater director. This work will include an exploration of theater design, model building, design drawings, learning techniques for building with a variety of materials used in theater. Students will become familiar and proficient in the use of lighting, sound and projection effects, scenic painting techniques and the use of fabrics to create a tapestry of interesting staging effects.

Lowest Grade Allowed: 9

No prerequisite needed

# Fall Production

Teacher: Marjorie Duffield

"The word theatre comes from the Greeks. It means the seeing place. It is the place people come to see the truth about life and the social situation." - Stella Adler

In this class, we will work as an ensemble to create the Upper School fall production.

This class is open to students interested in and dedicated to performance, direction and stage management. Students who take this class must be available to rehearse at least three days a week plus occasional Saturdays. Though this is a second-mod course, after-school rehearsals will begin shortly after school starts. Performances take place in mid-December.

Lowest Grade Allowed: 10

No prerequisite needed

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

# Visual Arts Courses:

## Core Art Practices

Teacher: Auguste Elder

Core Art Practices (CAP) examines the essential roles art plays in our everyday creative lives, while exposing students to the practical, critical, and hands-on skills indispensable to living an innovative life within and beyond Calhoun. Whether you take this course as an entering 9th grader, or as a seasoned artist by your junior year, CAP serves to develop and strengthen fundamental problem solving skills through the study of two and three-dimensional art and design. As students launch into their personal artistic trajectories, they will develop technical skills, craftsmanship, and aesthetic nuance through direct contact with a variety of materials, tools, and real-life design challenges. If you choose to take CAP in your freshman year, the opportunity provides

an excellent series of entry points into the more advanced art and academic courses offered at Calhoun. Or, by choosing to take CAP in your 10th or 11th year, you are seizing the unique opportunity to bring your diverse range of academic and extracurricular experiences to the drawing board to further hone your mastery and voice. CAP incorporates historical and contemporary examples of artistic practices through slides, discussions, and museum visits. This course is strongly committed to providing a diverse range of artistic voices, backgrounds, and experiences to our students' attention as they learn how, where, and why their voices matter as creative individuals navigating a complex world.

Lowest Grade Allowed: 9  
No prerequisite needed

## Drawing I

Teacher: Christopher Garcia

This course will focus on developing drawing skills in a variety of media. Students will concentrate on still lifes, landscapes, figure studies, and conceptual drawing techniques. The goal of this class is for students to challenge themselves and find their own personal expression in the drawing medium. Students will also learn to communicate with art through critiques and an end of term exhibit where their work will be brought before a wider audience.

Lowest Grade Allowed: 9  
No prerequisite needed

## Drawing II

Teacher: Christopher Garcia

This is an advanced level drawing course that builds upon Drawing 1. Students will work from observation and their own ideas in a variety of drawing media. The class will be taught as a studio workshop and lecture course. Students will also learn art history, contemporary practices, and art theory through lectures, critiques, discussions, assignments and presentations. The main focus will be on developing basic technical skills in various 2-D mediums, learning design terminology and progressing creatively

in the arts.

Lowest Grade Allowed: 9

Prerequisite: Drawing I

## Graphic Design I

Teacher: Hailey Kim

Why does the New York City subway use Helvetica for all of its signs? What happens in our mind when we judge a book by its cover? How can my poster for history, math, science, etc. be more visually effective? In this course, you will use your most powerful software (your brain) and your most versatile tool (your hand) to design and problem-solve. Through focused lessons, you will gain understanding of the basic and fundamental concepts of typography and composition, and use it to present and/or represent information or ideas. While the main focus of the course will be on your studio practice, it will also introduce works from historical and contemporary visual culture to build awareness and critical eye. No prior knowledge or experience with computer required.

Lowest Grade Allowed: 9

No prerequisite needed

## Graphic Design II

Teacher: Hailey Kim

Continuing from Graphic Design 1, you will build upon your knowledge of the essential principles of typography and composition by incorporating text and images over a single as well as multiple pages. Throughout your studio practice, you will explore ways of creating and manipulating various aspects of audience interaction: flow, direction, pattern, pacing, continuity, surprise, among others. Emphasis will be placed on visual harmony and discord as different layout strategies, especially the grid system, are introduced. Examples of published work (posters, magazines, pamphlets, books, interfaces, etc.) drawn from both historical and contemporary times, in addition to field trips, will facilitate and enrich your understanding of these principles. The traditional, hands-on methods of creating work will still be used, but you will also be introduced to

a number of digital image-making and desktop publishing tools. (Previous experience with such software is beneficial, but not required.) Based upon your interests, you will have an option towards the end of the course to either develop a personal project or contribute to the yearbook production.

Lowest Grade Allowed: 9

Prerequisite: Graphic Design I

## Painting I

Teacher: Hailey Kim

Why have human beings painted since the dawn of time? This course explores one of the most basic and profound aspects of artistic expression. We will tap into the inherent impulse to paint as we build the foundation of oil painting, including knowledge of materials, mediums, supports, color mixing and brushwork. Methods will include monochromatic underpainting, glazing, scumbling and wet-on-wet paint application. Through observational work, students will become familiar with basic technical skills. As they expand their visual language through experimentation and exploration with materials, students will give visual form to their own experiences and ideas. The class focuses on the process inside the studio, and will also incorporate the larger art world with visits to museums, galleries, and artists' studios. This class is intended for students who have no prior knowledge of painting but have an urge to make a mark, leave a trace, and delve into a direct experience with the creative process.

Lowest Grade Allowed: 9

No prerequisite needed

## Painting II

Teacher: Hailey Kim

Continuing from Painting 1, you will develop a personal vocabulary and strengthen your grasp of oil paint as a medium. As you engage further with the material, you will discover ways of manipulating the "colorful mud" to serve as a connecting channel, through which you communicate with and understand the world at large. Greater

attention will be paid to surface, mark-making, and texture, while in-depth exploration of color will be continuously stressed. Visits to museums and galleries will provide you with tactile examples of art history and various approaches to constructing a painted illusion, or an object that is painted. Studio activities will entail creating both representational and non-representational pieces while the focus will be on observation, interpretation, and synthesis. Notions of size, scale, mass, space will be considered as you re-examine the definition of painting. In addition to completing a series of assignments, you will conceive of and execute a personal project using the insight and knowledge gained throughout the course.

Lowest Grade Allowed: 9  
Prerequisite: Painting I

## Photo I

Teacher: Auguste Elder

This course serves as an introduction to the mechanics, concepts and practices of contemporary image making in photography using both the wet-darkroom and digital lab. Manipulating strips of negatives as well as files of digital matter, we will learn the ins and outs of camera operation (shutter-speed, aperture, ISO, etc.), while mastering basic darkroom mechanics and post-processing software. Drawing upon skills covered in and out of the Art Department, students will continue to practice and challenge aesthetic and social concerns within and beyond photography to create individualized bodies of work that reflect their understanding of the world. Experimenting with light-sensitive materials, Adobe Photoshop, pigment-based printing methods, and generating individualized portfolios will punctuate discussions around "the work of art in the age of mechanical reproduction," to quote Walter Benjamin.

Lowest Grade Allowed: 9  
No prerequisite needed

## Pottery I

Teacher: Christopher Garcia

The multi-level class will be taught as a studio workshop course. Students will learn

ceramic history, contemporary practices, and art theory. The main focus will be on developing basic technical skills in the medium and progressing creatively in the ceramic arts. Both hand-built vessels and wheel technique will be covered as well as glaze application and firing. Students must be prepared to work in clay, glazing, or firing in every class meeting.

Lowest Grade Allowed: 9

No prerequisite needed

## Pottery II

Teacher: Christopher Garcia

The multi-level class will be taught as a studio workshop course. Students will learn ceramic history, contemporary practices, and art theory. The main focus will be on developing basic technical skills in the medium and progressing creatively in the ceramic arts. Both hand-built vessels and wheel technique will be covered as well as glaze application and firing. Students must be prepared to work in clay, glazing, or firing in every class meeting.

Lowest Grade Allowed: 9

Prerequisite: Pottery I

## Printmaking I

Teacher: Hailey Kim

Make a great first impression! Have you ever wanted to print your own t-shirts or posters? If so, this is the class for you! This course will introduce students to a variety of basic printmaking techniques and materials. These techniques will include screen printing, monotype printing, relief and intaglio. We will also take a look into the rich history and traditions of printmaking. Students will keep a sketchbook, which will include their own drawings and inspirations as well as notes on techniques covered. Students will also participate in class discussion and studio critiques. Trips to museums and galleries will enrich students' understanding and appreciation of printmaking.

Lowest Grade Allowed: 9

No prerequisite needed

## Printmaking II

Teacher: Hailey Kim

This course is designed for students who have completed Printmaking I. Students will expand on printmaking skills developed in Printmaking I, as well as explore more advanced techniques. This course provides advanced students with the opportunity to delve deeper into printing processes they find most intriguing. Students are encouraged to explore alternative processes and push the limits of what is traditionally defined as printmaking. We will continue to look into the rich history and traditions of printmaking. Students will keep a sketchbook, which will include their own drawings and inspirations as well as notes on techniques covered. Students will also participate in class discussion and studio critiques. Trips to museums and/or galleries will enrich students' understanding and appreciation of printmaking.

Lowest Grade Allowed: 9

Prerequisite: Printmaking I

## Sculpture I

Teacher: Christopher Garcia

In Sculpture I, students are introduced to several methods of sculpting using additive and subtractive techniques. Students will use materials including clay, stone, foam-core, and paper to create original works of art. Through group and individual assignments, students will be able to investigate different three dimensional methods of sculpting throughout the Mod.

Lowest Grade Allowed: 9

No prerequisite needed

## Sculpture II

Teacher: Christopher Garcia

The class builds upon and extends Sculpture 1. It examines the definition of sculpture as a constantly shifting discipline embracing a variety of approaches that allow for meaningful engagement with contemporary culture. This class promotes an expanded approach to the discipline in order to expose students to the diversity of sculptural practice. Students are encouraged to develop their own individual approach and to form a unique identity as an artist.

Lowest Grade Allowed: 9

Prerequisite: Sculpture I

## **Visual Arts - Special Topics Courses:**

### **Anatomy for Artists**

Teacher: Auguste Elder

What the body is, where it came from, how it works, and who decides how or what the body is used for have intrigued artists, scientists, theologians, and philosophers since time immemorial. Through a thorough investigation of the form and function of the muscular, skeletal, tendinous and adipose deposits and systems, students will gain a more nuanced appreciation for how to articulate believable, fleshed out forms on paper, in clay, and through mixed media. Moreover, examining medical texts and diagrams from different time periods and regions of the world, drawing live figures from direct observation, and examining shifting cultural attitudes around beauty and body types will lend scientific, anthropological, historical and aesthetic dimensions to this advanced course of study. Students interested and involved in sports, the performing/visual arts and the sciences are particularly encouraged to consider enrolling.

Lowest Grade Allowed: 9

No prerequisite needed

### **Cameras Inside-Out**

Teacher: Auguste Elder

A basic camera is little more than a black box in which inverted images of the world enter by way of a lens or aperture. However, as photographic equipment becomes increasingly high-tech and software driven, the photographer's ability to participate or interfere in the image-taking process becomes more and more dictated by access to costly gear, daisy chains of peripheral devices and plug-ins. This course provides students the opportunity to design, construct and operate their own functioning cameras from readily available, repurposed and/or readymade materials and objects. Along the way, we will examine the relationship between form and function by investigating various image-making devices that have endured or become extinct over time: the camera-obscura; field cameras; Polaroid or instant cameras; stereoscopic cameras; Holga and plastic cameras; pinhole cameras; etc. From learning how to draft preliminary sketches, to interpreting/creating diagrammatical drawings, students will oversee their entire production process, putting their ideas/designs to task in the field. Basic camera and darkroom proficiency, as well as a willingness to experiment, invent and learn through trial-and-error are essential to the successful participation in this course.

Lowest Grade Allowed: 9

No prerequisite needed

## Environmental and Cultural Workshop

Teacher: Christopher Garcia

This course is designed to offer students the opportunity to create works of art based on individual and global reactions to the natural world. The work will for the most part be temporary and symbiotic with the surroundings. Students will be able to experience the challenges and revelations of creating works of art with and about the environment that surrounds them. The class will experiment with a variety of traditional and non-traditional materials including clay, stone, found objects, wood, and recycled items found throughout the city. Each project will have an individual theme that addresses key concerns such as manufacturing and waste, sustainable sources of energy, environmental education, and poverty and pollution. The focus of this class will be to use art as a form of communication and education.

Lowest Grade Allowed: 9

No prerequisite needed

## Illustration

Teacher: Hailey Kim

Alice was beginning to get very tired of sitting by her sister on the bank and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, "and what is the use of a book," thought Alice, "without pictures or conversations?" From the caves of Lascaux to Harry Potter, people have used visual images as either text or to supplement the text. In this class, we will look into different methods to illustrate something we will either read or write. From the newspapers to haikus to our own comic books, we will find new and untraditional ways to bring the written word into a more visual realm.

Lowest Grade Allowed: 9

No prerequisite needed

## Japanese Language, Art, and Design

Teacher: Hailey Kim

This course will provide an opportunity to study Japan through both a linguistic and artistic lens. We will focus on developing fundamental communication skills taught in Romaji (Japanese written phonetically using the English alphabet). We will also learn kana and kanji, the writing systems of Japanese language. Exploring a number of topics in Japanese culture and history, we will engage in various art and design projects to help deepen our understanding of this rich and complex society.

Lowest Grade Allowed: 9

NOTE: This is an interdisciplinary course in both Visual Arts - Special Topics & World Language

No prerequisite needed

# Packaging Design

Teacher: Hailey Kim

When we get a box of chocolate, why are some of us secretly more excited about the box more than the chocolate? When there is a new product on display, how do you know it is what you need (or simply can't resist) while it's safely protected inside the wrapping? In this graphic design class, we will tackle design challenges-conceptual, visual, and structural-of what meets the consumers' eye before the product it contains is revealed. You will dissect and analyze different examples of packaging design to tap into the intellectual/artistic framework that produces wrappings of all kinds, from a humble piece of candy wrap to highly collectible display boxes. Classes will include studio activities to allow each student to build understanding of typography, color, composition, and form. Lessons will also focus on ways of translating two-dimensional design to handcrafted three-dimensional structures.

Lowest Grade Allowed: 9

No prerequisite needed

# The Mask in Form and Function

Teacher: Auguste Elder

What is a mask? What are the purposes of a mask? How do masks function? What masks do we wear consciously or unconsciously? How many masks do we wear in any given day or lifetime? How do they affect our emotional or physical wellbeing, or survival as a species? Participants in this class will examine mask making and mask wearing through hands-on projects and activities designed to get us thinking about the many ways in which we alter our identities and sense of self. We will take a comparative approach to looking at the purposes masks play in: gender roles and notions of masculinity and femininity; rites of passage and rituals; mythologies; traditions in theater; crime and punishment; festivals; beauty and body modification; sports and war; and more. Students ought to be prepared to confront the psychological as well as historical mechanisms that masks play in and beyond our immediate culture(s) as we experiment in working with clay, papier mâché, face paint, and a variety of mixed materials. Local trips to the AMNH, as well as slideshows and student presentations/performances will augment our collective and individual understanding of this innately human experience.

Lowest Grade Allowed: 9  
No prerequisite needed

## Anatomy for Artists II

Teacher: Auguste Elder

Students who have completed Anatomy for Artists are invited to participate in this advanced course of study on the human figure in art. Drawing upon anatomical knowledge of the physical and esoteric layers of the body, students will concentrate their efforts on realizing two primary, ambitious, long-term projects: a fully realized figure drawing(s) from a live model; and a fully realized sculpted likeness from a live model. We will continue to explore the body as an intersection between art, mathematics, science, politics, culture, gender studies, and theology through direct investigation of image, text, and historical and contemporary works from various time periods and geographical regions. While charcoal, India ink, and clay will constitute the primary ingredients of our art production, students are encouraged to explore and integrate additional media germane to their interests into their respective processes. This is an excellent opportunity to focus deeply on your ideas and improving your craft, while generating content for your portfolio.

Lowest Grade Allowed: 10  
Prerequisite: Anatomy for Artists

## World Language Courses:

### French V

Teacher: Benjamin Ratliff

This course will introduce students to Francophile literature from the 18th to the 21st century from any French-speaking country. The principal objective of this course is to expose students to French Literature through texts, articles, documentaries and movies. Student will also develop their analytical skills as they give oral presentations, debate, discuss, and compose essays. While our focus will be on the study of literature and an author's historical context, students will also learn about socio-cultural and

economic conditions in the Francophone world. This course is taught in French.

Lowest Grade Allowed: 9

Prerequisite: French IV

## Mandarin II

Teacher: Xiaolin Lin

Lowest Grade Allowed: 9

Prerequisite: Mandarin I

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

## Mandarin III

Teacher: Xiaolin Lin

Lowest Grade Allowed: 9

Prerequisite: Mandarin II

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

## Mandarin IV

Teacher: Xiaolin Lin

Lowest Grade Allowed: 9

Prerequisite: Mandarin III

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

# Spanish IV

Teacher: Mariana Amato

In this intermediate/advanced course students will review grammar and vocabulary structures in order to solidify and deepen their mastery of them, and will learn new structures that will allow them to express themselves with more nuance and better adequacy to different communicative contexts. We will always work on the structures, not in isolation, but in their communicative context. We will also combine the study of the language skills with an exploration of various aspects of different Hispanic cultures. For this purpose, we will read short literary and journalistic texts, we will listen to music and study specific rhythms of the Hispanic world, we will look at the visual art of different Spanish-speaking regions, and we will watch films spoken in Spanish.

Lowest Grade Allowed: 9

Prerequisite: Spanish III

# Spanish V: Conversation

Teacher: Mariana Amato

This intermediate/advanced course is aimed at strengthening the students' conversational skills. The course will provide guided oral practice of grammar and vocabulary skills, through a discussion of topics of current interest and an exploration of Hispanic culture. Though occasionally new grammar structures may be taught, the main goal of the course will rather be that students become more fluent users of the structures they already know. Hence, part of the class will be focused on exercises aimed at improving the students' listening and speaking skills. In addition, we will read short literary and journalistic texts, and watch films that will help students expand their vocabulary and frame our discussions.

Lowest Grade Allowed: 9

Prerequisite: Spanish IV

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

# Mandarin V

Teacher: Xiaolin Lin

Mandarin Chinese V (elective) is a full year accelerated course (three mods) designed for students with advanced knowledge and language skills in Mandarin. Mandarin Chinese is the official language in Mainland China. In this course, students will learn simplified Chinese characters and standard Mandarin Chinese pronunciation. The goal of the course is to reinforce and to solidify students' Mandarin communicative competence in speaking, listening, reading and writing, with more focus on speaking, listening, reading, vocabulary expansion and content writing. A multimedia-based curriculum facilitates the acquisition of linguistic fluency and accuracy. The base curriculum covers what is achieved in the intermediate level course, but to greater depth and at a brisker pace overall. Authentic materials are used and the study of Chinese history and culture remains a part of this course. Extensive grammar review, intensive reading, composition, conversation and idiomatic expressions are emphasized in this course. Moreover, the course will integrate Chinese culture to promote students' cross-cultural awareness and understanding. Due to the great differences in Mandarin and English, students will also be introduced strategies and skills in learning Mandarin Chinese as a foreign language. Students will also have the opportunity to visit local museums and Chinatowns to enhance language learning and cultural exploration experience.

Prerequisite: successfully finish Mandarin I, II, III, IIII, IV with an average "B" required by the curriculum of core courses or approved by the teacher with placement tests.

Lowest Grade Allowed: 11

Prerequisite: Mandarin IV

This teacher has indicated that they NEED to grant permission for each student who signs up for this course

# Spanish V: Latin American Film

Teacher: Mirta Drake

Spanish V Films from Latin America and Spain

This course offers a critical view of film productions in the perspective of filmmakers

from Classic to contemporary movies in Latin America and Spain. A variety of films will be presented, along with selected scripts and fragments of novels adapted for cinema. While watching movies, we will consider issues such as gender, immigration and exile. An interdisciplinary approach will be presented in this class divided into thematic issues related to dream and nightmare, utopia and dystonia. While analyzing films, we will practice the four skills of listening, speaking, reading and writing. The class will be conducted in Spanish.

Lowest Grade Allowed: 11

NOTE: This is an interdisciplinary course in both World Language & Other Prerequisite: Spanish IV

This teacher has indicated that they NEED to grant permission for each student who signs up for this course.