



Wheeler School

Course Description Book 2023-2024

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Requirements For Graduation

Students are required to be enrolled in five major courses each semester. Any exception to this requirement must be approved by the Head of Upper School. The School recognizes and supports accommodations for students with documented learning disabilities. School policy requires that a Senior must pass all courses in which he or she is enrolled during the Senior year, regardless of any prior fulfillment of the distribution requirements or other factors. Seniors who have failed a one-semester or a year course will be granted a certificate of attendance in June and be given the opportunity to earn the diploma within a specified time subsequent to June of the Senior year.

Visual Arts: Two semesters required, including Foundation Art for one semester in grades nine or ten.

English: Four credits. English 9 & 10 (full year) , English 11 & 12 (Fall semester) and one core elective in the Spring semester of each year.

Modern Language: Through level 3 in one language, or through level 2 in two languages.

History: Three credits, including one year of United States history.

Mathematics: Three credits, including two credits in algebra and one in geometry.

Performing Arts: Two semesters.

Science: Three credits, including one credit each of environmental science and chemistry, and one credit of either biology or physics.

Physical Education: Four years, 100 minutes per week required.

Whole Life Seminar: Four years.

Note: One semester **major course** equals 0.5 credit; one year-long **major course** equals 1.0 credit.

Policies Governing Academic Study

Course Load

All students carry a minimum of five major courses. Although some students' interests compel them to consider taking seven courses, we urge students and families to make this decision cautiously as students must create a balance between academic study and co-curricular commitments for a healthy life. Students wishing to take seven courses must petition the Head of the Upper School and Program Planning Committee of the Upper School.

Students have an exploration period of the first two weeks of each semester to consider changing their program. Only students enrolled in six major courses can drop a major course after the last day of the second week of school as others will have missed too substantial a portion of a class to enroll in a fifth course. If a student has been misplaced, that student will be moved to the appropriate level with the advice of the teacher and the Department Head. Only under special circumstances are students allowed to drop a year-long course after the first semester. In these cases the first semester grade, W, will stand on the transcript, which will reflect a "Withdraw."

Advanced Placement Policies

Students are admitted to AP courses with the permission of the department. Students in these courses necessarily take on a course load with high work demands and often must use vacations and long weekends to cover material. All students in AP courses are required to take the AP examination.

In an effort to sustain a healthy balance between academic, co-curricular, and athletic commitments, no student will be allowed to enroll in more than four AP classes. Students who meet the criteria to enroll in four AP classes and who wish to do so will need to petition the Program Planning Committee of the Upper School. We urge students and parents to make this decision only after careful thought and with an eye toward preserving time for activities outside of school.

Semester and Year Away Programs

Wheeler recognizes the value of non-traditional educational programs and enthusiastically supports five programs that offer an experience complementary to ours to interested Juniors. These programs involve an application process with the hosting schools, and Wheeler works closely with them to ensure a good experience for our students. Students at Wheeler may apply to the following semester and year away programs for the JUNIOR YEAR ONLY: The Mountain School in Vershire, Vermont; CITYTerm in New York City; The High Mountain Institute in Colorado; The Island School, Eleuthera Island in the Bahamas; and School Year Abroad, sponsored by Phillips Academy. Seniors are expected to spend the entirety of the year on our campus.

Independent Study

Students with a particular passion or expertise in an area may choose to pursue independent study in that area with a faculty member. These opportunities require the utmost initiative, independence, and responsibility on the part of the student. Independent studies may be taken as either major or minor courses; in either case students and the instructor must be able to meet for five periods in the eight day cycle. Independent studies as minors are approved by the appropriate department chair and the Head of Upper School. Independent studies as majors are approved by the Committee of Department Heads. These applications must be submitted in the spring for the Fall semester of the next year and in the Fall semester for the Spring semester of that academic year. No independent study can count as a fifth major unless that student has exhausted the department's offerings.

Visual Arts

The study of art affects many areas of learning. The development of perceptual skills, like that of verbal skills, is vitally important because these skills improve thinking. The study of art, while enhancing learning as a whole, also has value as a discipline in and of itself. The Upper School Art curriculum encourages students to be open and receptive to new ideas, to new ways of working and thinking, and to taking risks. Students learn to value experimentation and discovery without fear of right or wrong outcomes; the process of art-making is valued before product. Program goals broaden student awareness through involvement in the art making process and aim to help students value themselves, their work, and the efforts of others. Requirements: Because Wheeler considers art to be an integral part of the educational process, each student is required to take two art courses in the Upper School. The first of these, in the 9th or 10th grade, is always the Foundation Art course. Students new to Wheeler in the 10th grade are required to take Foundation Art. Students may then complete their art requirement by taking Introduction to Wheel Throwing, Digital Photography 1, Drawing, Graphic Design, Ceramics: Hand Building, Printmaking, or Painting before they graduate. Students new to Wheeler in the 11th grade are required to take either Foundation Art or one art elective, depending on previous art experiences. Students with a strong interest and ability in art should take Foundation Art in the ninth grade, and then complete the necessary application process to be considered for acceptance in the Studio Art program. Students with a strong interest in art specialties can pursue advanced work in the Drawing, Ceramics, and/or Digital Photography sequence of courses. Serious students in the electives track may qualify for the Advanced Art Seminar. For an overview of the Upper School Art offerings and their sequences see Appendix 6.

Foundation Art

Foundation Art provides the basis for all art courses that follow in the Upper School. This studio-based course covers the basic elements of design, form, and composition. Projects explore a variety of media and materials that may include but are not limited to, drawing, painting, collage, photography, printmaking and ceramics. Gallery visits and critiques are also an essential component of this curriculum, encouraging students to analyze art in addition to creating art. This single-semester course is required at the 9th or 10th grade level. Offered fall and spring semesters. (Minor course)

Ceramics: Hand Building

This course is designed to familiarize students with various techniques of hand building utilitarian objects in clay, including pinch, coil, and slab construction techniques. Projects are assigned to give students knowledge and confidence in working with clay as a material while considering the function of a piece. In addition, decorative techniques and surface design will be taught throughout the semester. Students will learn how to create pieces by considering form, surface, personal style and craftsmanship. Offered fall and spring semesters. (Prerequisite: Foundation Art) (Minor course)

Introduction to Wheel Throwing

This class is an introduction to learning the basic techniques of creating clay forms on a potter's wheel. At first students will develop basic skills of centering the clay, pulling up walls, and making simple pieces. As the semester progresses students will develop more complex work. Projects include a variety of utilitarian objects with some consideration of sculptural work as well. Glazing and decorating techniques will be presented throughout the semester. (Prerequisite: Foundation Art) Offered fall and spring semesters. (Major course)

Advanced Wheel Throwing

For students who have completed Introduction to Wheel Throwing and are interested in continuing developing skills and expression with this medium and technique. Projects include plates, coil throwing, sculptural construction as well as explorations of artists and cultures focused on ceramics. Techniques in decorative work and surface design will also be emphasized. Students can opt to take one or two semesters of Advanced Wheel Throwing. Please indicate your preference during course sign-ups. Offered fall and/or spring semesters. (Prerequisite: Foundation Art and Introduction to Wheel Throwing) (Major course)

Three-Dimensional Design

This course offers an exploration of sculptural techniques to create three-dimensional forms working with a variety of media. Projects will draw inspiration from nature, architecture, and creations from industry. As students learn techniques and gain the ability to communicate their ideas in three-dimensions, more complex processes will be introduced. Offered fall and/or spring semesters. (Prerequisite: Foundation Art) (Minor course)

Drawing

This course is designed for students to develop their skills in drawing with an emphasis on creative exploration and personal expression using a wide range of drawing surfaces and materials. Subjects may include spontaneous and responsive mark-making, self-portraits, and still-lives. Each student will be given a sketchbook for their own personal visual journaling. In-class assignments are supplemented by walking field trips to nearby museums and galleries. Offered fall and spring semesters. (Prerequisite: Foundation Art) (Minor course)

Printmaking

This course focuses on an exploration of printmaking techniques which may include but are not limited to mono print, silkscreen, relief, intaglio and related photo processes. While learning the technical skills involved in contemporary and traditional printmaking, students will explore how to make multiple prints as a reproduction technique that can be used for t-shirts, posters, and cards as well as single prints combining various techniques. In-class assignments are supplemented by walking field trips to nearby museums and galleries. Offered fall and spring semesters. (Prerequisite: Foundation Art) (Minor course)

Painting

The focus of this course is daily in class painting as a way to enjoy the exploration of painting without the stress of perfection. In addition to learning the basics of painting, students will continue to develop drawing skills for accuracy and expression. Students will also learn about value, color-mixing, and color-relationships. Through an exploration of different styles and materials, the aim of this course is for each student to find the best means for personal expression. In addition to inside studio work, we will paint outside when possible, (plein-air, in the spirit of our founder) visit shows in our own Chazan Gallery and when possible, take a day long field trip to the Rhode Island School of Design Museum and Edna Lawrence Nature Lab. Offered fall or spring semester. (Prerequisite: Foundation Art) (Minor course)

Graphic Design

In this course students will learn the basic principles of creating great designs combining text and image. Students will learn to create strong and effective visual statements through traditional design methods balanced with contemporary computer technology. The skills learned in this course offer a solid foundation for students interested in pursuing design work in commercial art, advertising, and web design. Course-work will be supplemented with field trips to local studios when possible. Offered fall or spring semesters. (Prerequisite: Foundation Art) (Minor course)

Digital Photography 1

An introduction to black and white digital photography, this course will cover the basic operations of a digital camera, image-capture, downloading, formatting and image adjustments in Adobe Photoshop, and printing. A digital camera is required for the course. No phone cameras. Offered fall and spring semesters. (Prerequisite: Foundation Art) (Minor course)

Digital Photography 2

This course is a continuation of the skills and concepts learned in Photography 1. Students will be introduced to color digital photography, learning color theory and applying various color combinations and palettes to image-capture. Advanced techniques in Photoshop will be covered to further enhance image-manipulation possibilities and to create photo-collages. A digital camera is required for the course. No phone cameras. Offered fall and/or spring semesters. (Prerequisite: Foundation Art and Digital Photography 1) (Minor course)

Advanced Art Elective Seminar

Art Seminar is a rigorous course of study for advanced Art Elective students to continue exploration in Ceramics, Drawing, Photography, Printmaking, Graphic Design, or Sculpture. First semester studio time is structured around conceptually based assignments to which students respond within their medium of expertise. Class time also includes demonstrations, critiques, visits from professional artists as well as trips to museums and local studios. The second semester is devoted to producing a body of artwork around a personally selected theme, which culminates in a senior art show in the Chazan Gallery. This is a year-long major academic course. Prerequisites: successful completion of level two and level three (if offered) Art Electives within a specified medium and permission of instructor. (Major course)

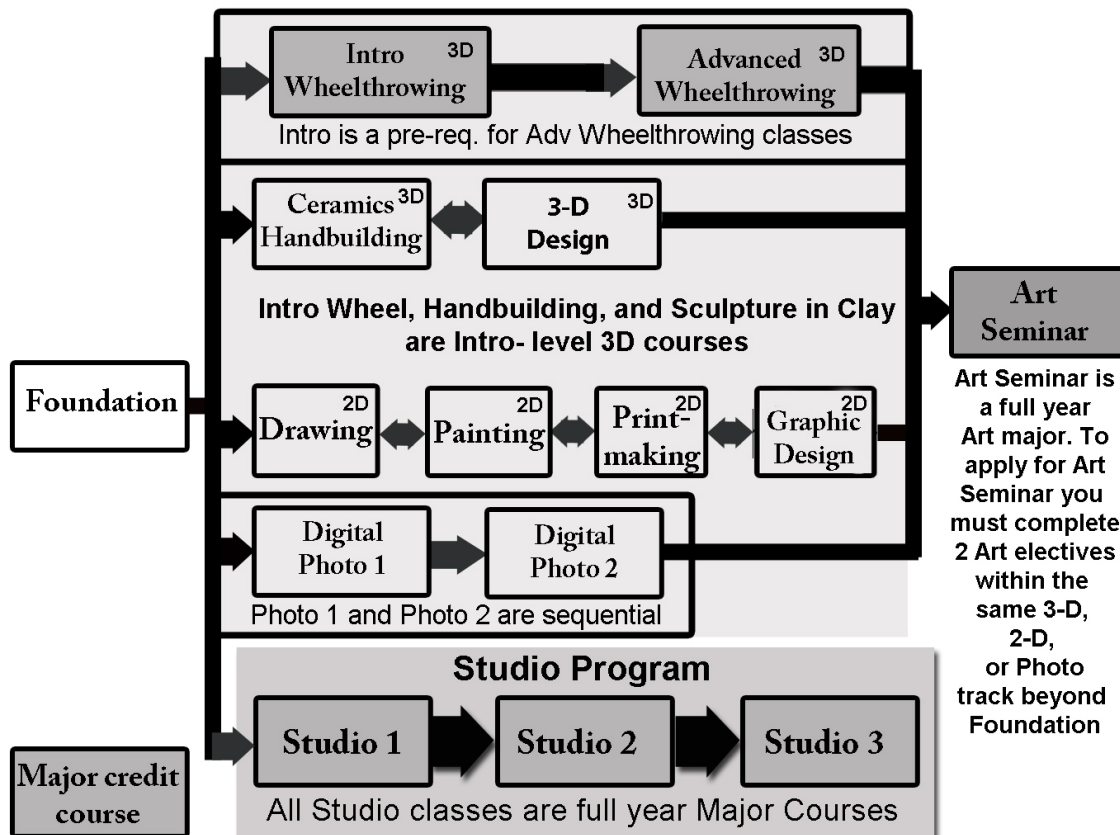
Studio Art 1

Studio Art One is a rigorous course specifically designed for students with a strong interest in drawing and painting and a commitment to advanced study in visual art. Through a series of structured assignments, students develop the observational and rendering skills necessary to make powerful visual statements through their art. The first semester focuses entirely on black and white compositions and designs. Subject matter include both representational and non-representational imagery, figure drawing, landscape and portraiture. The second semester provides a thorough introduction to color theory and painting. Studio Art 1 is a year-long major academic course with a weekly five hour out-of-class assignment. Prerequisite: Foundation Art/Departmental Recommendation/Application requires submission of three assigned drawings and a written statement. Full year. (Major course)

Studio Art 2 & 3

Studio Art 2 and 3 provide a further exploration of drawing, painting, design, and sculpture for the student who has successfully completed Studio Art 1. Focusing on visual expression as a means of communicating ideas, the course emphasizes the conceptual development of ideas and experimentation with materials to explore expressive possibilities. Working independently on long-term projects, each student strives to develop the skills and confidence necessary to make uniquely personal and expressive visual statements. Figure drawing classes, group critiques, gallery and museum trips, and artists' lectures are also included. The second semester of Studio Art 3 is devoted to producing a body of artwork around a personally selected theme, which culminates in a senior art show in the Chazan Gallery. Advanced Studio Art is a year-long major academic course with a weekly five-hour out-of-class assignment. Prerequisite: Studio Art 1. Department recommendation is required. Full year (Major course)

Art Department Course Sequence



Note: All Art Electives are 1 semester Minor Courses except where noted (in gray)
 Students may take the Art electives Ceramics Handbuilding, Drawing, Graphic Design, Painting, Printmaking, Intro Wheelthrowing, Three -Dimensional Design, or Digital Photography 1 in any order.

Computer Science

Introduction to Web Design

This course introduces concepts related to web layout (including Internet protocols), content production and graphic design. We look at website design from both programmatic and graphic design perspectives. Students will learn the basic elements of web page design including basic layout, the use of graphic and text elements in design, integrating navigational elements, the use of buttons in a page and the relationship between page design and target audience. Students are introduced to the following elements and their use in the construction of Web pages: Hyper Text Markup Language (HTML), Cascading Style Sheets (CSS), and JavaScript (JS). The primary application tools used in the course include online coding editors/compilers and Adobe Photoshop (or Pixlr). As a capstone to the class students will design, create and present their individual web sites. No previous programming, web design or Photoshop experience is necessary. One semester. Offered Fall semester. (Minor course)

Introduction to Computer Science

This course is an introduction to computer science topics, including: program design and development, hardware, data compression, binary conversion, algorithms and programming. We evaluate programming methodologies and the use of structured, problem-solving logic. Students are introduced to fundamental concepts of computer science including computer programming terminology, standard data types, and class and object concepts through the programming language Javascript. A significant amount of time in class is devoted to learning how to design, code, compile and debug programs. This course does not assume any previous programming experience and is intended for students who want to gain a foundation in standard programming concepts and techniques. Students interested in this course should have completed Honors Math 1, or Algebra 2, or received the teacher's permission. This course is a prerequisite to AP Computer Science. One semester. Offered spring semester. (Major course)

Advanced Placement Computer Science

This course emphasizes advanced programming methodologies and Object Oriented Programming concepts. Students will become proficient in advanced class and object design, arrays/array lists, inheritance, polymorphism, searching/sorting algorithms, recursive techniques and other algorithms among other fundamental concepts in computer science. The curriculum is based on the College Board Advanced Placement Computer Science syllabus and taking the Advanced Placement Computer Science Examination in the Spring is a requirement of the course. The course uses hands-on projects to help students acquire the skills and understanding necessary to be successful programmers. Prerequisite: completion of the Introduction to Computer Science course (offered in Spring) with an A- or better or with teacher's permission. Students starting the class with a math aptitude and a strong foundational understanding of the Java syntax and computer logic are in the best position for success. Full year. (Major course)

English

The English department encourages students to become sophisticated readers and confident writers. Through in-depth analysis of texts of increasing complexity chosen from various literary forms (autobiographies, essays, novels, short stories, plays, and poetry), our students develop their ability to understand and to explain an author's style, voice, background, and historical period. We strive for a balance between classic and contemporary texts and look to expose our students to a diverse selection of perspectives and subjects.

Writing is at the heart of all levels of the English curriculum. The department emphasizes both analytical and creative writing assignments in order to enhance students' understanding of literature and their own place in the world. Students at each grade level can expect to write a variety of expository and personal essays, poems, short stories, and one act plays. Students hone their writing through a revision process that involves thorough teacher commentary, peer editing in class, and the use of appointed student writing mentors. We encourage students to showcase their work in student publications and various writing contests.

All students must complete four full years of English study.

N-12 English & Language Arts Department Mission Statement

Stories and storytelling, as ongoing expressions of the full human experience, are at the heart of our work as an English department. Our students will better know themselves, their fellow citizens, and the world we all share through the attentive examination of these stories as well as the thoughtful reflection on their own emerging voices. In our classrooms, when we are committed and willing to engage in each other's narratives, when we create a culture of inquiry and empathy, we can more effectively and meaningfully realize literature's highest purpose as a collective call to action, justice, and compassion. We acknowledge the role of education as a tool for the liberation of all people, that our mission as an English department is to equip students with the voices and the authority to question, challenge, and transform themselves and the world around them.

English 9

In the freshman year, students are exposed to great works of fiction, poetry, and drama. As they read, students will also learn to ask important questions about how the words on the page might help them better understand human experience. In many cases, the texts in this course have, as their protagonists, young people who are struggling with choices about falling in love, finding an identity, or defying cultural expectations. Students in ninth grade are expected to generate ideas for writing, to revise drafts with care, and to spend time identifying their own strengths and weaknesses as readers and writers. In addition to critical essays, students will also write creative responses to the texts in such forms as poetry, fiction and personal narrative. Students will study vocabulary and grammar in conjunction with their reading and writing. Texts used in recent years have included *The Catcher in the Rye*; *The Story and Its Writer*; *Small Odysseys*; *Twelfth Night*; *Sing, Unburied, Sing*; *Oceanic*; *The Norton Introduction to Poetry*; and *The Book Thief*. (Major course)

English 10

Sophomore English is designed to develop and refine students' critical reading and writing skills. The study of international literature will identify the common ground between texts of different cultural origins and literary genres. More thematically, this curriculum explores what shapes and makes us who we are as well as who we are perceived to be. Our texts explore the boundaries we face, perceived and unknown, some constructed by others, and some we ourselves have built. What defines who we are? How do the multiple identities intersect? What determines our path? What borders, literal and metaphorical, are crossable, which are impassable, and in what contexts? Writing assignments will focus on synthesizing information, concepts, and approaches from various literary sources, including works in translation. In addition to writing analytical essays, students have opportunities to write creative responses to the texts. Texts used in recent years have included *The Namesake*, *The Classic Fairy Tales*, *The Elephant Vanishes*, *Exit West*, *How Long 'til Black Future Month*, and *The Making of a Poem*. (Major course)

English 11, Fall Semester

The fall semester of junior year is devoted to the study of American literature. Students examine such topics as the pursuit of the American Dream, philosophies of freedom and democracy, the examination of gender dynamics, the relationship between narrative voice and identity, and the intersections of race, culture, and class. Students examine these themes in personal and critical essays and various forms of creative projects. Authors may include Zora Neale Hurston, Frederick Douglass, Walt Whitman, Emily Dickinson, Langston Hughes, F. Scott Fitzgerald, and Jimmy Santiago Baca. Juniors in good standing may be invited by their English teachers to take either one or both of the Advanced Placement exams in English in the spring. (Major course)

English 12, Fall Semester

The fall semester of English 12 introduces students to challenging texts that explore important existential questions; the complex interplay between social constructions and personal individuality; the blurry lines between memory, history, and reality; and the tensions between a responsibility to self and accountability to others. The class will first collectively perform a close study of William Shakespeare's *Hamlet* and its protagonist's struggles with grief, inaction, and selfhood. Later in the semester, when students read Toni Morrison's *Beloved*, they will examine Morrison's powerful exploration of memory and the many ways it haunts, shapes, and defines the human experience. In responding to these texts, students are encouraged to challenge themselves, in their own writing, to articulate a more nuanced and complex engagement than they have taken on in the past. Such efforts have taken these forms: experimenting with form and voice in creative writing as inspired by the nonlinear narrative structures of the texts they are reading; designing, blocking, and novelizing a scene from Shakespeare's play; and crafting a comparative retrospective that synthesizes a set of texts across their high school English career. (Major course)

English 11 and 12, Spring Semester Core Electives

Each spring the English Department offers core elective choices for 11th and 12th graders. Students rank their preferences from this list of the specific course descriptions during course sign ups. All English electives are major courses.

Contemporary Poetry

In this course, we will read the poetry of our contemporaries with an eye for what marks their work in and of our shared time. As we do so, students will be expected to cultivate their sense of the poetic voice and to develop a deeper sense of what it means to read poetry for pleasure. Students will also be asked to write poetry, as a way to help them not only develop their own practice of the craft but also to help them become more sophisticated readers. To this end, students will employ pastiche and parody, among other techniques, to help develop their understanding of what our language offers and requires of its poets. We will read from an electronic course packet and make enthusiastic in class use of the many excellent web-based sources of contemporary poetry.

Epic Poetry

In this course, we will read Homer's *Iliad* and Derek Walcott's *Omeros*. As we study these poems, we will focus, primarily, on the evolution of the epic poem as a form. We will consider, too, the evolution of the epic hero—as a character and as a representative of certain cultural ideals. Our study of the epic hero and his moral make-up will also cause us to think about the role of women in epic poetry, the necessity of civic piety, the interference of the gods, the power of fate, and the potential effects of travel on the individual and his character.

The Female Protagonist

This course will focus on the development of strong female characters in a range of literary works. We will begin by considering the female characters students have already encountered in their reading since childhood before shifting to assigned texts, focusing on 19th and 20th century novels. Students will write critically in response to the literature and will also explore those qualities which distinguish strong women in their own experience. Novels considered in the past have included: *Pride and Prejudice*, *Emma*, *Jane Eyre*, *To the Lighthouse*, *The Bell Jar*, *The Color Purple*, *The Bluest Eye*, *Americanah*, and *The Hate U Give*.

Fiction & Film

In 1936, art historian Erwin Panofsky wrote, "If all the serious lyrical poets, composers, painters and sculptors were forced by law to stop their activities, a rather small fraction of the general public would become aware of the fact and still a smaller fraction would seriously regret it. If the same thing were to happen with the movies the social consequences would be catastrophic." Film is arguably the most powerful and popular art form of the past hundred years. So what happens to a novel when it gets adapted to film? How can the two mediums communicate? While studying cinematic elements (mise-en-scene, cinematography, and editing) to better understand the significance of what becomes "invisible" when viewers lose themselves within a film's "illusion of realism," we will consider each text as an independent work of fiction as well as a source that inspired adaptation/ translation, asking how each film remains faithful to or alters the original's plot, style, and message. Works may include *The Children of Men* (by PD James, dir. Alfonso Cuaron), *The Silver Linings Playbook* (by Matthew Quick, dir. David O. Russell), *Slumdog Millionaire* (by Vikas Swarup, dir. Danny Boyle), *Bee*

Season (by Myla Goldberg, dir. Scott McGehee and David Siegel), *No Country for Old Men* (by Cormac McCarthy, dir. Joel and Ethan Coen), *Million Dollar Baby* (by FX Toole, dir. Clint Eastwood), and *Where the Wild Things Are* (by Maurice Sendak, dir. Spike Jonze).

The Literature of Immigrant Communities

A city, a map, text, and the human heart are all territories we seek to analyze and define. However, part of the paradox of examining such territories as an immigrant is that they require boundaries: they ask us to draw sharp lines of separation between ourselves and others, our place of origin, and the location we now call home. This course focuses on several texts that explore questions of home, nation, and self. The overall intent is to explore various immigrant experiences, and introduce and explore the historical breadth and depth of critical thinking from and about diverse peoples throughout the diaspora.

Metafiction

Many postmodern authors tackle the problematic nature of reality's "universal descent into unreality" (Roth) by engaging the reader in uncertainty. In metafiction, fiction about the nature of fiction itself, readers struggle to separate actuality from possibility, truth from lies, and memory from imagination, as authors simultaneously undermine belief and the suspension of disbelief in order to reach more complex truths. Together we will study novels, plays, children's literature, cartoons and comics, popular music, films, and television episodes in order to examine the relationship between reality and fiction as well as the nature of storytelling as a means of transcending truth and unveiling "the possible fictionality of the world outside the literary fictional text" (Waugh). Possible texts: Kurt Vonnegut's *Slaughterhouse-Five*, Grace Paley's "Conversations with My Father," Tim O'Brien's *The Things They Carried*, Samuel Beckett's *Waiting for Godot*, Margaret Atwood's "Happy Endings," and Luigi Pirandello's *Six Characters in Search of an Author*; possible films: *Stranger than Fiction* (dir. Marc Forster), *Adaptation* (dir. Spike Jonze), *Rear Window* (dir. Alfred Hitchcock), and episodes from the fourth season of *Seinfeld* (written by Larry David).

Monsters of Literature

For centuries, monsters have been the profanely corporeal translations of humanity's fears, anxieties, sins, and transgressions. These unsettling embodiments of the grotesque and the inhuman have often represented, with varying subtlety, a terrified fixation on human difference, notions of perversion and abnormality, otherness, social upheaval, and cultural flux. The uncertainty and chaos posed by clashes between peoples and by encounters with unfamiliar realms has persistently begotten dread with terrible imaginativeness, spawning monstrosities that scare us and which we must either escape or destroy. It is no accident, then, that the history of monsters echoes the histories of racism, sexism, colonialist tyranny, scapegoating violence. We will examine the layers of symbolic meaning packed into the figures of monsters in stories. We will also investigate the effects and implications of confronting and engaging with monsters in literature exactly and palpably for what they are: terrifying creatures with strange and repulsive physicalities. What happens when we accept the bodies of monsters—their breathing, even heaving presences—as real, tangible entities, rather than as symbolic stand-ins for entrenched or looming fears of "the other" or of social change? At what point do our monstrous metaphors become merely convenient refuges where we can stay at a safe distance? We have the audacity to conjure them, but what of the guts to face them? Perhaps monsters are not threats at all. Perhaps monsters are revolutionary. In this class, we will read a selection of these texts: Mary Shelley's *Frankenstein*, Maria Dahvana Headley's translation of *Beowulf*, John Gardner's *Grendel*, stories by H.P. Lovecraft, and Victor LaValle's *The Ballad of Black Tom*.

Reading and Writing the Personal Narrative

In this course students will read several complete memoirs in addition to a collection of excerpts and personal essays as inspiration for telling their own stories. We will also be exploring the growing genre of graphic memoirs and will experiment with visual projects ranging from digital storytelling to graphic journaling. Though students will write critically on the assigned reading in class, papers will be creative nonfiction pieces. We will read work by authors like: Tobias Wolff, Mary Karr, David Eggers, Annie Dillard, Tim O'Brien, David Sedaris, Roald Dahl, Amy Krouse Rosenthal, Allison Bechdel, Lynda Barry and Allie Brosh.

The Short Story

In this class, we will read, analyze, and discuss the short story as a genre. Our shared study will lead us to ask deep and prolonged questions about the nature and purpose of this literary form. We will examine how it differs practically and aesthetically from our experiences with the novel, and we will consider the many ways in which the short story's concentrated narrative affects its treatment of human behavior and even the very act of storytelling itself. After beginning with micro fiction, flash fiction, and sudden fiction, we will examine a wide variety of authors who may include: Chimamanda Adichie, Aravind Adiga, James Baldwin, Nana Kwame

Adjei-Brenyah, Julia Alvarez, Ann Beattie, Raymond Carver, John Cheever, Anton Chekhov, Ted Chiang, Sandra Cisneros, Jennifer Egan, Nikolai Gogol, Nathaniel Hawthorne, Ernest Hemingway, Langston Hughes, Zora Neale Hurston, Jhumpa Lahiri, Gabriel Garcia Marquez, Flannery O'Connor, Aleksandr Pushkin, Philip Roth, David Sedaris, Amy Tan, Alice Walker, and Tobias Wolff. Over the semester, students will write critical essays as well as original short fiction.

Twenty-First Century Literary Rebels: Wit, Wonder, and the New Sincerity

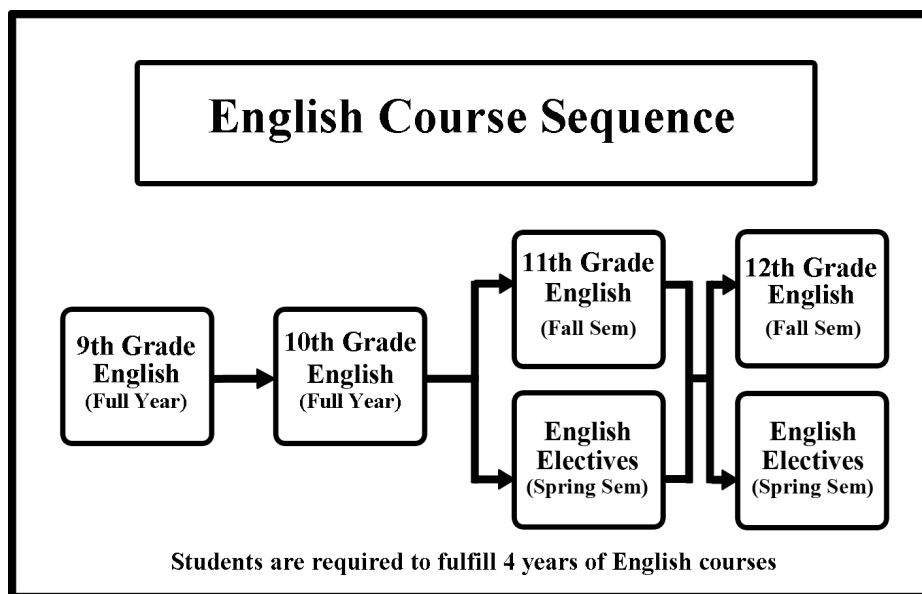
David Foster Wallace wrote in his essay “E Unibus Pluram: Television and U.S. Fiction”: “The next real literary ‘rebels’ in this country might well emerge as some weird bunch of anti-rebels, born oglers who dare somehow to back away from ironic watching, who have the childish gall actually to endorse and instantiate single-entendre principles... The new rebels might be artists willing to risk the yawn, the rolled eyes, the cool smile, the nudged ribs, the parody of gifted ironists, the ‘Oh how banal.’ To risk accusations of sentimentality, melodrama. Of overcredulity.” His essay is a challenge for writers to embrace what Nick Carraway described as Gatsby’s “romantic readiness,” to transcend irony. In our self-conscious social networking world in which we wait for “likes” and share ironic memes, how do we face the tension between cool detachment and straightforward sincerity? How do we balance comedy with vulnerability, style with authenticity, and performance with privacy?

Weird Worlds in Literature

In this elective, we will explore the fantastical, the scientifically not-here, the perplexing, the unsettling, and the horrific. We will investigate other worlds that authors have created, and one of the course’s central hopes is that such excursions will help us to witness and comprehend more fully our own world and its wonders, chaos, mysteries, beauties, and terrors. As we traverse the otherworldly, we must strive to glean new wisdom. We should challenge what we think we know and what we say we believe. Together we will read Ursula K. Le Guin’s *The Left Hand of Darkness*, Margaret Atwood’s *The Handmaid’s Tale*, and Octavia E. Butler’s *Kindred*.

Writing in a Public Voice: Modes of Journalism

Writer, philosopher, and humorist Kurt Vonnegut famously advised writers to “use the time of a total stranger in such a way that he or she will not feel the time was wasted.” Writing in a Public Voice introduces students to the art of informed engagement in an era of distraction. We will read op-eds, reviews, profiles, columns and opinion pieces from publications such as The New York Times, The Atlantic, Rolling Stone, Wired, The Washington Post and The New Yorker, with an eye toward studying the essential skills and hallmarks of style required by each genre. Students will generate story ideas, develop research strategies, learn to engage readers and submit queries for publication in print and online formats. They will write, review, and revise several works of their own and learn how to connect to their respective audience through informed storytelling. Texts studied will include a curated selection of articles accessed through the Prescott Library’s Flipster account; any other required readings to complement the articles will be provided digitally.



History

The History Department trains students to understand the foundations of the contemporary world. By the time students graduate (when many of them have reached voting age), they should be able to make informed decisions about the people, issues, and events around them.

To that end, students develop the skills needed to become successful citizens in today’s rapidly changing world. Students learn to think critically by examining both primary and secondary sources, by weighing different sides of arguments, and by evaluating options and judging outcomes. Such critical thinking is encouraged through a variety of means: essays, tests, presentations, research projects, debates, role-plays, class discussions, and a variety of types of writing assignments. Critical writing is stressed throughout the curriculum. History courses are structured to build skills over a three-year span of secondary school. The skills and the knowledge acquired in the year-long courses are designed to prepare students for the following year, therefore taking courses out of sequence is discouraged.

Students are required to take three years of History that include Topics in World History, Modern World History, and United States History, however the Department strongly encourages students to take a fourth year of History through the electives we offer each year. For an overview of the Upper School History offerings and their sequences see Appendix 2.

Grade 9

Topics in World History

In this course, students build the skills of historical inquiry by examining the ways cultures and societies in the Middle East, Europe, Africa and the Americas evolved over centuries of contact and conflict. Our study proceeds chronologically, from “medieval” to “modern,” but with a thematic focus. For instance, the course compares patterns of colonization, including assimilation and conquest, and considers the roles of race, religion, gender, sexuality and ethnicity in the process. Students study how ideas are circulated and how intellectual developments impact social and political history (e.g. the Enlightenment and the French and Haitian Revolutions). We also consider how economic circumstances inspire new cultural movements (e.g. the Industrial Revolution and socialism). We foster skills needed for historical analysis: discerning cause and effect connections, recognizing patterns, and evaluating perspectives. In the process, we analyze a number of primary sources, use library and web resources for research, and build analytical writing skills. We cultivate study skills including note-taking, time management, and organization in order to prepare students for success in this and future history courses. (Major course)

Grade 10

Modern World History

The tenth-grade year is designed to complete the chronological sequence begun in the ninth grade by examining major developments in the making of the modern world from the late 19th century to the present. Although the format of the course is chronological, it will emphasize in-depth study of major topics and themes such as colonialism and imperialism, global economic development, revolution, world war, technological innovation, competing political and economic ideologies, decolonization, and contemporary issues. Students will build upon skills developed in the ninth grade as they closely analyze a variety of primary sources, complete a number of research projects, and continue to refine their analytical writing skills. (Major course)

Grade 11

United States History

This course examines major developments in the United States from the colonial era to the present, emphasizing significant cultural, constitutional, political, economic and social developments. Themes such as race, gender, foreign policy, and migration will be emphasized, and students will be exposed to key ideas, debates, institutions and documents of United States history. Students will continue to develop critical reading and thinking skills over the course of the year, and assessments will include at least one major research paper. (Major course)

Honors United States History

The expectations of this course are set at the level of a first-year college seminar. The course proceeds chronologically through United States history and aims to help students see current events in the United States through a historical lens. Students will participate in student-directed discussions, write an original historical research paper, and display a high level of engagement in all areas of the

course. With a focus on the craft of history, the course will require independent inquiry, sustained analysis of primary sources, engagement with academic journals and historical monographs, and strong writing skills. This is a writing and reading intensive course; students can expect longer nightly readings and frequent analytical writing assignments. Admission to this course is selective and students will be recommended for the course by their tenth-grade teacher. (Major course)

Note: Students completing the Honors US History course who wish to take the College Board Advanced Placement (AP) exam should check with their teachers, since extensive out of class review and independent preparation is required.

Advanced Placement courses

Advanced Placement Economics

The AP Economics course offers an in-depth introduction to the fundamental theories and concepts of economics. Students are expected to take the Macroeconomics AP exam in May, as preparation for this exam is one of the primary goals of the course. We will begin the year working on basic economic concepts of opportunity costs and supply and demand before examining macroeconomic topics including economic indicators, fiscal and monetary policy, as well as international trade. During this process, abstract economic theories will be related to everyday items and current events. Admission to this course is selective and students will be recommended for the course by their eleventh-grade teacher. (Major course)

Advanced Placement Art History

The AP Art History course is an exploration of the nature of art, its function, meaning, processes, traditions, responses to and its impact upon societies and cultures from prehistory to present, caves to contemporary. The course engages students in the investigation of collective themes that connect people cross-culturally and throughout time. Students gain the skills of visual analysis necessary to the in depth work of Art Historians. Whether you're an artist, musician, anthropologist, visual learner or simply interested in looking at the world through a different lens, this course will interest and enlighten you while also encouraging you to develop a strong sense of self-awareness. A January exam will be given and students are required to take the College Board's AP Examination. Students should expect approximately 30 minutes daily of outside-of-class reading, videos, journal writing and project preparation. Enrollment is open to juniors and seniors (with preference given to seniors). Students wishing to enroll in this class must submit an application during the Spring course enrollment period. (Major course)

History Seminars

History Seminars are open to Juniors and Seniors. Sophomores wishing to enroll in seminars must receive written permission from the Department. History seminars are one semester majors.

American Cultural History

This course will examine the last seven decades of American life through the lens of our most ubiquitous medium, television. We will consider the ways in which television both creates and mirrors American society through the stories we tell and the myths we invent. In this way, television has both shaped and reflected our changing cultural norms as well as our sense of generational, political, regional, national, gender, and racial identities. We will explore the role television has played in everyday American life through the genres of the sitcom, the variety show, dramas, and the news. I will assess your comprehension of the course materials and concepts through written assignments, which will give you an opportunity to put your television analysis and creative skills into practice. (One semester)

Contemporary World Issues

The goal of this course is to provide students with a broad-based understanding of the contemporary world and to encourage them to be actively involved in the world around them. The course will explore major issues facing the world today such as globalization, the fight against terrorism, international peacekeeping, individual rights and liberties, and the tension between state sovereignty and global intervention. We will approach these issues through current case studies and through an examination of their historical context. Our study of the issues will ultimately lead us to question what can and should be done about world crises and what role the United States should take in global affairs. Class discussion is stressed in this course, and students will be expected to do nightly reading, conduct independent research, and write papers. This semester culminates in an independent research project on a contemporary world issue of each student's choice. (One semester)

Economics

Did you know the price of Coca-Cola did not change for nearly 70 years? Or that you can compare the strength of currencies using Big Macs? What happens to our money when we put it in the bank? Why are car prices increasing so much? Economics can offer insights into our everyday world, as it's the study of how we make the most out of what we have. Often, this means we face tradeoffs and need to make tough decisions in order to maximize our resources, our time or our happiness. The goal of this course is to provide the tools to become a more informed decision-maker when considering prices, costs, trade, and market structures. It will also help you make your own assessments about the economy, with knowledge of economic indicators, policy tools and your own personal finances. This year-long course is open to juniors and seniors. Juniors will have the option to apply for AP Economics after successfully completing this course; however, this course is not a prerequisite for AP Economics. (Full year course)

Political Philosophy and the Law

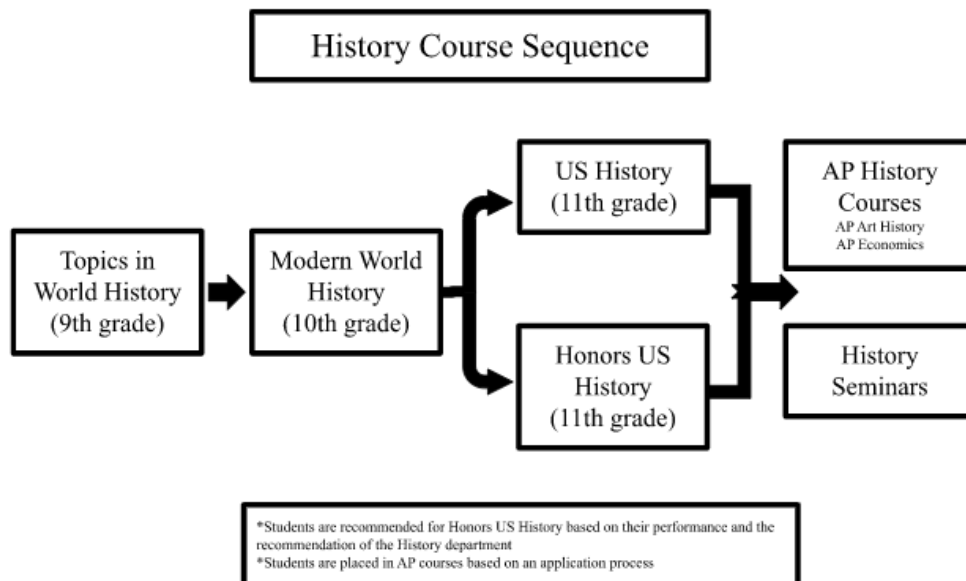
The notion of inalienable rights is the fundamental construct of the American political system. Throughout our history, Americans have believed in and fought for rights guaranteed by the Constitution. Civil Rights and Civil Liberties offers an intensive study of some of the fundamental constitutional issues which have shaped the history of the United States. Students taking this course will explore the basis of American law in Enlightenment political philosophy and then turn to an examination of the Constitution itself. The second quarter will be devoted to a study of the landmark Supreme Court decisions interpreting racial segregation in education, search and seizure rights of students, and free speech. (One semester)

US Immigration History

As host to more immigrants than any other country in the world, the United States has been shaped and reshaped by immigration over the centuries-- demographically, economically, culturally, socially, and politically. In this seminar, students will explore how immigration has been a defining, often contentious, element throughout US History and answer key questions, such as: What are the push and pull factors driving immigrant waves? How and why has US immigration policy changed over time? In what ways has immigration shaped American identity? The course will culminate in a research project in which students will identify and explore some aspect of the history of immigration in Rhode Island. (One semester)

Women and Sports in the United States

In this seminar, students will trace the evolution of women's sports in the United States from the non-competitive, informal rule-less recreational activities of the 1800s through the passage of Title IX as well as the formation of professional women's athletics. Using primary source material, scholarly journals, and oral history accounts, the class will focus on the obstacles-- ideological, social, legal and economic--that women have encountered and continue to face as female athletes in America. The course will culminate with an oral history project that will focus on the experiences of Wheeler Alumni athletes, with the goal of starting an oral history archive documenting the evolution of women's sporting programs at Wheeler. (One semester)



Mathematics

The objective of the Mathematics department is to give students the tools and problem-solving skills to face the challenges of a changing world. We believe in a balanced approach, where students learn to explore conceptually rigorous material with the mathematical skills and fluency that will set them up for success in future pursuits. We encourage students to work both individually and collectively in finding solutions. We want each student to build confidence in their ability to think critically and logically now and in the future, to see connections among the concepts covered in our curriculum, and to reach their potential through understanding and appreciation of the subject.

Students are required to take at least three years of math in Upper School, including Geometry and Algebra 2. Almost all students study mathematics for all four years. Students who have a particularly strong interest in mathematics or in another field which relies on advanced mathematical ideas may, if qualified, undertake an accelerated sequence.

Integrated Math

This course covers Algebra 1 and Geometry topics in an integrated fashion and is intended for students who have not taken Algebra 1 or who need further solidification of their algebra skills. Topics include properties of numbers, linear and quadratic functions, rational expressions, plane and solid geometry, and data analysis as time permits. The curriculum places particular emphasis on skills relating to the interpretation of concepts through word problems. Successful completion of this course fulfills the departmental Geometry requirement. Department recommendation only. (Major Course)

Geometry & Data Analysis

For the first two-thirds of the year, this course covers the major topics of Euclidean geometry. Concepts are explored through conjectures, constructions, and computer use. The course begins with a thorough review of analytical geometry including midpoint, slopes, linear equations, and intersections. The major geometry topics covered are congruence, similarity, parallel lines, polygons, circles, area and volume, and further development of coordinate geometry. The remainder of the year is devoted to the study of descriptive statistics and probability. Topics include measures of central tendency, standard deviation, graphical displays of data in two variables, regression, probability, and combinatorics. Algebra 1 topics are used, reviewed, and assessed throughout the year to make the transition to the second year of algebra a smooth one. (Major course)

Intermediate Algebra

This course reviews the essential concepts and techniques of Algebra 1, including the real number system and its properties, mathematical symbols and notation, solving equations, factoring, and graphing. Based on Algebra 1 skills assessment in Geometry, this course is designed for students who need further solidification of their skills to be successful in Algebra 2. Emphasis is given to mastery of basic algebraic skills, but Algebra 2 topics are introduced as time permits. Department recommendation only. (Major course)

Algebra 2

The goals of this course are to establish mastery of basic algebraic skills and enhance mathematical maturity. Basic skills are developed around the following families of functions: linear, exponential and logarithmic, quadratic, rational, radical, and polynomial, with a special focus on graphs and their transformations. Emphasis is placed on exploring functions in symbolic, graphical, and tabular form. Within this framework, topics include solving equations and inequalities, factoring, simplifying higher radicals, and complex numbers. Trigonometric concepts, sequences and series and probability topics are also introduced and developed as time allows. (Major course)

Algebra 2 and Trigonometry

One distinction between this course and Algebra 2 is the pacing and depth at which the content is covered. The other is in the additional topics covered and the expectation that students are comfortable working through more challenging problems. Algebra 2 and Trigonometry is organized around the study of families of functions including linear, quadratic, polynomial, rational, exponential, logarithmic and trigonometric functions with increased emphasis on mathematical modeling. Sequences and series and sigma notation will also be covered. Students will simplify expressions with exponents and radicals and solve equations involving the function families studied. Both a grade of B+ or better in Geometry and departmental approval are required for this course. (Major course)

Algebra 3 and Trigonometry

This course is designed for students from either Algebra 2 or Algebra 2 and Trigonometry who need an extra year to solidify their skills and understanding of algebraic and trigonometric functions in preparation for Precalculus. This course covers a vast array of topics intended to both strengthen each student's algebraic foundations, as well as preview potential material covered in future classes. There is a major emphasis on using technology to help foster a better understanding of mathematical applications. Topics will include functional analysis, graphing, exponents and logarithms, complex numbers, trigonometry, and probability and statistics. (Major course)

Precalculus

As its name implies, this course is designed for students who expect to take a calculus course, either at Wheeler or in college. The function concept, including composite and inverse functions, is extended beyond previous courses, and quadratic, polynomial, rational, exponential, logarithmic, and trigonometric functions are covered in depth. Special topics such as modeling and regression, probability, sequences and series are also covered. Both a grade of B or better in Algebra 2 & Trigonometry and departmental approval are required for this course. Students in Algebra 3 & Trigonometry must have a grade of A- or better as well as departmental approval. (Major course)

Calculus

This course covers the key concepts related to differential and integral calculus, as well as the main techniques and applications that relate to these concepts. It strives to provide students with an introduction to calculus topics they may see again in a college level course. It is open only to seniors who have earned a grade of B- or better in Precalculus or juniors who have successfully completed Honors Math 2, or to those students who have departmental approval. (Major course)

Statistics

This course is an introduction to statistical methods, concepts, and literacy with an emphasis on understanding the methods and applying them confidently to real issues and data sets. Topics include techniques of descriptive and exploratory data analysis, the use of software to analyze real data sets and produce convincing graphical displays, and the design of random sample surveys and experiments. Probability concepts and techniques are introduced and inferential methods such as confidence intervals and hypothesis tests are explored through in-class and computer simulations. Statistics is open to seniors only. (Major course)

Honors Mathematics 1: Euclidean Geometry

This course begins the sequence of accelerated study leading to Advanced Placement Calculus BC. Enrollees must have completed Algebra 1 by grade 8 and have a thorough knowledge of Algebra 1 topics, including equations of lines, factoring, solving quadratic equations, solving systems of equations, and work with square roots. This course covers the standard topics of Euclidean geometry in detail, with special attention to the proof-writing process and solving geometry problems using the algebraic techniques listed above. Two- and three-dimensional applications and trigonometric concepts are introduced along with in-depth work on analytic geometry. A departmental recommendation is required for admission to this course. (Major course)

Honors Mathematics 2: Continuous Functions

This fast-paced honors course, designed for students with proven exceptional ability, interest, and background in mathematics, covers the material of Algebra 2 and Trigonometry and Precalculus in one year, and at a more sophisticated level. Topics covered include an in-depth examination of functions including polynomials and rational functions, exponential and logarithmic functions, and trigonometric functions specifically. The course is intended primarily for sophomores who completed Algebra 1 in grade eight and Honors Math 1 (or its equivalent) in grade nine. Students in this course are expected to enroll in AP Calculus AB the following year. Only students who have a strong interest in mathematics, have a grade of B or better in Honors Math 1, and who are recommended by the department may enroll. (Major course)

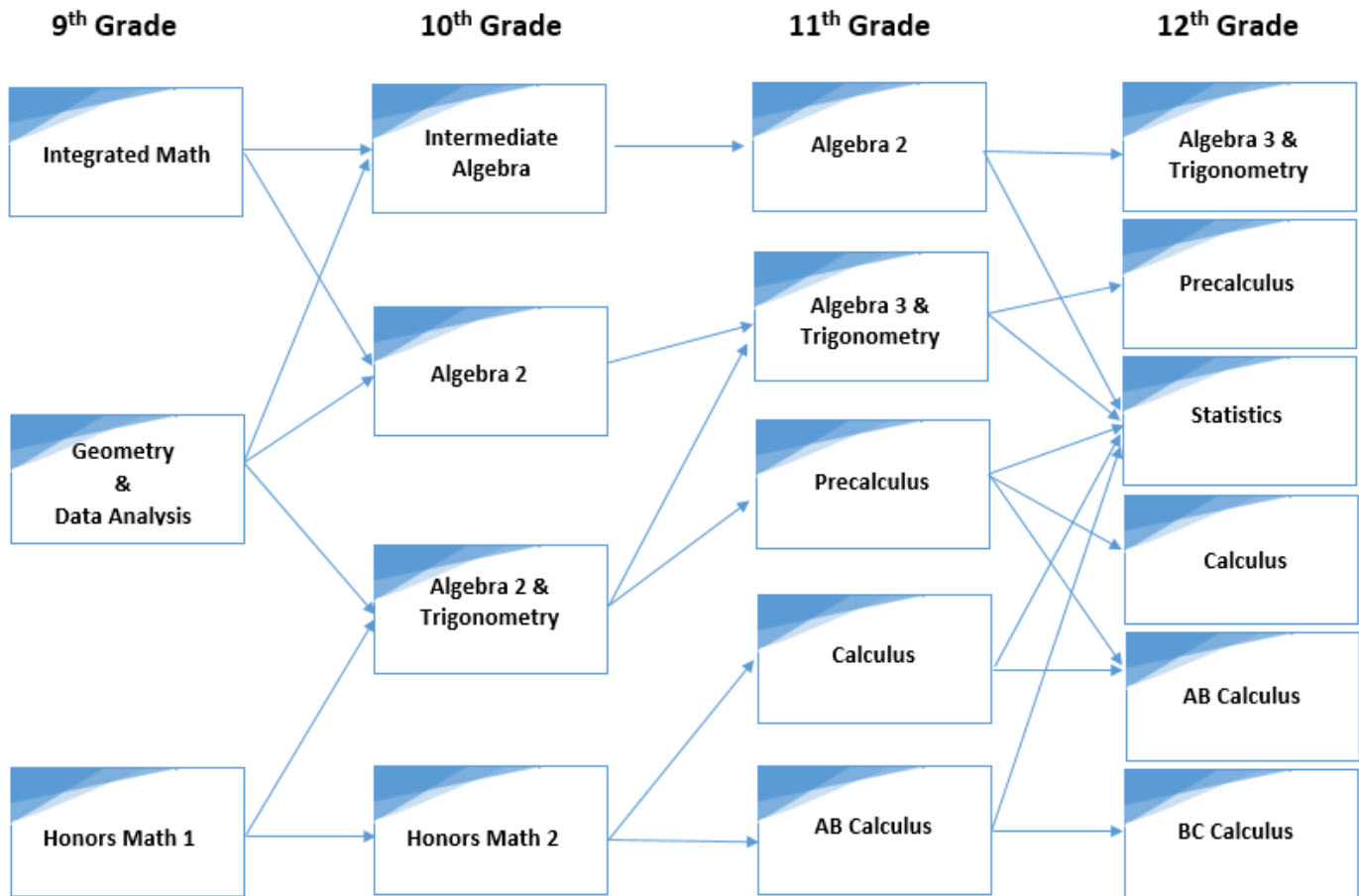
Advanced Placement Calculus AB

This course covers the syllabus outlined by the Advanced Placement Program of the College Board. Topics include limits, derivatives and integrals of functions of a single variable, and selected applications. Students enrolled in this course are required to take the AP Calculus AB examination in the spring. This course requires a high level of mathematical maturity and a strong level of commitment to, and interest in, mathematics. Either a grade of A- or better in Precalculus or B- or better in Honors Math 2 and departmental approval are required for enrollment in this course. (Major course)

Advanced Placement Calculus BC

This yearlong course is the continuation of AP Calculus AB and covers topics that separate the AB and BC curricula. Advanced techniques of evaluating integrals, applications of calculus to polar and parametric systems, differential equations, and power series approximations are covered. Satisfactory performance in AP Calculus AB and departmental approval are required for enrollment in this course. Students enrolled in this course are required to take the AP Calculus BC examination in the spring. (Major course)

Mathematics Course Sequence



Modern Languages

N-12 Modern Language Department mission statement

We strive for our students to become active global citizens. To achieve this goal, we provide opportunities to investigate the world, communicate ideas, recognize diverse perspectives and build meaningful relationships. Our challenging curriculum empowers students to be curious, use their voice, collaborate and develop a joy for language-learning. This language journey begins in our Early Childhood Program.

To become proficient in a modern language, students must learn to speak, to listen and understand, to read and to write in the target language. Teachers, therefore, choose activities to address these four skills. At each level, students learn grammar and vocabulary, study cultural units, read selected literary texts or news articles, watch video clips or films, write in journals or prepare more formal compositions, and converse in groups or speak in front of the class. Since we encourage students to become independent speakers, the higher-level courses place greater demands on self-generated conversation. In each class, the mid-year examination is oral and requires the student to meet individually with the teacher to converse in the target language.*

Wheeler offers course work in Chinese, French, and Spanish. Students normally begin studying any one of these three languages in the sixth or ninth grades. Modern language students must earn a C- or better in level 1 language study to continue to level 2. Those students who earn a D+ or below must either repeat level 1 at Wheeler the following year or satisfactorily complete an approved summer school course and pass the department's qualifying exam prior to continuing to level 2 at Wheeler. Students with accepted documentation of a language waiver can opt to take the language Pass/Fail.

Students who wish to continue beyond the required level 3 of modern language study must be willing to speak the language extensively and to approach their work with a high degree of commitment and motivation. Students must earn a C to continue beyond level 3 or have the consent of their current instructor. Students who do not pursue the study of a modern language beyond the third year are strongly advised to enroll in the introductory sequence of a second modern language..

Chinese

Elementary Courses (Chinese 1, 2, 3)

This sequence of courses is intended to promote basic competence in all aspects of the language.

Chinese 1

This course introduces students to Mandarin, also referred to as Putonghua, Guoyu, or Hanyu, which is the official national language in China. Students will begin with the Pinyin system of romanization to learn the pronunciation of Mandarin and will soon learn to recognize as well as read and write simplified characters. The students will learn to communicate about topics such as getting to know each other, families, feelings, hobbies, the date, time, expressions, location, and daily routines. Chinese culture and history are also woven into the language lessons to lend a sense of vitality to the course. (Major course)

Chinese 2

In this course, students continue to develop the basic level skills in speaking, listening, reading and writing. While working on character writing, students also use the Pinyin system to build pronunciation skills. This course emphasizes grammatical structures, vocabulary building and greater fluency in utilizing communication skills in familiar, everyday situations at school and at home. Topics include shopping, making appointments, and transportation. Students begin to learn different strategies and methods of expressing similar ideas, feelings and concepts, thereby gaining a greater flexibility of expression. Additionally, students will read a short novel about an American high school student who spends a year in Taiwan. (Major course)

Chinese 3

This course introduces more complicated grammatical concepts and vocabulary from daily life situations in greater depth. Students will learn to speak about subjects such as getting and giving directions, renting an apartment, sports and travel. The course also emphasizes the critical transition from thinking in English and translating into Chinese to thinking on your feet in Chinese. To this end, a series of activities will be proposed to help students develop flexibility and fluidity of expression. These include debates, scavenger hunts, presentations, and a movie project. This class is conducted mostly in Chinese. (Major course)

Advanced Courses

Courses are designed for students who wish to pursue the study of the language beyond level 3 required by Wheeler. Ability and willingness to speak Chinese extensively in the classroom are prerequisites. Mandarin is primarily used in the following courses. The other requirements are listed in the introductory section.

Chinese 4

This course leads students to greater proficiency in listening, speaking, reading, writing and mastering more complicated grammatical concepts. Students will learn to discuss topics through the lens of college students, such as traveling, dormitory living arrangement, major Chinese regional cuisines, dietary preferences, shopping for clothes, and choosing academic majors and courses in school. Students will use storytelling, presentations, skits and video projects to explore these topics. In addition, students will read a Chinese novel and explore Chinese modern pop culture. (Major course)

Chinese 5

This course begins with a review of grammar, characters, and idiomatic expressions to prepare students for the transition to post-secondary Chinese programs. The course will emphasize topics relevant to college, such as roommates, campus life, cooking, traveling, and leisure time. Students will be exposed to authentic language materials including documentaries, website articles and films about current events, history, literature and politics. Students will use short essays, debates, and presentations to express their opinions about these issues. Additionally, students will read a novel based on a traditional folktale. (Major course)

French

Elementary Courses (French 1, 2, 3)

This sequence of courses is intended to promote basic competence in all aspects of the language.

French 1

This course is an introduction to basic grammatical structures, elementary vocabulary, and the sounds of French, with extensive practice in speaking. By the end of French 1, students will be able to have conversations in the present and past tenses about topics such as food, families, travel, sports and weather. They will also be familiar with the geography of France and Europe. (Major course)

French 2

This course is a continuation of French 1. It includes vocabulary building with increased emphasis on creative use of the language, both spoken and written. Themes for vocabulary include holidays, daily life, travel, sports and leisure and health and nutrition. By the end of French 2, students will be able to use several tenses, including the present, the passé composé and the imperfect. Students will also study the geography and culture of the Francophone world, concentrating mainly on France, Africa and Canada. This class is mostly conducted in French. (Major course)

French 2 Honors

French 2 honors covers the grammar and vocabulary review of French 2 at an accelerated pace. This allows students to read more short stories, poems and current events and study more grammatical tenses, including the pluperfect, the future and the past conditional. This class is mostly conducted in French. Requires departmental recommendation. (Major course)

French 3

In this course, students continue to develop their language skills by reviewing basic grammar, learning more complicated grammatical concepts and expanding their vocabulary. They study vocabulary topics such as education, employment, technology, the environment and contemporary world issues. Students read and write about the history, the culture and everyday life in Francophone communities in Europe, Africa and Canada. This course is mostly conducted in French. (Major course)

Advanced Courses

Courses are designed for students who wish to pursue the study of the language beyond level 3 required by Wheeler. Ability and willingness to speak French extensively in the classroom are prerequisites. French is primarily spoken in all the following courses. The other requirements are listed in the introductory section. Depending on enrollment, some courses may be taught in a combined setting.

French 3 Honors

In this course the emphasis is on authentic language and practical vocabulary for communicating in real life situations. Using this vocabulary and more advanced grammar, students complete contextualized activities, communicative group-work, and written compositions. Literary excerpts and short films from the francophone world are studied to enhance students' understanding of culture and current events, which are intrinsically woven into the course work. There is a strong on-line component to this class. Students have access to all audio and video components on-line. They complete on-line activities on a daily basis and receive instant feedback on their performance. In addition, they use on-line voice recording for which they receive personalized feedback from their instructor. The course is conducted in French. (Major course)

French 4

A thematic study of vocabulary is combined with an in-depth review of grammatical structures to allow students to further develop their skills in speaking, writing, reading and listening. Literary excerpts and short films from the francophone world are studied to enhance students' understanding of culture and current events, which are intrinsically woven into the course work. There is a strong on-line component to this class. Students have access to all audio and video components on-line. They complete on-line activities on a daily basis and receive instant feedback on their performance. In addition, they use on-line voice recording for which they receive personalized feedback from their instructor. The course is conducted in French. (Major course)

French 4 Honors/ French 5

In this course students develop greater comprehension by reading works by authors such as Maupassant, Saint-Exupery, Zola and others. They also explore short films and newspaper and magazine articles. Students are exposed to more extensive thematic vocabulary in various ways which enable them to gain greater confidence with spoken French. Grammar is reviewed and expanded to include important linguistic subtleties. Students learn how to write exposés and compositions on a variety of topics in French. (Major course)

AP French Language & Culture

The AP French Language and Culture course is designed as the culmination of students' studies in Upper School. Students enrolled in this course should already have a good command of French grammar and considerable competence in listening, speaking, reading and writing. In AP French, students refine those skills while learning new vocabulary to communicate in French on a variety of topics. The course aims at enriching the students' cultural knowledge and experience with the Francophone world through a comparison with their own cultural experience of the six course themes: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. These themes, explored from a variety of authentic written and audio resources, serve as springboards for the practice of interpersonal, interpretive and presentational communication within relevant contexts. The course is devised to prepare students for the AP French Language and Culture Examination. AP French Language and Culture is conducted exclusively in French. (Major course)

Spanish

Elementary Courses (Spanish 1, 2, 3)

This sequence of courses is intended to promote basic competence in all aspects of the language.

Spanish 1

This course enables students to converse in basic Spanish in the present tense by introducing topics such as getting to know others, daily activities at school and home, feelings, the weather, likes and dislikes, foods, and vacation and travel. Students learn about daily life and cultural activities in the Hispanic world, watch videos and listen to tapes featuring native speakers. Spanish 1 emphasizes the essentials of Spanish grammar by introducing practical vocabulary, by stressing accurate pronunciation, and by including reading, writing and conversation drills. (Major course)

Spanish 2

This course enables students to acquire a solid foundation in basic grammar and vocabulary. Students will be required to speak about their own lives and activities in the present and past tenses. The vocabulary includes topics such as daily routines, personal hygiene, holidays and cultural celebrations, food, technology, shopping, health, and household chores. Students are expected to share their opinions about their own lives and about individuals in other cultures. This class is conducted mostly in Spanish. (Major course)

Spanish 2 Honors

Spanish 2 Honors incorporates a weekly focus on the four skills of second language acquisition: listening, speaking, reading and writing. Students continue to develop their language by reviewing intermediate grammar concepts and expanding their vocabulary with a strong emphasis on oral expression. This course presents grammar and vocabulary of Spanish 2 at an accelerated pace. In addition, students learn the perfect tenses, additional uses of the present subjunctive and the imperfect subjunctive. This requires a willingness to engage readily and to take risks speaking often in Spanish. Students read and discuss a short novel during the second semester and analyze short Latinx films. (Major Course)

Spanish as a Heritage Language

Spanish as a Heritage Language is an honor's course that explores and reinforces students' particular strengths as well as areas for growth in a cooperative learning environment. Students' individual cultural identity along with literature, music, film, media, and personal research will enhance the aspects studied. This course is designed to improve student's communication skills in Spanish (listening comprehension, speaking, reading, and writing). Students will be given ample opportunity to build and demonstrate proficiency in the three modes of communication as offered by the American Council on the Teaching of Foreign Languages (ACTFL): the interpretive, the interpersonal, and the presentational. This course is structured so that a majority of class time is dedicated to collaborative activities. Upon successful completion of this course students' will be recommended for either Spanish 3 Honors, 4 Honors, or AP. (Major course)

Spanish 3

This course prepares students to express their opinions and carry on conversations in Spanish about their community and the world around them. This culminates in a mid-year oral exam which requires that they communicate about issues like the environment, life in the city, social justice, or health and wellbeing. Reading and oral skills are developed by studying selected cultural materials about Central America, the Caribbean, South America and Spain. One unit includes a film in Spanish, either addressing issues that Mexican immigrants may face in our country or reflecting on the privatization of the water supply in Bolivia, which has strong connections to the Spanish conquest and exploitation of the New World. New grammar includes the future and conditional tenses, the present perfect and the pluperfect, and the uses of the present subjunctive. The class is conducted mostly in Spanish.

Advanced Courses

These courses are designed for students who wish to pursue the study of the language beyond level 3 required by Wheeler. Ability and willingness to speak Spanish extensively in the classroom are prerequisites. Spanish is primarily spoken in all the following courses. The other requirements are listed in the introductory comments to this section.

Spanish 3 Honors

This course incorporates the four skills of second language acquisition: listening, speaking, reading and writing. Students continue to develop their language by reviewing complex grammar concepts and expanding their vocabulary with a strong emphasis on oral expression and comprehensive input. Culture from various regions in the Spanish speaking world is presented through music, readings—including a novel—a year long television program, films and class speakers. Students participate in virtual exchanges with global and local partners to cultivate relationships, gain global competence, increase empathy and investigate the world, all while using the language. The course is conducted in Spanish. (Major course)

Spanish 4

A thematic review of vocabulary is combined with the study of grammar to facilitate self-expression. In this course we expose the students to authentic materials that encourage students to read and listen for total comprehension. In addition to grammar and vocabulary units, students read poetry, watch short film series, connect with students in Spanish speaking countries, analyze a year long authentic television series, and explore art and other cultural topics. Oral participation is essential. (Major course)

Spanish 4 Honors

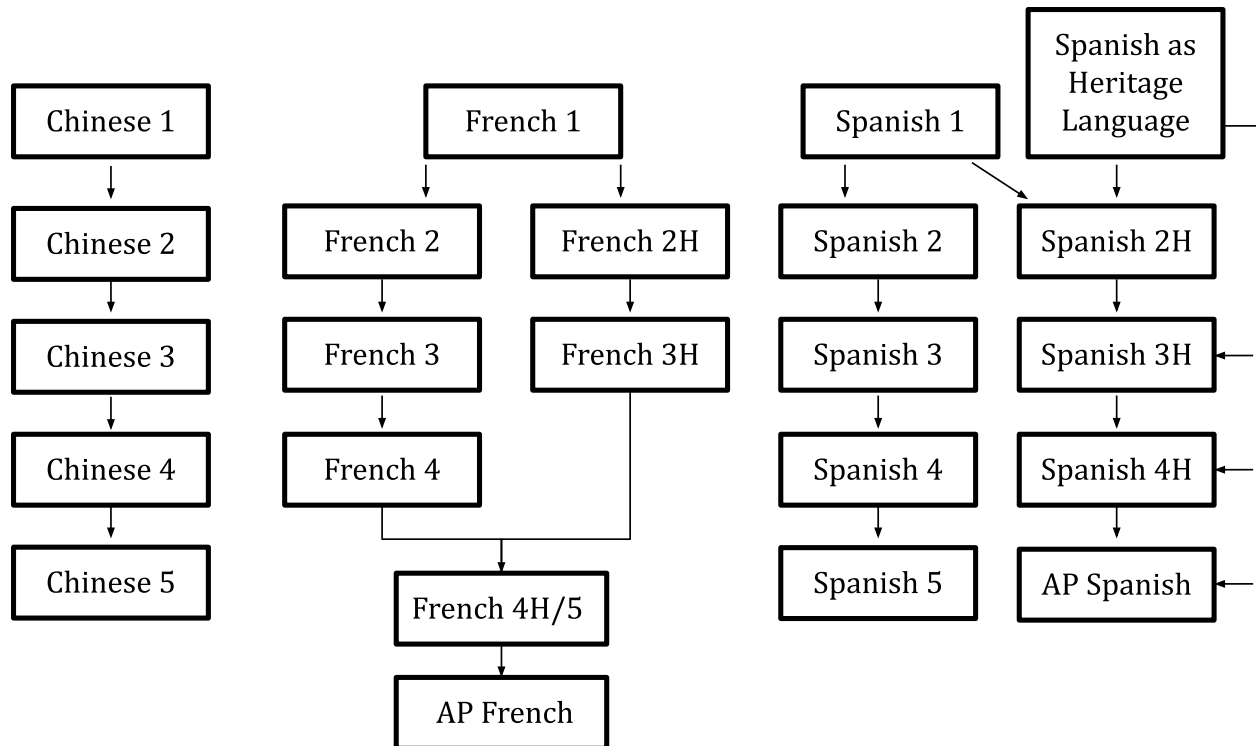
This course takes advantage of the students' strong foundation in grammar and expression to explore the literature, contemporary issues, and art of Hispanic cultures. This class is conducted entirely in Spanish and students learn the nuances of spoken and written language while discussing and writing about global themes such as technology, education, global challenges, and contemporary life. This course is focused heavily on oral participation in both interpretive and presentational modes. (Major course)

Spanish 5

This course incorporates the four skills of second language acquisition: listening, speaking, reading and writing with a focus on comprehensive input, community engagement and relationship building. Students continue to develop their language skills while venturing outside of the classroom and building relationships with Spanish speaking members of our local Rhode Island community, including politicians, social justice activists, artists, restaurateurs, business owners, and students from other schools. Students in Spanish 5 also participate in monthly virtual exchanges with global partners to build relationships, gain global competence, increase empathy and investigate the world, all while using the language. Exposure to history and culture from various regions in the Spanish-speaking world are also presented through film, music, current events, and a yearlong television program. The course is conducted in Spanish. (Major course)

AP Spanish Language

This course is entirely focused on and organized around preparation for the AP Language exam in May. The first semester curriculum draws on literary works and contemporary and cultural topics as a basis for developing more confidence with spoken and written Spanish. Readings are selected from a variety of Latin American and Spanish prose, poetry and narrative. A general review of grammar principles will accompany literary study. Films, newspapers, and websites provide additional supplement to the core curriculum. The second semester prepares students even more intensively for the AP Language Examination by introducing material that closely duplicates the test experience. In addition to in-class work, students use AP Classroom to practice advanced communication skills with a focus on synthesis in writing and speaking. Students are required to take the AP Language examination. Prerequisite: Final grade of A- or above in Spanish 4 Honors or permission from instructor. (Major Course)



Performing Arts

Courses in the Performing Arts curriculum involve students in a process, which includes creativity, sharing, performance, and critical analysis. Courses designated Ensemble develop fundamental skills while exploring history, form and theory. Courses designated as Performance emphasize repertoire, technique, and hands-on applications. Performance courses require an audition to determine appropriate placement. Specific audition criteria are available from individual instructors.

Every student is required to successfully complete one full year of Performing Arts. This may be fulfilled with either major or minor elective courses. The department strongly recommends that every student complete at least one semester by the end of the sophomore year. Students new to Wheeler may enroll in any non-performance class or contact the department for entrance into a performance level course. Eleventh graders new to Wheeler need take only one semester of Performing Arts.

Theatre Company: *The Axle*

This year-long theatre course will bring together an ensemble of students to create and perform theatre for the community. Developing the skills students have built in prior theatre courses and/or productions, the work will focus on performing, writing, directing, and design techniques, culminating in multiple performances throughout the school year. Open to juniors and seniors only; Application process required. (Full year major course)

Acting

Acting is about living truthfully under imaginary circumstances. This course begins with basic exercises to develop the actors' tools, beginning with focus, energy, and imagination. As we dive more deeply into the work of the performer, we learn the importance of goals, action, and tactics. Students examine classic and modern plays and scenes from the point of view of the actor, bringing the words on the page to life in exciting and dynamic ways, and experimenting with a variety of performance styles. Continued skill development in voice, movement, and improvisation builds a strong foundation of tools for the actor. No prior experience necessary! (Fall semester minor elective)

Theatre Ensemble

The best way to study and appreciate an art is by doing it, and so the main focus of this course is on making theatre as an active and collaborative process. Creating dynamic theatre requires an understanding of story, character, composition, and the power of both verbal and non-verbal language. In this course, students study these basic elements through the playing of theatre games, basic acting exercises, improvisation, ensemble work, and collaboration on in-class performances, which help students discover their own creative voices. Students critique their own and others' performances, and they learn how to evaluate and understand what "works" on stage. No prior experience necessary! (Spring semester minor elective)

Improvisation

This unpredictable, incredibly fun and challenging course asks students to focus on listening, responding honestly, and making strong and truthful actor choices. Students develop a foundation of acting techniques and work to solve problems collaboratively during spontaneous performances. Improvisation is also applied to the creation and rehearsal of scripted material. Activities include theatre games, storytelling, character development, and scene building. The ultimate goal of the work is to hone students' ability to be truly alive and playful, paying attention to the moment they are in, so the value of this work is clearly wide-ranging. No prior experience necessary! (One semester minor elective, offered Fall and Spring semesters)

Introduction to Technical Theatre

This course provides an opportunity for students to explore the many aspects of stage-craft for theater. The class will address stage structures, lighting, carpentry, and scenic painting through hands-on projects and workshops. The main focus of the class will be to construct, light and run the major theater productions successfully during a semester. The course requires a number of lab hours on designated weekends during the semester. Students may take this course only once. (Minor elective, offered Fall and Spring semesters)

Advanced Technical Theatre

This course is designed as a continuation of the technical theater sequence. The class will focus on in depth development of the skills in stagecraft which were introduced in the introduction class. Students will be expected to work independently on long term projects

based around the spring theater productions. Opportunities will be offered for students to focus on a particular area of interest and more deeply explore that area. This course requires a number of lab hours on designated weekends throughout the semester.

Prerequisite: Introduction to Technical Theater or permission from the instructor. (Minor elective, offered Spring semester of odd years, not offered 2024)

Design for the Theater

This course will provide an opportunity for students to pursue and understand skills in the many design areas involved in theatrical productions. This class will explore scenic, lighting and costume design through workshops and projects. It will cover all stages of the design process from concept development to final design presentations. Students will be given a chance to develop skills in rendering, drafting, and model making as well as gain a firm understanding of the basic principles and techniques for theatrical design. (Fall semester minor elective)

Sound Exploration

This course presents an opportunity for experienced and non-experienced musicians alike to explore music as a language. By “speaking” (playing) in an ensemble-based setting, students gain the courage and confidence to ignite their inner musician. A marimba band is formed each semester and students develop ensemble skills while discovering why being in a band is cool. Principles and foundations of sound and music are discovered through mediums such as videos, sound clips, student performances and other interactive assignments. (One semester minor elective, offered both Fall and Spring semesters)

Vocal Study

This class is open to anyone who has a love of music and a desire to unlock the power of their singing voice. We will explore the anatomy of the human voice as we use techniques that will develop vocal range, harness breath control and build confidence. We will study a wide range of repertoire, allowing each student to discover their own voice and musical style. Techniques will be practically applied throughout the course and culminate with a performance at the end of the semester. Listening to and analyzing recordings of current and past artists will also be a large part of class, as we work toward creating our own performances and solo recordings. Due to the nature of vocal study and your ever-changing voice, this course can be taken for one semester only or throughout High School. (One semester minor elective, offered both Fall and Spring semesters)

Performance Chorale: 18 Wheelers

The 18 Wheelers is an ensemble for advanced singers and performers. While the repertoire focuses primarily on contemporary a cappella, we will explore a wide variety of musical genres as we cultivate our musical and technical skills. This is a mixed voice ensemble (SSAATBB) and auditions are competitive. Singers will be expected to develop specific skills including sight-singing, intonation, diction, blend, vocal techniques, and an understanding of music theory. Experienced music readers are encouraged to write choral arrangements. Members are required to participate in the ensemble’s efforts and meet all performance commitments on and off campus. Prerequisite: Audition. (Full year major course)

Handbell Ensemble

Learning to ring handbells is fun, accessible, and an excellent way to develop musical skills. Using contemporary hits and classical favorites, students will explore the wide range of sounds that can be produced using handbells and handchimes. The course will cover basic music theory including how to read and interpret musical notation. The handbell ensemble is open to all students regardless of previous musical experience. Note: this ensemble will perform alongside the Performance class at our Winter and Spring concerts. (One semester minor elective, offered both Fall and Spring semesters)

Handbell Performance

Emphasis is on performance and ringers are expected to demonstrate proficiency in all techniques and aspects of musicianship. In addition to on-campus concerts, the ringers are required to meet all performance requirements, including participation in Spring Tour, local and regional workshops, and festivals sponsored by the American Guild of English Handbell Ringers. The group will perform a variety of the most challenging repertoire for the instrument, and individuals are encouraged to compose or arrange for the ensemble. Prerequisite: Ensemble Handbells and/or Audition. (Full year major course)

Jazz Ensemble

This course emphasizes the development of individual facility on a chosen instrument and provides the ensemble structure in which the student must play and improvise daily. Theory includes scales, modes and chord progressions. Repertoire includes jazz, blues, rock, and other improvisational music. Prerequisite: permission of the instructor. (Full year minor course)

Jazz Performance

This course emphasizes mastery of the student's chosen instrument via performance, improvisation, composition and arranging. Students will be expected to play all scales, modes and rhythmic figures in varying styles. Repertoire includes jazz, blues, folk, rock, and other improvisational music forms. Each student will have the opportunity to compose and arrange for his/her instrument. Students must participate in regular ensemble rehearsals, individual tutorial sessions when needed, and all performances. Prerequisite: Jazz Ensemble and permission from the instructor. (Full year major course)

Dance Ensemble

Dancers of all skill levels are encouraged to take this course and every student will be given opportunities for personal growth. This is a semester-long class where students will explore Ballet and Contemporary dance techniques through a set of warm-ups followed by memorization of teacher lead Choreography. This class will focus on dance technique fundamentals as well as Dance History and the development of dance vocabulary and body placement. The Dance Ensemble class will culminate at the end of the semester with a piece in the Dance Company showcase. No Prerequisite. This class can be taken more than once. (One semester minor elective, offered both Fall and Spring semesters)

Dance Performance

This class will explore Ballet, Modern, and Contemporary Dance through class study and performance opportunities at an intermediate and advanced level. Coursework will be heavily focused on the development of technical skills and artistry, memorization of teacher-led choreography, and the study of Ballet variations. There will be two main stage performances in which all students are required to participate. Dancers with prior dance experience are encouraged to take this course to continue to grow as a dancer and artist. This class can be taken more than once. Prerequisite: Prior dance experience and audition. (Full year major course)

Independent Study in Performing Arts

This program provides an opportunity for motivated students to pursue special topics in the Performing Arts after their requirement has been fulfilled. Admission to this program is by departmental permission. The project must include research, written documentation and conclude with a major presentation. Candidates should submit a detailed project proposal including the subject and scope of the project, specific resources, and deadlines for various interim presentations. Students are responsible for securing the support of a faculty advisor from the Performing Arts Department for any independent study. (Minor elective, semester or full year)

Science

The Upper School science curriculum is based on the premise that all Wheeler graduates should be scientifically literate citizens, and that all of our students should be exposed to the methods and concepts of the primary physical and biological sciences. Each of our science courses emphasizes critical observation, logical reasoning, quantitative experimentation, problem-solving skills, and scientific literacy.

The minimum science requirement for graduation from Wheeler is three credits (three years of study), including Environmental Science, Chemistry, and a full-year course in either Biology or Physics. All students are encouraged to take at least one course in each of the scientific disciplines. After completing courses in Environmental Science (ninth grade) and Chemistry (tenth grade), students may take courses in Biology and Physics in either order. This sequence of courses is considered to be our core curriculum. Students new to Wheeler after the ninth grade are not required to take Environmental Science.

Environmental Science

In Environmental Science, ninth graders consider environmental issues within the sciences in general, and within ecology specifically. Course material focuses on becoming responsible citizens in a global ecosystem, with a goal of developing sustainable solutions to issues which impact our planet. After setting an ecological foundation, students explore human-constructed systems which affect populations, resources and pollutants. Projects include individual and group research presentations, assays of soil, water and other resources, and a final exhibition through which students address and attempt to solve an environmental problem currently affecting a National Park. Full Year. (Major Course)

Advanced Placement Environmental Science

Ninth grade students will follow an AP environmental science (APES) curriculum by reading an entire college level text, taking weekly reading quizzes, writing thorough and coherent essays, as well as completing recommended laboratories and field trips in preparation for the AP exam in May. Students study the sustainability of both ecosystems and human constructed systems, throughout the year. Prerequisites: APES candidates should have excellent command of Algebra 1, receive recommendations from all of their 8th grade teachers, demonstrate strong reading and writing skills, have a strong independent work ethic and complete a placement test. Course completion satisfies the Environmental Science requirement for graduation. All students are required to take the AP examination in May. Full year. (Major course)

Fundamental Chemistry

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, the periodic table, chemical reactions, chemical bonding, states of matter, solutions, acids and bases, and organic chemistry. It will emphasize the “language of chemistry”, and students will develop an ability to visualize processes on an atomic and molecular level. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts. Laboratory experiments and inquiry activities augment and reinforce the basic principles discussed as well as provide practical examples. The problem sessions will further the students’ skills in solving algebraic problems and students’ understanding of applied mathematics in the study of Chemistry. Corequisite: Intermediate Algebra or Algebra 2. Full Year. (Major course)

Chemistry

Chemistry is the study of matter and the interactions it undergoes. Strong emphasis is placed on the development of the fundamental ideas and concepts of chemistry, and their application to everyday life, technology and related fields in science. Inquiry based learning and laboratory experimentation are a major component of this course. Topics include measurement, atomic and molecular structure, the periodic table, chemical reactions, chemical bonding, states of matter, solutions, acids and bases, and organic chemistry. Methodologies include hands-on inquiry activities, labs, and research-based projects. Corequisite: Algebra 2 or Algebra 2 Trig. Full Year. (Major course)

Honors Chemistry

This course is designed for students who have a strong interest in science and mathematics. Topics studied will include atomic structure, electron configuration of atoms, the periodic table, chemical bonding, equilibrium in chemical and physical systems, energy changes in chemical reactions, oxidation and reduction, kinetic molecular theory as applied to gases, liquids, and solids, nuclear reactions, and an introduction to organic chemistry. Emphasized in the course are the following: 1) understanding and application of

fundamental concepts, 2) logical, analytical thinking skills, 3) the experimental and historical development of the ideas of chemistry, and 4) the relationship of chemistry to other scientific fields, and to advances in industry and technology. Corequisite: Algebra 2 Trig or Honors Math 2, and recommendation by the science department. Full year. (Major course)

Advanced Placement Chemistry

This course is intended for juniors and seniors who wish to further their understanding of chemistry beyond the first year. It is designed to be the equivalent of a typical general chemistry course offered by most colleges; students will prepare for and take the AP exam in chemistry at the conclusion of the course in May. The curriculum includes detailed studies of the following broad topics: structure of matter, states of matter, chemical reactions, chemical equilibrium, thermodynamics, and descriptive chemistry. Laboratory work is emphasized throughout the course in all topics. Prerequisites: Honors Chemistry or Chemistry, concurrent enrollment in Precalculus or beyond, and recommendation by the science department. Full year. (Major course)

Fundamental Biology

This course introduces students to the major branches of biology. These include molecular and cell biology, energy, genetics, evolution, anatomy and physiology. Throughout the year, students conduct hands-on laboratory exercises and research projects that are tightly coordinated with lectures and other classroom activities. This course emphasizes biological principles in a conceptual way and aims to help students visualize biological processes. Time is dedicated to learning important concepts through multiple learning approaches, flexible pacing, use of hands-on models, structured notes templates, and a variety of assessment approaches. Prerequisite: Fundamental Chemistry or Chemistry. Full Year. (Major course)

Biology

This course introduces students to the major branches of biology. These include molecular and cell biology, energy, genetics, evolution, anatomy and physiology. Students will conduct coordinated laboratory exercises and activities throughout the year that will serve to answer questions about living things. Prerequisite: Fundamental Chemistry, Chemistry, or Honors Chemistry. Full year. (Major course)

Advanced Placement Biology

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. A strong emphasis is placed on laboratory experimentation and data analysis. Students are required to take the AP examination. Prerequisites: completion of one year of Chemistry and recommendation by the science department. Full year. (Major course - open to seniors only)

Molecular Biology

Molecular Biology is a rigorous course specifically for students interested in pursuing research in the biological sciences. This full year science department course will introduce students to the structural and functional roles of nucleic acids and proteins. This laboratory-intensive course is designed to expose students to basic laboratory research, current topics, and techniques in molecular biology. Students will carry out a wide array of classical and advanced molecular biology techniques, including the isolation, analysis and manipulation of DNA and proteins. Prerequisite: Fundamental Chemistry, Chemistry, or Honors Chemistry. Prerequisite or corequisite: Biology or AP Biology, in addition to written application and approval by the science department. Rising juniors interested in taking Molecular Biology may be granted permission by the department to take the AP Biology corequisite in their senior year. Full year. (Major course)

Fundamental Physics

In this course students will learn the fundamental laws of classical physics. Students will explore the history of physics and learn how we discover and test laws of nature. Course topics include metric units, forces, universal gravitation, energy, waves, and electricity. Students will complete lab investigations and learn about the experimental process, analysis, communication, and the application of physics to daily life. They will demonstrate the connection between science and mathematical concepts. Prerequisite: Fundamental Chemistry or Chemistry. Prerequisite: Algebra 2. Full Year. (Major course)

Physics

In this course we will study topics of classical and modern physics, including motion, energy, electricity and magnetism, sound, light, optics, atomic physics, nuclear physics, and particle physics. The goal of the course is to gain understanding of the fundamental ways that the universe works and how to use physics to your advantage in life. Students will learn by analyzing practical applications in daily life and imagining future applications in technology. Students will perform several laboratory experiments to predict, discover, and/or verify concepts and mathematical laws. Many laws of physics will be examined through algebra, and minimal trigonometry will be used. Prerequisites: Chemistry or Honors Chemistry, Algebra 2 Trig or Honors Math 2, and permission of the science department. Full year. (Major course)

Honors Physics -MI

This math-intensive (MI) physics course provides students with a fast paced and highly quantitative survey of topics of classical and modern physics, including motion, energy, electricity and magnetism, sound, light, optics, atomic physics, nuclear physics, and particle physics. The goal of the course is to gain understanding of the fundamental ways that the universe works and how to use physics to your advantage in life. Students will learn by analyzing practical applications in daily life and imagining future applications in technology. Students will perform several laboratory experiments to predict, discover, and/or verify concepts and mathematical laws. Mastery of algebra and trigonometry skills is necessary for this course. Prerequisites: Honors Chemistry, Honors Math 2, and permission of the science department. Full year. (Major course)

Advanced Mechanics

This is a second-year physics course for seniors who wish to expand their problem solving skills in calculus-based mechanics and its application to modern physics. It is intended to cover the first semester of college-level physics plus additional skills expected of students entering a typical physical science undergraduate program such as physics, engineering, chemistry, or pre-med. Students will improve their science writing, reading, and discussion skills through lab reports, research, and projects. Students may take the AP Physics C: Mechanics exam in May. Prerequisite: a full year of Physics or Honors Physics and recommendation by the science department. Corequisite: Calculus. Full year. (Major course)

Science Electives

Science electives are one semester-long major courses. For 2023–2024, the courses described below will be offered.

Anatomy and Physiology

This integrated course is designed for juniors and seniors seeking careers in medicine, physical therapy, occupational therapy, sports training and other similar health related careers. Students analyze human movement based on anatomical, physiological and mechanical principles in order to better understand athletic performance. Lab activities will include a thorough study of the muscular and skeletal systems and their integration with the nervous system to control body movement. Basic physics and math principles will also be reinforced and students will work in teams to apply these principles of human motion to analyze a sport or exercise skill of their choice as a final project. Open to Juniors and Seniors. (Major course)

Astronomy

In this course students will be introduced to the field of astronomy. Students will explore the history of astronomy and various astronomers who made important contributions to the field. We will review prior knowledge of the solar system then expand our discussion of terrestrial planets versus gas giants, Kepler's Laws, and Newton's Universal Law of Gravitation. We will journey beyond the solar system to explore the greater cosmos, focusing on the formation of stars and galaxies, ending with theories that attempt to explain the origins, evolution, and future of the universe. (Major course)

Introduction to Engineering

In this course students will be introduced to the field of engineering. We will discuss the process of engineering and its impact on society and our daily lives. Students will explore various branches of engineering: mechanical, electrical, civil, chemical, biomedical, nuclear, and industrial. Students will learn about the design process, research, analysis, team work, communication, and global and human impacts of engineering as well as demonstrate the connection between science and mathematical concepts. (Major course)

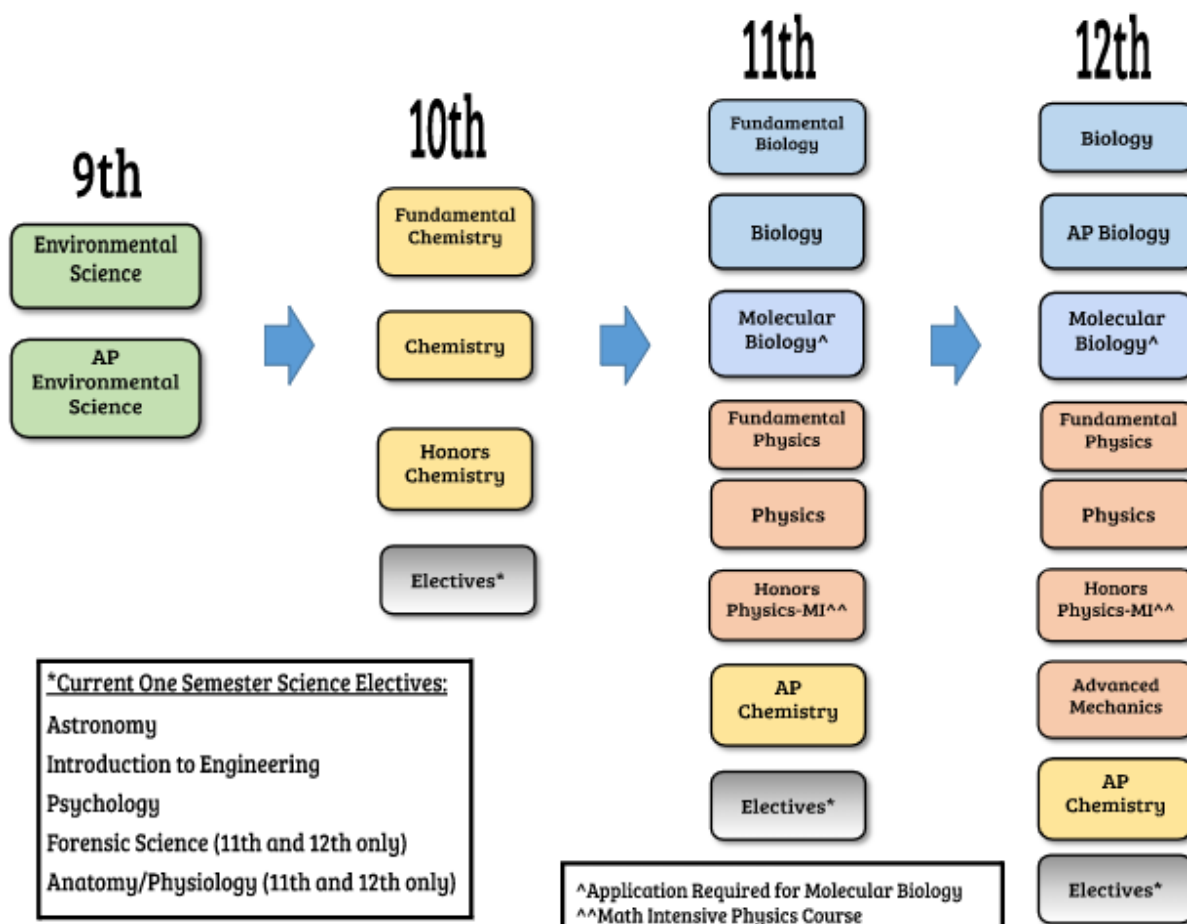
Forensic Science

This integrated course will focus on critical thinking and lab skills as well as problem-solving techniques to learn more about the fascinating field of forensics. We will learn how scientists gather crucial information at the scene of the crime and then carefully analyze evidence such as fingerprints, fibers, and blood. We will investigate how skulls and bones can provide clues to help medical artists in their attempt to reconstruct faces. The forensic science field includes a wide range of specialized jobs and we will familiarize ourselves with the many opportunities that exist throughout the course. Our final project will be a complicated crime scene in which students will apply the skills they have learned during the semester. We will have two guest speakers and take at least one field trip during the semester. Open to Juniors and Seniors. (Major course)

Psychology

In this course, students will learn about the methodology underlying psychological research. We will pay particular attention to the aftermath of the replication crisis and the solutions proposed. Topics explored are as follows: “How are theories generated?” “Why are we attracted to some people and repulsed by others?” “How does psychology affect our everyday lives?” “How do crowds make collective decisions?” “Why do people believe in supernatural entities, such as gods and spirits?” “How does memory work?” Students will be required to complete collaborative multimedia projects and study experimental designs that are on the forefront of psychological research. (Major course)

Wheeler Upper School Science Sequence



Athletics & Physical Education Program

Physical education and athletics are an integral part of the Upper School Program. Participation in either area encourages physical fitness, development of specific skills, cooperation and socialization with peers, and fun through physical activity. Athletics specifically develops values such as commitment, self-discipline, and teamwork. Participation in athletics is highly encouraged and fulfills the physical education requirement for a specific term. Physical education instruction and athletics participation are divided into three seasonal terms: Fall, Winter, and Spring. Requirements for the Athletic and Physical Education Program in the Upper School are as follows:

1. All students must participate in a minimum of 100 minutes of physical education activities per week. This is a Rhode Island state requirement.
 - a. Students must sign up for their elective activities at the beginning of each term. Students will be enrolled in upper school PE classes which will meet during Enrichment twice per week until they make arrangements with the PE Dept.
 - b. Most physical education activities will meet after school one or two times per week depending on the activity. Weight Room participants may work out after school from 3:30 pm - 5:30 pm at the farm. If necessary transportation is provided.
 - c. Playing on an interscholastic team fulfills the physical education requirement for that season.
 - d. Student performance in the play and musical will satisfy the Physical Education requirement for the trimester during which they are offered
 - e. As usual we will offer physical education classes after school, as well as honoring independent contracts for students doing outside activities. Students are required to participate in physical education for all 3 terms.
2. Students will receive a grade of “credit” or “no credit” in physical education and athletics on the basis of attendance, knowledge, skill performance, improvement and effort.
3. Independent contracts are allowed for students who participate in an outside of school activity that meets the weekly time requirement and is supervised by either a coach, supervisor or instructor.
4. The only students exempt from the physical education requirement are those with physical injury/disabilities and those who provide a physician’s letter of explanation to the School Nurse.
5. Activity possibilities are listed below. Activities will be revised according to student interest and facility availability.

Examples of Physical Education Offerings

<i>Athletic Teams</i>	<i>P.E. Classes</i>
Boys’ Teams Fall: Cross Country, Soccer Winter: Basketball, Squash, Indoor Track, Swimming Spring: Baseball, Lacrosse, Tennis, Golf (Co-ed), Track & Field	After School Offerings - Co-Educational Yoga, Rock Climbing*, Archery, Ultimate Frisbee, Weight Room
Girls’ Teams Fall: Cross Country, Field Hockey, Soccer, Volleyball Winter: Basketball, Squash, Indoor Track, Swimming Spring: Lacrosse, Softball, Golf (Co-ed), Tennis, Track & Field	Enrichment Offerings Yoga, Physical Education Classes, Dance, Volleyball
Athletic Co-operative Teams[^] Boys Ice Hockey w/ Providence Country Day & St. Raphael Academy* Football w/ Providence Country Day & Juanita Sanchez*	[^] Please note that these programs are only open to returning Juniors and Seniors who have competed in previous seasons.

*participation fee

Aerie Program Courses

Supplemental Course Offerings

The Aerie Program provides courses individualized to a student's particular passion, beyond what is offered within Wheeler's curriculum. Seminars and tutorials with adjunct instructors can be arranged in consultation with advisors, department heads, and Aerie staff. In order for Aerie Supplemental Courses to appear on the transcript (and thus receive course credit), they must at least meet the school's minor course requirement of meeting five days in each eight day school cycle. Students may apply through Mr. Harris, the Director of the Aerie Program.

2022-2023 for credit courses included:

- German, Linguistics, Korean, Hmong Culture and Linguistics, Ethiopian
- Neuroscience, Advanced Writing Seminars, Reproductive Justice
- Abstract Algebra, Data Structures and Algorithms, Artificial Intelligence, Advanced Data Analysis

2022-2023 not for credit tutorials included:

- German, Modern Hebrew, Italian, Modern Greek, Portuguese, Czech, and Turkish
- Astrophotography, Precalculus, Extended Reality Project, Marine Biology
- Jazz Drumming, Prussian History, Roman Military History, Infectious Disease, Marine Biology

Enrichment Electives Program

The Upper School schedule provides a daily Enrichment block from 10:35 a.m. - 11:25 a.m. during which students may enroll in semester-long weekly offerings which cater to individual interests beyond the classroom. Most students take at least one Enrichment course, and many take more; students who do not enroll in Enrichments go to study hall during this period. This block is also when some academic teams meet: Math Team, Model UN, Mock Trial, Envirothon, Debate, and Robotics.

2022-2023 Enrichment offerings included:

- Japanese, Russian
- Game Design, Human Anatomy, Bioethics
- Film Studies, Improvisational Comedy, Intro to Law, Music Production, Tap Dance

Broadcast Program

Video Broadcasting

Video Broadcasting provides an introduction to the foundational principles of video production from inception to completion via creative writing, storyboarding, camera shooting, and editing footage with state of the art software. Projects come in the form of documentaries, music videos, creative works, or on-campus recordings that the student produces for use on our multimedia site: www.wheelerschoolbroadcasting.org. (Major one semester course, Performing Arts Credit)

In addition to the Video Broadcasting major, there are a number of ways to get involved with the Broadcast Program. In recent years, these have included Advanced Video Production, Sound Production, Radio Broadcasting, and Podcasting.

Supplemental Language Offerings

Students who wish to explore foreign languages in addition to their Modern Language requirements do so through the Aerie Program. In the last few years Wheeler students have been enrolled in classes or tutorials in different levels of Japanese, American Sign Language, Arabic, Italian, Russian, and German. Other students have studied Ancient Greek, Modern Hebrew, Korean, Urdu, Turkish, Persian, Swedish, Dutch, and Haitian Creole. Some students do advanced work in preparation for AP exams not offered within the regular curriculum or continue their language studies past the AP level. In the year 2022-2023 nineteen different languages were taken by Wheeler students.

Latin Program

Upper School students who wish to pursue language studies beyond the scope and requirements of the Modern Language Program may pursue instruction in Fundamentals of Language: Latin, Latin 1, 2, 3, 4, and Advanced Latin Literature. New students who come to Wheeler in the Upper School and took Latin as their primary language before they arrived may also continue Latin.

Latin I

Latin I focuses on morphology, syntax, and vocabulary acquisition. Students learn all six tenses of the indicative of the four plus verb conjugations and all five noun declensions. There is a focus on learning how to read Latin effectively as well as a perusal of Roman history and culture. (Major course)

Latin II

Latin II is a continuation of Latin I: it reintroduces students to an in-depth study of the language in a reading context. Students spend the first three quarters finishing the study of basic morphology, syntax, and vocabulary. In the final quarter, students begin to read Latin authors including Catullus, Martial, and Seneca the Younger. (Major Course)

Latin III

A thorough review of all morphology, syntax, and vocabulary of Latin II precedes a close reading and examination of various prose Latin writers in their historical context including Caesar, Cicero, Eutropius, Livy, Sallust, Augustus, Petronius, Pliny, Tacitus, Suetonius, Apuleius, and others. Neo-Latin authors including Ludvig Holberg will also be considered. (Major course)

Latin IV

A reprise of all morphology, syntax, and vocabulary of Latin III leads into a thorough reading of selections from the poetry of Catullus, Tibullus, Vergil, Horace, Martial, and Ovid. Students learn the various meters of these authors while learning to actively apply and expand their knowledge of the basics of Latin grammar – in the cultural and historical context of the fall of the Roman Republic and rise of the Principate under Augustus. Quizzes on syntax, morphology, meter, and translation solidify and deepen students' understanding. (Major course)

Advanced Latin Literature

Advanced Latin Literature can be taken after Latin IV; the curriculum changes with the interests of students but always includes reading, interpretation, and translation of prose and poetry at a deep and high level. (Major course)

Fundamentals of Language: Latin

This course serves as an introduction to Latin language acquisition. Students learn the nuts and bolts of both English and Latin. This course pays particular attention to the manner in which English and Latin establish meaning: word order and word inflection (changes in verbs, nouns, pronouns, and adjectives) are considered on a daily basis to help students gain understanding of how precisely English and Latin convey meaning. Students may continue the following year with Intermediate Latin. (Major course)

Intermediate Latin

In the Intermediate Latin course students build on their work from Fundamentals with continuing intensive focus on the morphology, vocabulary, and syntax of both English and Latin. Students begin to translate more complex Latin as the course unfolds and their linguistic facility deepens. Roman History and Mythology are incorporated into the class as well. (Major course)

Fundamentals of Latin III & IV

The Fundamentals course sequence continues for interested Polaris students and Upper Schoolers with Modern Language waivers. Translation of original texts, archeology, and the culture of Ancient Rome are explored. (Major course)

Inquiry and Design

The Department of Inquiry & Design supports individuals to expand their curiosity and creativity through asking essential questions for authentic problem solving in our labs, shops and studios.

We believe everyone is curious and creative and that inquiry and design live in the mind and the hands, in ideas and materials.

We collaborate with teachers and learners across academic disciplines and grade levels to develop sequential curricula that support common learning goals using efficient inquiry and design methods.

Courses within the I&D Department are specifically designed to prepare students with the complex problem solving and critical thinking skills necessary for post-secondary studies and the workforce and not just align with the Wheeler School mission, but be the strong structural foundation that propels it.

XR Lab@Wheeler

One of the most universal aspects of being human is the appreciation, creation, and telling of Story. In the XR lab, we explore immersive storytelling through Extended, Virtual, Augmented, and Mixed Reality. Courses in the XR Lab explore character, fashion, set and sound design as well as cinematography and photography. Storytelling and creation of lore are strong components of coursework. Students engage in scientific research in neurotechnology and biotechnology and learn programming in *Unreal Engine* to create interactive experiences while learning project management skills.

Project X: Immersive Storytelling

Students work collaboratively to tell a multi-generational story in a world where the global electrical and internet infrastructure goes down. Students will use cutting edge technology to create characters, fashion, and interactive environments in a virtual, augmented, and mixed reality space. Students come together to employ and develop their diverse expertise to create something greater than the sum of their collective skills. Students interested in character, fashion, and set design as well as visual storytelling, music/sound design, and programming should join. This single-semester course is offered in the Fall/Spring semester. (Minor course)

Material Learning Space @ Wheeler

The Material Learning Space @ Wheeler is a new initiative in response to a previous partnership with NuVuX, Cambridge. Courses in this space have incorporated concepts of design fields such as industrial design, architecture, engineering and fashion design, preparing students to apply design methods and skills to solve contemporary and future challenges. In the current space, students will learn skills in woodworking tools, laser cutting, 3D printing, and digital fabrication (CAD). Additionally, students employ modes of visual communication such as diagramming and photographic/video documentation. All work is geared towards practicing skills of creativity — including observation, abstraction, and synthesis — with a foundation in spatial thought and reasoning. Past studios include: Devices for Activism, Waste to Wonder, Design for Dystopia, and Food Futures.

Form(ing) Thought

Do you find it hard to put words to the things that you know? Most classes ask you to say what you're thinking before you do it - in this class we'll be doing the opposite. Through playing with materials we will practice the processes of abstraction and application, as well as observation and synthesis. In this studio we will practice thinking spatially, visually, and abstractly. By working with materials we will practice processing thought in non-verbal ways, and then through reflection find strategies to communicate all that we have learned. In order to do this students will be guided through exercises that will teach the safe and effective use of the tools in the Materials Learning Space. These tools include those for woodworking such as the bandsaw and chop saw, soft fabrication techniques such as sewing and mold making, as well as computer-aided tools such as the laser cutter and 3D printer. In order to use the computer-aided machines students will learn softwares such as Rhino and Adobe Illustrator. As students gain expertise in the use of these tools exercises will begin to focus on skills of creativity, including the fundamentals of spatial reasoning, mechanics, artistic observation, analysis and feedback, synthesis, and abstract communication - in other words, students will be practicing the foundations of engineering, art, and design. (Major course)

Design Topics Studio | BioDesign

How does nature organize itself? What optimized structures has the process of evolution created? How might we create designs that are not simply sustainable, but regenerative and ecological? These are some of the questions we will explore in this year's Design Topics Studio — BioDesign. Drawing on the artistic observation we practiced in Designer's Toolbox, we will identify problems, opportunities, or questions we have about the natural world and our place within it. We will practice shifting from anthropocentric to ecocentric thinking - putting nature on an equal playing field with humans. Ultimately we will try to make in the way that we see nature creating, and learn about topics such as Biophilia and Biomimesis along the way. This single-semester course is offered in two sections in the spring of 2024. To take this class, students must have previous design experience, either through taking Form(ing) Thought or a design enrichment class or with permission of the instructor. (Major course)

College Counseling

The College Counseling Office serves as a resource for students, families and the Wheeler faculty with regard to every facet of the college application process. For some students, this might be attending a large college on the West Coast, a small college in New England or for others studying in another country. For some students, opportunities like a post-graduate year or a gap year are the perfect next step. What is key is that the College Counseling Office works together with students, families, and faculty to guide (rather than direct) students in the post-Wheeler planning process.

Wheeler's course requirements are minimum requirements for the Wheeler diploma. When planning a program for a given year or semester, a student should consider their curricular and co-curricular interests, the ability to manage demanding courses, and future goals. Most colleges are interested in students who choose to exceed the graduation requirements; highly selective colleges are looking for students who are able to excel in the most demanding courses offered at Wheeler. Seniors must continue with or exceed previous years' curricular challenges to be the most competitive applicants.

College Counseling encourages students to develop co curricular/extracurricular interests at Wheeler and in the greater community. These interests may be academic, and may also include athletic, artistic, and altruistic. The depth and quality of a student's commitment to any activity are far more important than the number of activities in which they participate.

The Wheeler College Counseling Office will work with students and families as they navigate the following steps:

- Exploration: Helping students explore the range of options available using a wide variety of resources.
- Evaluation: Helping students and families to understand the criteria that colleges and universities use to evaluate applicants, and then suggesting the potential range of college options based on the entirety of the student's record.
- Application: Helping students with their applications, providing technological and personal advice and support to make their applications be as authentic and as strong as possible.
- Financial Aid: Helping families access the resources available to learn about and apply for financial aid.
- Matriculation: Helping students to decide amongst their options to determine their post-Wheeler path.

Ultimately, our goal is to help students make good choices through a process that celebrates self-discovery, self-evaluation, and prepares them for a healthy transition to a new environment.

Whole Life Seminar

The Whole Life Seminar (WHLS) program focuses on identity development for adolescents. It incorporates the themes of the three pre-existing co-curricular areas of Unity & Diversity, Health, and Community Engagement. The program also includes other important elements, such as social-emotional learning, digital citizenship, and global education.

The WHLS implementation came from the collective decision for co-curricular programming to cut across the developmental spectrum and focus beyond 9th and 10th-grades. It provides opportunities for co-teaching and collaboration across departments. Each grade level has a teaching team including representatives from the U&D and Health Offices. The teaching is intersectional, while at the same time intentional to preserve aspects of our specific U&D curriculum. Students gain independence through the program, culminating with a community-based independent inquiry-based project.

Based on our existing Unity & Diversity and Health curricula, as well as our work to integrate social-emotional learning, each grade level has a theme:

- 9th grade is a foundational year and begins with the theme of My High School Experience.
- 10th grade increases the level of challenge and focuses on a theme of Identity and Well-being.
- 11th grade focuses on the theme of Choices and Relationships.
- 12th grade culminates with a focus on Adult Life and the Future, as well as the Senior Free Inquiry Project

Topics throughout the WHLS program include establishing a common vocabulary, building community, developing listening and empathy skills, increasing DEI & SSI awareness, becoming active anti-racist citizens, and learning how to engage in challenging conversations. The students focus on the relevance of socially significant identities in school, locally, and globally. The curriculum provides the opportunity to examine privilege, preconceptions, and understanding of different people. As students mature, they have opportunities to grapple with more advanced issues of diversity, equity, inclusion, and belonging. Through complex discussions and activities facilitated by the Office of U&D, students explore and address issues of social justice and social responsibility to provide them with the skills necessary for their future role as global leaders in a diverse, multicultural world.

The integrated health goals include human development, wellness, disease prevention, stress, sleep, mindfulness, nutrition and exercise, body image, sexual education, decision making, substance abuse, digital citizenship, social-emotional learning, and public health. Other topics woven throughout the WHLS program include community service, civics, food insecurity, global education, and leadership development. Inquiry-based learning and community action are embedded through the course work as well. The students are provided opportunities to develop self-awareness and advocacy skills.

Regarding Community Service Learning (CSL), 11th-grade students are required to complete a total of 20 hours of service at a local 501(c)(3) organization over the school year (5 hours per quarter), and 12th-grade students are required to complete 12 hours of service (4 hours per quarter during quarters 1, 2, and 3). Hours may be submitted earlier than the quarterly deadlines if a student chooses to complete their hours early. In addition, the senior year experience of WHLS dovetails with the Senior Free Inquiry Projects.