

DUBLIN SCHOOL
ACADEMIC COURSE CATALOG
For the School Year 2025-2026



Dublin School Mission

At Dublin School, we strive to awaken a curiosity for knowledge and a passion for learning. We instill the values of discipline and meaningful work that are necessary for the good of self and community. We respect the individual learning style and the potential each student brings to our School. With our guidance, Dublin students become people who seek truth and act with courage.

Throughout their Dublin education, students will be challenged to develop these habits to embody our mission:

Long Term Transfer Goals

- ❖ **ENGAGE IN LEARNING WITH CURIOSITY AND PASSION**
- ❖ **SEEK AND APPRECIATE DIFFERENT PERSPECTIVES**
- ❖ **COLLABORATE AND CONTRIBUTE FOR THE GOOD OF THE COMMUNITY.**
- ❖ **COMMUNICATE CREATIVELY AND EFFECTIVELY.**
- ❖ **RESPOND TO ADVERSITY WITH RESILIENCE.**
- ❖ **SYNTHESIZE AND APPLY YOUR LEARNING.**
- ❖ **REFLECT ON YOUR LEARNING AND BE OPEN TO GROWTH.**

DUBLIN SCHOOL GRADUATION REQUIREMENTS

(One credit equals a full year course)

[illegible]

Prior Credit *Algebra I and/or a year of world language taken in 8th grade will be recognized if the student has earned a satisfactory grade. Dublin School may require a student to repeat a course in which they have not mastered the material as demonstrated on a placement test regardless of grade.

Table of Contents

ARTS DEPARTMENT	5
ENGLISH DEPARTMENT	12
ESPAÑOL DEPARTMENT	16
HISTORY DEPARTMENT	18
INTERDISCIPLINARY	21
MATHEMATICS DEPARTMENT	23
SCIENCE DEPARTMENT	25
TECHNOLOGY DEPARTMENT	28

ARTS DEPARTMENT

Dance, Theater and Film

Fall Semester Electives

Dance Ensemble

Prerequisite: by audition through participation in Fall dance or by approval of instructor.

For more experienced dancers or performers, the Ensemble has three intermediate/advanced technique classes and repertory rehearsals per week. This course meets outside of the daily academic schedule and on weekends, and includes performances and workshops both on and off campus. In the first term, the focus is on building group performance skills and understanding the role of a soloist or featured group within a larger ensemble, allowing dancers the opportunity to explore dance as a vehicle for self-expression and communication. In most cases, participation in Dance as a fall sport will serve as the audition for placement in Dance Ensemble. As the year progresses, we focus on technique and alignment, and dancers will work on solo performance and choreographic skills, gaining stronger proprioceptive awareness. Students are empowered to self-correct and take technical and creative risks.

Film Production: Form (interdisciplinary arts/tech)

This course is an introductory course into narrative film production. Students will study filmmaking and storytelling techniques and apply them to their own projects. Course assignments will build toward a spring semester final project, and will include everything from writing the script, pre-production, production and post-production editing. Skills learned will include: knowledge of film equipment, story telling, on-set protocol, working with actors, technical knowledge and editing. Students will be expected to apply the concepts and skills that are learned to their projects, using their editing software of choice, which may require a transfer of skills taught to new platforms.

Ballet and Pointe (Multi-level approach)

This is a studio technique course that will meet during the academic day. The focus of the course is on building strength and flexibility through ballet technique. This class is open to all levels; more advanced dancers have the option to do pointe work if they demonstrate technical proficiency. The class will focus on barre technique, standing and travelling combinations, and variations. We will also explore the history of ballet, view works by influential choreographers and companies, and analyze how the form has evolved over time. Students will culminate the semester with a final performance and/or presentation.

Spring Semester Electives

Dance Ensemble

Prerequisite: by audition through participation in Fall dance or by approval of instructor.

For more experienced dancers or performers, the Ensemble has three intermediate/advanced technique classes and repertory rehearsals per week. This course meets outside of the daily academic schedule and on weekends, and includes performances and workshops both on and off campus. In the first term, the focus is on building group performance skills and understanding the role of a soloist or featured group

within a larger ensemble, allowing dancers the opportunity to explore dance as a vehicle for self-expression and communication. In most cases, participation in Dance as a fall sport will serve as the audition for placement in Dance Ensemble. As the year progresses, we focus on technique and alignment, and dancers will work on solo performance and choreographic skills, gaining stronger proprioceptive awareness. Students are empowered to self-correct and take technical and creative risks.

Scene Study/Student Play Production

This course gives students a focused look at the craft of acting, offering instruction in technique, voice, body, and memorization. Students will gain an awareness of theater history, script analysis and the process of character and relationship development through hands-on work with scenes from plays by contemporary playwrights. Our work will culminate with a performance of a small-cast play or a series of scenes for which the students in the course will be responsible for directing and designing with the guidance of their teacher.

Film Production: Content (interdisciplinary arts/tech)

This course is an introductory course into narrative film production. Students will play the roles of screenwriter, director, producer and various other roles in the film process that culminates into a final project of a short film that will be submitted to a high-school level film festival. Course assignments will build toward this final project, and will include everything from writing the script, pre-production, production and post-production editing. Skills learned will include: knowledge of film equipment, story telling, on-set protocol, working with actors, technical knowledge and editing. Students will be expected to apply the concepts and skills that are learned to their projects, using their editing software of choice, which may require a transfer of skills taught to new platforms.

Music

Full Year Course

Advanced Music Theory & Composition

In this year-long course, students will greatly deepen their understanding of and facility with various aspects of music theory. Though the language we will develop to speak about music comes from the Western European art music tradition, we will learn from, explore, and apply our knowledge to music from diverse genres and cultures. We will spend the first month reviewing the basic building blocks of music (rhythm, pitch, meter, and mode) through written, aural, piano, and sight-singing exercises. We will then move onto harmonic structures (intervals, triads, and seventh chords), before ending our first semester by exploring melody and how melodies work together to create harmony through counterpoint. The second half of the year will focus on harmonic function through compositional exercises, musical analysis, and aural reflection and dictation. Additionally, students will develop a greater understanding of additional musical concepts such as texture, form, motivic development, and orchestration through weekly group deep listening and, when applicable, score study. By the end of this class, students will be prepared to take the AP Music Theory exam or the equivalent Music Major entrance exam, should they desire. *(This course will be offered in 2025-2026 and then on an every other year basis)*

Fall Semester Electives

Midi Lab I - Intro to Music Production/Ableton Live 12 (interdisciplinary arts/tech)

This course will introduce the concepts of recording, sequencing, and mixing music using Ableton Live. Topics covered include introduction to piano, MIDI theory, MIDI sequencing, synthesizer creation,

introductory sound, electrical, and microphone physics, music theory, live recording techniques, stereo mixing techniques, effects processing, and how to use software-based virtual instruments and loops to create original music. Students will learn by collaborating on a portfolio of digital and live recorded pieces. A rudimentary knowledge of music (i.e. pitch, key, meter, song form) is useful, but not required.

Chamber Ensemble (Vocal)

Vocal Ensemble is a class for people curious about their voice and the practice of singing together in an ensemble. In this class, students will gain confidence in their voice, deepen their awareness of their own voice in relation to a group sound, develop habits for improving intonation and breath control, and expand techniques for artistically expressing and interpreting musical works as a group. Students will grow as musicians and greatly develop their musicianship through regular ear training, sight singing, and song analysis. There is no prerequisite for this course.

Chamber Ensemble (Instrumental)

Chamber Ensemble is for instrumentalists who have at least a rudimentary understanding of their instrument and basic music theory and want to play in an ensemble (exceptions can be made following a discussion with Mx. Redler). Throughout the semester we will work on a variety of pieces from the global art music repertoire, create our own music through composition and improvisation, as well as cultivate a greater musical appreciation through active listening and score study.

Spring Semester Electives

Chamber Ensemble (Vocal)

Vocal Ensemble is a class for people curious about their voice and the practice of singing together in an ensemble. In this class, students will gain confidence in their voice, deepen their awareness of their own voice in relation to a group sound, develop habits for improving intonation and breath control, and expand techniques for artistically expressing and interpreting musical works as a group. Students will grow as musicians and greatly develop their musicianship through regular ear training, sight singing, and song analysis. There is no prerequisite for this course.

Chamber Ensemble (Instrumental)

Chamber Ensemble is for instrumentalists who have at least a rudimentary understanding of their instrument and basic music theory and want to play in an ensemble (exceptions can be made following a discussion with Mx. Redler). Throughout the semester we will work on a variety of pieces from the global art music repertoire, create our own music through composition and improvisation, as well as cultivate a greater musical appreciation through active listening and score study.

Music Explorations

Music Explorations will allow students to deepen their study of music. Students may form small ensembles and/or choose to practice on their own (including Digital composition). We will continue our pursuit of greater musical literacy through song analyses, composition, and listening assignments. Students from this class will perform in the Coffee House towards the end of the Spring Semester.

Midi-Lab II - Song Scoring (interdisciplinary arts/tech)

Students should have a solid grasp on basic music theory, as well as facility with a DAW of their choice and/or music notation software in order to take this course. Throughout the semester we will look at how melody, harmony, form, texture, and orchestration influence, augment, or detract from various dramatic

situations, signify and clarify character arc, as well as make or break audience reception and interpretation of a final work. Students will compose several short original pieces modeled after the examples we analyze in class. Additionally, students will collaborate with students in New Play Lab, Film Production, and technology courses, to create original scores.

Studio Arts

Fall Semester Electives

Drawing

Learning to draw is essentially learning to see more clearly and learning how to interpret what is seen. This is an intensive studio course for the beginning art student. The elements and principles of art as well as proportion and basic perspective are studied. One week of drawing exercises is followed by a week spent on a student-developed project that utilizes skills learned the previous week. A master-work is drawn from a diverse selection of cultures to demonstrate the creative use of a particular element of art and then students are challenged to solve a creative problem that utilizes that same element. These projects develop composition skills and critical thinking, and offer opportunities for self-expression. Students will learn to use some basic computer graphics programs as well.

Digital Photo

Photo I introduces students to the fundamentals of photography, including basic theory, connections between traditional and digital photography, camera controls, camera/Photoshop interface, “developing”/editing in Photoshop and strategies for maximizing print quality with the Iris ink jet printer. Parallel with this is a curriculum based on the elements and principles of design. A master-work is drawn from a diverse selection of cultures to demonstrate the creative use of a particular element of art and then students are challenged to solve a creative problem that utilizes that same element. These projects develop composition skills and critical thinking, and offer opportunities for self-expression. The group critique process is introduced and used weekly. This gives students many opportunities to learn how to discuss their non-verbal creative ideas in language.

Painting

By emulating masterworks from a variety of cultures, students are introduced to both direct and indirect painting techniques. The term starts with color theory and then moves into projects. The first project is a study of line art from around the world. After studying eight cultures’ work, students create new designs that reflect the style of four of those cultures in acrylic paint. The second project explores masterworks that exploit shape as their primary element. Students then produce a modern icon painting of their own. Next is a faithful copy of an impressionist or post-impressionist work. Finally, students create a new still-life in the Northern Renaissance medium of oil paint. Elements of art history will precede each unit. Painting combines opportunities for appreciation of other cultures, strategies for expression and communication, chances to work through adversity and opportunities to make discoveries of the self.

3D Design: Studies in Biomimicry

The Fall semester focuses on composition in three dimensions and uses paper, balsa wood, wicker, paper and glue to build Chinese kites, model bridges, Japanese lamps, sculptures and architectural models. Three Dimensional Design envelops students in the study and creation of artwork that is defined by the elements of form, space and volume. Emphasis is on critical thinking applied to problems with multiple solutions. Students will solve all creative problems utilizing solutions inspired by research in biomimicry. Master works of design in Fashion design, Automotive Design, Architectural Design, and Industrial Design are viewed and analyzed, a problem and working parameters are assigned, and students then create unique solutions in the form of finished artwork. Assessment is in the form of self, individual and group critique, as well as rubric-guided project grades and, potentially, a quiz and one short paper and presentation per term.

Advanced Art

Advanced Art is a unique class in that each student designs their own curriculum with the common goal of creating a body of work to be shown to prospective colleges or showcase a higher level of proficiency in a particular form. Elements of art history, criticism and esthetics are explored as a group and through independent work. The pay-off, or test, of the class, and of the individual student, will be whether or not they get into the college of their choice, and whether or not they have reached the level of facility and maturity they had hoped to achieve. This course combines opportunities for appreciation of other cultures, strategies for expression and communication, chances to work through adversity and opportunities to make discoveries of the self.

Spring Semester Electives

Drawing

Learning to draw is essentially learning to see more clearly and learning how to interpret what is seen. This is an intensive studio course for the beginning art student. The elements and principles of art as well as proportion and basic perspective are studied. One week of drawing exercises is followed by a week spent on a student-developed project that utilizes skills learned the previous week. A master-work is drawn from a diverse selection of cultures to demonstrate the creative use of a particular element of art and then students are challenged to solve a creative problem that utilizes that same element. These projects develop composition skills and critical thinking, and offer opportunities for self-expression. Students will learn to use some basic computer graphics programs as well.

Digital Photography II

Photo I introduces students to the fundamentals of photography, including basic theory, connections between traditional and digital photography, camera controls, camera/Photoshop interface, “Developing”/editing in Photoshop and strategies for maximizing print quality with the Iris ink jet printer. Parallel with this is a curriculum based on the elements and principles of design. The group critique process is introduced and used weekly. Photo III introduces no new technical skills, but focuses on developing more complex strategies for using established skills for artistic or non-verbal communication purposes. Students will continue to raise the sophistication and subtlety of analysis and argument in the critique process. Students will be able to develop and execute complex themes across multiple artworks and use appropriate strategies for achieving clear conceptual goals. In addition, traditional photography will be explored, especially alternative processes such as the digital pinhole. Student work is assessed by project with a rubric based on effort, craft, composition and the student’s demonstration of mastery of that week’s special focus topic. Students also receive one-on-one feedback and group critique feedback.

Drawing II/Painting

By emulating masterworks from a variety of cultures, students are introduced to both direct and indirect painting techniques. The term starts with color theory and then moves into projects. The first project is a study of line art from around the world. After studying eight cultures’ work, students create new designs that reflect the style of four of those cultures in acrylic paint. The second project explores masterworks that exploit shape as their primary element. Students then produce a modern icon painting of their own. Next is a faithful copy of an impressionist or post-impressionist work. Finally, students create a new still-life in the Northern Renaissance medium of oil paint. Elements of art history will precede each unit. Completion of a course in drawing is not a prerequisite for enrollment but is strongly recommended. Painting combines opportunities for appreciation of other cultures, strategies for expression and communication, chances to work through adversity and opportunities to make discoveries of the self.

3D Design: Ceramics

Students will work in slab, pinch coil, wheel throwing and additive/reductive clay sculpture in the round.

The process of imbuing material with meaning through moving from the abstract to the concrete and back again is the major conceptual task of this course. The element of space is primary but explorations of texture and color are also of vital importance. Projects include a portrait mug, functional work, and vessels for the protection of dreams and the imprisonment of nightmares.

Advanced Art

Advanced Art is a unique class in that each student designs their own curriculum with the common goal of creating a body of work to be shown to prospective colleges or showcase a higher level of proficiency in a particular form. Elements of art history, criticism and esthetics are explored as a group and through independent work. The pay-off, or test, of the class, and of the individual student, will be whether or not they get into the college of their choice, and whether or not they have reached the level of facility and maturity they had hoped to achieve. This course combines opportunities for appreciation of other cultures, strategies for expression and communication, chances to work through adversity and opportunities to make discoveries of the self.

Woodworking

Fall Semester Electives

Woodworking I - Forest to Finish

Forest to Finish gives students the opportunity to create artistic and functional pieces from local resources. Students will learn about different species of wood and their use in furniture making and sculpture. Each member of the class will learn to design their work and then create their pieces using hand tools and power tools. The class will be given objective goals and the students will then be given creative right to design and make their functional pieces using different woods. Throughout the year the course builds on its foundation; new techniques and tools will be used and students will gain greater proficiency in reflecting on and revising their work. Students will learn in depth about different hand tools and power tools and be quizzed on safety procedures before using the shop as a work space. Students will also do research assignments and be given homework on a weekly basis.

Woodworking: Advanced Design Concepts

Prerequisite, one full year of woodworking, permission of instructor and evidence of independent work habits in woodworking

Students in this course will expand their knowledge of sketching, drafting by hand, model-making and design, including developing their concepts and creating working drawings as steps toward building unique projects in wood. In this class, students will solidify their ability to manage a furniture-making project from concept to completion, applying technical and design skills they have learned in previous courses and honing their craftsmanship through the use of the various tools in the shop.

Collaborative Design Project

Students' creative minds will come together in this collaborative woodworking class. Starting with design and innovation, students will work through the process of building, revising, finishing, and showcasing their finished product. A prerequisite of Woodworking I is required to take this class.

Spring Semester Electives

Woodworking I - Forest to Finish

Forest to Finish gives students the opportunity to create artistic and functional pieces from local

resources. Students will learn about different species of wood and their use in furniture making and sculpture. Each member of the class will learn to design their work and then create their pieces using hand tools and power tools. The class will be given objective goals and the students will then be given creative right to design and make their functional pieces using different woods. Throughout the year the course builds on its foundation; new techniques and tools will be used and students will gain greater proficiency in reflecting on and revising their work. Students will learn in depth about different hand tools and power tools and be quizzed on safety procedures before using the shop as a work space. Students will also do research assignments and be given homework on a weekly basis.

Woodworking II

Prerequisite: Woodworking I

Forest to Finish gives students the opportunity to create artistic and functional pieces from local resources. Students will learn about different species of wood and their use in furniture making and sculpture. Each member of the class will learn to design their work and then create their pieces using hand tools and power tools. The class will be given objective goals and the students will then be given creative right to design and make their functional pieces using different woods. Building on skills learned in Woodworking I, students utilize tools and techniques to communicate their creative ideas with more detail and nuance. The second term of this course will focus on Shaker Style Furniture, and the history and progression within this specific style of furniture making. Students will design and build tables from local raw materials and study master works from pioneers like Thomas Moser.

Woodworking: Advanced Design Concepts

Prerequisite, one year of woodworking or permission of instructor

Students in this course will expand their knowledge of sketching, drafting by hand, model-making and design, including developing their concepts and creating working drawings as steps toward building unique projects in wood. In this class, students will solidify their ability to manage a furniture-making project from concept to completion, applying technical and design skills they have learned in previous courses and honing their craftsmanship through the use of the various tools in the shop.

Into the Woods - A Sustainable Structure Project

In this course, students will build a structure in a natural setting using a blueprint of sustainable architecture. Students will learn construction techniques such as framework, door and window installation, as well as detailing, and how to build safely. Students will appreciate different perspectives as they focus on function and accessibility. Sustainable choices for renewable energy technologies will be taught and incorporated to accommodate a low carbon footprint. This course may collaborate with students in the Solar Energy course to inform decision making and design.

ENGLISH DEPARTMENT

English 9: Adolescence (Re)Imagined

High school is a pivotal time, containing the messy, personal, and (yes, sometimes) euphoric stage of life known simply as “adolescence.” Given the extremity of this developmental period, it’s no surprise that writers, artists, cultural theorists, and psychologists all continue to return to the teenage experience in their work. The English 9 reading list will prompt students to examine this significant stage of life by examining a range of characters across time, literary genres and mediums. Discussions and readings will also prompt students to reflect on their own experiences and the formation of their values during these critical years. Inquiry is at the heart of the work of English 9. Students will respond to readings in writing and speech, sharpen their analytical and creative writing techniques with in-class and long-term assignments, master basic vocabulary and grammar skills through classwork and quizzes, and develop their listening skills. This course emphasizes trusting one’s own reactions to a given work of literature, while lending new literary vocabulary to sharpen the precision of those observations. With a focus on the foundational skills of English scholarship—writing, thinking, and listening—this course asks students to be curious, to ask questions, and to dive beneath the surface. The course will culminate in the creation of a final capstone project in which students will generate an open-ended question on a topic concerning the adolescent experience and conduct research that offers them the opportunity to answer and present their findings.

English 10: Rebels, Outsiders, and Others: Creating a New American Story

How does the tradition of rebellion shape our concept of American identity? How do outsiders rewrite cultural and literary narratives to create new schools of thought and literary movements? How does Otherness shape the story of what it is to be American? Students will explore how successive generations of writers and thinkers have challenged and overthrown existing schools of thought and created new ways of writing the world. Students will develop as engaged citizens, examining their own identities and what lenses, privileges, and values they carry, viewing these in relation to the tumultuous and regenerative evolution of the idea of American literature. Engaging with fiction, nonfiction, and poetry, students will develop awareness of genre, purpose, and rhetorical strategy. Throughout their investigation of canonical and contemporary texts, ranging from Zora Neale Hurston’s *Their Eyes Were Watching God* to Tommy Orange’s *There There*, students will encounter voices from a variety of backgrounds, often emerging from the margins to create, through the power of their voices and visions, new vistas from which to behold the American experience.

English 11: Language Under Pressure

In this course, you’ll explore how language functions under pressure—how it can be used to control, conceal, resist, or reveal. We’ll dive into diverse texts to examine how language shapes perception, identity, and power, and how silence or speech can both be acts of survival. You’ll experiment with writing across genres, from personal narratives to public-facing work, learning to express your ideas clearly and impactfully. Emphasis will be on the writing process: starting with messy drafts, revising thoughtfully, and developing work you’re proud of. Peer review will be an essential part of this process, as we help each other refine not just our words, but the thinking behind them. By the end of the course, you’ll not only craft a compelling personal narrative, but also create work that speaks meaningfully to the world around you.

Advanced Seminar in Language and Composition

Prerequisites include the successful completion of English 10 as well as summer reading and writing assignments. Other considerations for admission to the class are previous English grades, teacher

recommendation, and approval by the course instructor and the English Chair. Because this is a college-level course, students should expect a rewarding and highly rigorous academic experience.

This advanced course sharpens your skills as both a critical reader and a confident writer. You'll explore a wide range of texts—memoirs, essays, journalism, speeches, and cultural criticism—that challenge dominant narratives and deepen your understanding of language, power, and persuasion. As you read, you'll build awareness of audience and purpose; as you write, you'll experiment with analytical, reflective, narrative, and argumentative forms. Emphasis is placed on process: starting with messy drafts, revising with intention, and engaging in peer review to refine ideas and voice.

While the AP Language and Composition Exam is optional and not the central focus, you'll gain a strong foundation in rhetorical analysis, synthesis, and information literacy, and will have access to support and resources should you choose to take the exam in May. Throughout the course, you'll be encouraged to approach writing as both an intellectual practice and a creative act. In the end, this seminar is about thinking deeply, writing meaningfully, and joining the ongoing conversation about what matters in the world.

Full Year

English 12: Advanced Seminar in British Literature

Prerequisites are the successful completion of AT English Language and Composition or exemplary performance in and completion of English 11, along with summer reading and writing assignments. Other considerations for admission to the class are previous English grades, writing samples, teacher recommendation, and approval by the course instructor and English Chair. Because this is a college-level course, students should expect a rewarding and highly rigorous academic experience. A sense of humor and love for literature is highly suggested, but not required.

Advanced Seminar in British Literature follows and extends beyond the AP Literature and Composition curriculum. This is a dynamic, fast-paced course for students ready to immerse themselves in a rigorous reading and writing curriculum focused on British Literature. Students are introduced to critical theory and learn to dissect texts with the varied lenses of Psychoanalytic, Feminist, African American Criticisms as well as Critical Race and Queer Theories. These lenses offer opportunities to appreciate diverse, complex perspectives, which students will apply as they cultivate their own lines of inquiry and gain literacy in social justice, racial equity, and gender studies as they journey across 600 years of British literary tradition. Texts such as Shakespeare's *Hamlet*, Charlotte Brontë's *Jane Eyre*, and Zadie Smith's *White Teeth* guide students in the development of their own craft as they become creative, empowered communicators. Students can expect to write multiple analytical papers and experiment in creative nonfiction and short fiction by the year's completion—all while evolving insights into the most meaningful components of their writing processes. The AP Literature Exam in the spring is optional and will not be the primary focus of the course; students will, however, be provided with a plethora of resources, study materials, and supports should they wish to take the exam in May.

English 12: Fall Semester Electives

English 12: Greek Myth & Meaning

How do ancient myths reflect fears and hopes that still exist in today's world? Is it possible to resist fate? Why are we still drawn to the mythology of gods, heroes, and monsters thousands of years later? This course explores the universal themes and enduring power of Greek myth. Students will study both classical texts and modern retellings, covering a wide range of genres including plays, film, poetry, and

novels. We will deeply investigate themes of love, loss, revenge, fate, and suffering, as we connect these ancient themes to our quest for meaning in the modern world.

English 12: Introduction to Fiction Writing

In this course, students will learn fundamental practices and strategies for writing fiction. Through focus on craft and technique, students will immerse themselves in learning to read, observe, think, and write like fiction writers. They will learn from classic and contemporary masters of short fiction what elements of character, scene, tone, imagery, structure, voice, and dramatic tension combine in successful fiction. In addition, students will do regular writing and revision exercises, partake in regular workshops of peer work, and meet for teacher conferences.

English 12: On Being

In this course, we will seek to capture and convey the wisdom found in the human condition by examining both secular and non-secular texts. Our units will take on some of the major facets of life: joy, love, growth, loss, grief, despair, belonging, faith, curiosity, connection, solitude, nature, and more. A wide selection of books, stories, essays, poems, podcasts, and art from a range of authors, creators, activists, philosophers, and leaders of different eras and backgrounds will inspire students as they work to hone in on, and articulate, their own life philosophies. Our study and our time together is designed to inspire deep reflection and the thoughtful development of a personal connection with our values and experiences. Flannery O'Connor is quoted as saying, "I write to discover what I know." Likewise, students in On Being will write reflective weekly journals as a way to build towards crafted personal essays that express their particular wisdom with style and purpose. Our writing, like our reading and discussion, will be exploratory in the name of discovering our wisdom about living what Mary Oliver reminds us is our "one wild and precious life."

English 12: On Friendship

Friendship, according to bell hooks, is the place in which the majority of us have our first encounter with "redemptive love." For our friends can offer care, solidarity, and even paths towards undermining alienating structures; friendship, as Aristotle suggested, also "holds a mirror up to us," providing a truer picture of ourselves. But friends can also be rivals, competitors, and sources of envy. In this course, students will explore the complex, rewarding, occasionally bewildering nature of friendship by examining some of the most memorable kindred spirits in literature.

English 12: Spring Semester Electives

English 12: Creating Personal Narrative

Why do we as humans love to tell stories? Why do we use storytelling to shape who we are and what we mean in different contexts & how do we choose what stories to tell when? How do we choose what stories to keep retelling (& revising)? This class will challenge and empower students to explore a variety of storytelling modes in pursuit of these questions. Students will engage with a range of stories and texts about storytelling over the course of the semester, grounding their practice as writers and sculptors of their own narratives. As a class, we will venture through different storytelling modes, including personal narrative, lyric essay, and staged spoken-word storytelling, among others. By building a practice as writers, readers, and editors of each other's work, we will develop a community of collaboration and respect for each other and the process of creation. Students should expect to write in almost every class period (and be willing to share or reflect on what they wrote) and will workshop each other's stories to develop critical and creative skills in giving and receiving feedback, ending the semester with a portfolio of personal stories in a variety of genres.

English 12: Murder, Madness, Mayhem

From the gothic horror and unreliable narrators of Edgar Allen Poe's short stories, to the intricate plot and surprising red herrings of Agatha Christie's classic mysteries, this course investigates the dark corners of society and the human mind. We will explore how murder, madness, and mayhem is depicted in literature by reading and analyzing gothic fiction, detective stories, psychological thrillers, and true crime narratives. Students will reflect on how these stories all reflect deeper cultural anxieties and fascinations.

English 12: On Friendship

Friendship, according to bell hooks, is the place in which the majority of us have our first encounter with “redemptive love.” For our friends can offer care, solidarity, and even paths towards undermining alienating structures; friendship, as Aristotle suggested, also “holds a mirror up to us,” providing a truer picture of ourselves. But friends can also be rivals, competitors, and sources of envy. In this course, students will explore the complex, rewarding, occasionally bewildering nature of friendship by examining some of the most memorable kindred spirits in literature.

English 12: On Suffering

“Why do bad things happen to good people?” In this course, we will consider various literary responses to this age-old question. We will begin with a close examination of the *Book of Job*, the tale of that tragic biblical figure who is morally “perfect” but who loses everything he has, everyone he loves, and suffers mightily. When Job dares to ask about the cause of his suffering, the answer he receives is enigmatic. The tale and this question have engaged religious and literary scholars in interpretive arguments for centuries. Through the examination of art, religion, current events, & literature that grapples with this question, students will hone, change, and develop their own answers about human suffering, seeking and reading about creative solutions to seemingly unsolvable suffering and crisis.

ESPAÑOL DEPARTMENT

Placement in Spanish 1, 2, and 3 will be determined by a student's proficiency level in Spanish. All three classes will be run as Spanish immersion experiences in order to more closely imitate how a person learns their native language. The goals of the method are to build community, to take risks and make mistakes, to infer and use circumlocution, to speak Spanish, and to have fun.

Español 1

This class covers present tense usage of regular and irregular verbs with a focus on the most common verbs: ser, estar, hacer, tener, and gustar. There are units on family, home, city, country, geography of Spanish-speaking countries, and likes and dislikes. We read two to three beginning readers, which supply additional vocabulary, grammar, and cultural information. In addition we practice with native-speaker listening exercises in order to train the ear to understand Spanish as it is normally spoken.

Español 2

Spanish 2 builds on the foundations of Spanish 1 by reviewing the present tense and introducing additional verb tenses such as the preterite and imperfect in the indicative mood. Thematic units include asking and answering questions in a hospital setting, technology, housing, and the environment. These topics expand on prior knowledge while increasing exposure to more advanced grammar and vocabulary. The course incorporates leveled readings to strengthen reading comprehension and frequent conversational activities to develop speaking proficiency. The primary goal is for students to improve their ability to communicate effectively in Spanish through meaningful and practical conversation.

Español 3

Spanish 3 reviews verb tenses in the indicative mood and introduces new verb forms, including the imperative, present perfect, future, conditional, and the subjunctive mood. Thematic units focus on cities and giving directions, health and wellness, the world of work, and Hispanic art. Students engage with level-appropriate readings, interviews, and class discussions in each unit. This course is centered on helping students build greater confidence and fluency in conversation through consistent speaking practice and real-life communication activities.

Español 4: Spanish through Art, Film and Literature

This course studies a meaningful selection of films from Latin America and Spain. Students will have the opportunity to see the present-day region and the forces that have shaped it through images generated from within its cultures. Art, film, and literature are the primary sources of exploration. They will study art that is revolutionary because of its form and the ways in which it challenges the cinematic methods and styles of creation that characterize the American cultural industry. This course will use as its basis a range of cultural, gender, ethnic, queer, and postcolonial perspectives as they apply to cinema. Students who will take this class must have completed Spanish 3.

Fall Term: Focus on Spain.

Spring Term: Focus on Central & Southern America.

Espanol 5: Advanced Placement Spanish Literature

El curso de Español V: "AP Spanish Literature and Culture" está diseñado para iniciar a los estudiantes en el estudio formal de un grupo representativo de la literatura escrita en el idioma en español de España, los países hispanohablantes de Latinoamérica y las comunidades hispanas en los Estados Este curso les

ofrece a los estudiantes múltiples y variadas oportunidades de desarrollar aún más su español en las diferentes habilidades lingüísticas, pero haciendo énfasis en la lectura crítica y la escritura analítica. Igualmente anima a los estudiantes a reflexionar de manera consciente sobre las diferentes voces y culturas representadas en la literatura hispánica. La clase es dictada totalmente en español, e incluye autores tanto españoles como hispanoamericanos, al igual que piezas que van desde tiempos medievales hasta nuestros días. También incluye muestras de poesía, narrativa (novela, cuento, ensayo) y teatro. Las obras literarias son presentadas de manera cronológica con el propósito de integrar diferentes momentos históricos importantes y su influencia en la formación de cada pieza literaria y los movimientos artísticos y literarios. Cada una de las lecciones está planeada para ayudar al estudiante a desarrollar la habilidad de analizar e interpretar figuras retóricas, tono, estilo, tema, simbología, entre muchos otros elementos del análisis literario. Todos los textos serán estudiados en sus versiones originales, por lo cual todas las lecturas se harán en clase.

HISTORY DEPARTMENT

World History I

In World History I, you will explore early human societies to pursue questions about the essential nature of humanity. The development of different religions and political systems in response to these questions and in response to the geographical conditions in which they were embedded leads toward a greater understanding of the modern world. Examining artifacts, myth, literature, and scholarship, you will delve into ancient cultures and seek the wisdom of China, Egypt, Greece, and Islam. Your materials are primary source documents and artwork, as well as textbooks. Academic skills such as reading, note-taking, organization, library use, and fundamentals of academic research are taught. In addition, this course encourages you to become a curious and passionate learner, approach historical inquiry in creative ways, emphasizing the role of each learner as the creator of his or her knowledge.

Electives for 10-12th graders

Students in 10th, 11th or 12th grade may take any history course listed below. This includes full year courses, including U.S. History, and AP U.S. History, AS European History, as well as any of the fall or spring electives. Some advanced seminars are only available for students in the 11th or 12th grade.

Full Year Courses

U.S. History

United States History investigates critical themes about the nation while also developing historical thinking and writing skills. Students learn to analyze primary documents, interpret and summarize a variety of secondary sources, and share their insights in class discussions. Within each thematic unit, there are guiding questions and students learn about moments of history from the founding of the country up to the present day that connect to the theme. Essential goals of this approach include learning to appreciate different perspectives, reading from a wide variety of historians, gaining curiosity about how people lived in the past, and seeing connections between the past and the world we live in now. Units covered include 21st century America, Equality, Democracy in America, the importance of the frontier, The Civil War and Reconstruction, who is an American, and social protest and justice movements of the 20th century. Students also work on and write a research paper on a topic of their choice, developing effective and creative skills in scholarship and in communicating their learning.

Advanced Placement United States History

Prerequisites: Strong performance on the culminating paper of the previous year, as well as timely completion of a major summer assignment.

An intensive survey of American history from colonial times to the 21st century, AP US History at Dublin School is designed to serve as the equivalent to an introductory-level college course. We will take a chronological and thematic approach, weighing evidence and interpretations in historical scholarship to deal critically with the problems and materials of United States history. A particular focus will be placed on developing effective analytical skills; students will hone their abilities to present ideas and evidence clearly and persuasively in writing and discussion. Students enrolled in this class should demonstrate strong reading and writing skills, along with a willingness to devote considerable time to homework and

study. Throughout the year, students will learn to interpret maps, charts, political cartoons and primary documents. They will engage in scholarly discussion and debate, compare multiple perspectives, and learn to appreciate a variety of historical interpretations. They will learn to write document-based essays and formal papers and take traditional tests and quizzes. Along with sitting for the Advanced Placement US History Exam in early May, students are expected to complete a major research paper with scholarly citations. AP US History is open to highly committed and capable juniors and seniors with permission from the instructor and the prior history teacher.

Advanced Seminar in European History

This course will be limited to students with a demonstrated track record of excellence and commitment to studies in history. Completion of summer work by the stated deadline is also a requirement for this course. This year-long course is an intensive study of European history from 1450 to the present era, balancing inquiry into political, social, intellectual, artistic, economic and technological developments in European societies. Above all this course aims to develop and sharpen historical thinking skills including analyzing and interpreting evidence, comparing and synthesizing scholarship, causation, identifying patterns of continuity and change, argumentation, and performance under time pressure. Inspiring deepening curiosity and a passion for history, seeking out and appreciating different perspectives, communicating effectively and creatively are dispositions we practice to empower students in their work. This course pays particular attention to women as scholars and as historical actors and works to include a diversity of voices and experiences in primary and secondary sources. Assessments will include exam practice, tests, and analytic writing. Other assignments may include reflection papers, news analysis, family history, and research. This course will prepare students for the AP exam should they wish to take it.

Advanced Seminar in Psychology: Research Seminar

Prerequisite: Completion of history requirement. Completion of summer work by the stated deadline is also a requirement for this course. Preference given to seniors.

This course introduces students to the systematic and scientific study of human behavior and mental processes. While considering research that has shaped the field, students will explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, developmental psychology, cultural psychology, clinical psychology, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, evaluate claims and evidence, and effectively communicate ideas. Students will work toward major departmental transfer goals, including appreciating diverse perspectives, creating curiosity and passion, and communicating clearly and effectively. Students will be assessed through critical analyses, in-class essays, research papers, and tests. This course is designed to be more conceptually advanced than AP Psychology with high expectations for homework. Similar to an AP, students will be expected to complete 8-10 hours of homework per week. Students will have the option to take the AP Psychology exam at the end of the year.

Fall Semester Electives

Advanced Seminar in Economic Theory

This course is open to students in the 11th and 12th grades.

The Advanced Economic Theory class explores the history of economic thought. We will focus on four very important economists who created economic theories still in use in our days: Adam Smith, David Ricardo, Karl Marx, and John Maynard Keynes. We will study their lives, their ideas and also the historical context in which they lived and worked. In doing so, we will use the book “The Worldly Philosophers” by Robert Heilbroner in order to have a solid introduction to modern economic thought. Students will learn the specific terminology of economics, develop charts explaining the different

economic theories and analyze excerpts from each one of the economists' work. As a way to close the course, students will focus on one economist and research their life and main theoretical contributions.

Advanced Seminar: International Relations: The US and China

There may be no more important relationship in the contemporary world order than that between China and the United States. China is rivaling American dominance of the international order in several significant ways. In relation to many current world issues, the relationship between China and the United States is critically important. This course will examine the 19th century roots of the U.S. - China relationship with the Open Door policy, and American backing of the Nationalist Party in the Chinese Civil War. We will also look at the evolution of this relationship in the Cold War. The rise of Xi Jin-Ping and changes during his tenure mark China's global reach; this will be our last unit of study. This course will include interviews and a field trip (probably not to China) to explore Chinese culture. Assessments for this course will include discussions, presentations, and essays.

World War I and World War II

This elective will explore the 1914-1945 historical period. The choice of this period is not random. Some historians such as Eric Hobsbawm have called it "the 30 year war" as there is consensus around the ideas that World War I and the peace settlement of 1919 are the main cause for the 1930's economic depression and that in turn, the 1930's economic depression was the main cause for World War II. The course will explore the First World War, the Versailles Treaty and its impact on the European economic and political situation, the rise of fascism with an emphasis on the Nazi regime, the world economic depression during the 1930s, the international relations and leading to World War II, and the Second World War with some emphasis on military aspects. For each topic, we will consider economic, social, political and ideological aspects. Students will work with primary sources, images, documentaries and scholarly accounts. They will write short essays consisting of documents and or image analysis and will write a final paper about a topic of their choice.

Protest Movements

Protest movements have been a driving force in history. Launched by people outside the power structure who are threatened by encroachment or loss of status or livelihood, protest movements envision and demand greater justice. In this way, when they are successful on a larger scale, protest movements instigate change that benefits and empowers new groups. Protests movements can also take place on a smaller scale, calling for more specific changes in policy or structures. This course will consider historical examples of protest movements, considering their causes, their vision, their strategies, and the degree to which they are successful. We will start with a unit on Gandhi and his movement in India and beyond. In the United States, our studies will include the movement for women's suffrage in the 19th century, the labor movement of the early 20th century, the civil rights movement, the women's movement of the 1960s-70s, the antiwar and antinuclear movements. We will look at some protests movements in other nations as time permits. Students will discuss questions such as whether there is a place for violence in protest movements, and the impact of social media on protest movements. Students will analyze a contemporary protest movement and may have the opportunity to take part in a protest themselves. The larger aims of the course are for students to gain knowledge of the history and role of protest movements, feel empowered to evaluate movements they encounter in their lives, and use their power in movements to shape a better world.

Spring Semester Electives

Native Studies

As American society becomes more aware of the damage to the climate from the capitalist economy and as we examine the structure of white privilege, the history of the interaction of white settler-colonists and Native peoples is being re-examined. This course will explore the complex relationships between settlers

and Native peoples, primarily the Abenaki in Northern New England, from pre-colonial times to the present. We will study differing concepts of land and land management, conflict and treaties, intercultural exchange and adaptation, and ways Native peoples and white settlers understood and responded to progressive efforts to remove Native presence. Treaties have been called “the original American literature,” and we will examine them for their literary as well as historical value. Native American literature, its intersection with cosmology and historical memory, and the oral tradition will be studied to give us a better understanding of different Native cultures. We will conclude by looking at the current resurgence in interest in Native people and renewed efforts to enforce treaty rights and learn from Native concepts of the earth.

Nuclear Weapons and the Cold War

The use of the atom bomb ended World War II and began a new era in history. This course will examine the development of nuclear weapons in the U.S. and their impact, both on humans who suffered from their use and on global politics. Nuclear technology spread into other industries as well, changing our society in far-reaching ways. In the Cold War, the US and USSR engaged in a nuclear arms race, and the logic of mutually assured destruction led to an array of proxy wars that combined with decolonization movements. Asia was impacted most directly by nuclear war, but the entire planet was affected by fallout as well as by the Cold War. This course will explore these questions, and yours:

Why did the arms race occur?

How did American citizens cope with the threat and the power of nuclear technology?

How did the pursuit of nuclear superiority impact the societies of the US and the USSR?

How did the Cold War play out across the globe?

How and why did it end?

What nuclear threats still exist in our world?

This course will involve reading, writing, research and projects. The Long Term Transfer Goals pursued and practiced are responding to adversity with resilience, appreciating different perspectives, and synthesizing and applying your learning.

History of Art of the 19th and 20th Centuries

This course will look at Western visual arts and architecture as key elements to understand the economic, social, and cultural developments that occurred during the last two centuries. In visual arts, students will learn about Neoclassicism, Realism, Naturalism, Impressionism, and the avant-garde movements of the 20th century. In architecture, students will learn about the School of Chicago, the Bauhaus, Rationalism, Organicism, and Functionalism. Students will analyze images, engage in scholarly discussions, and work on a final research project.

INTERDISCIPLINARY

Senior Project

This is a year-long course.

What have you been wishing you could study? What would you explore if there were no constraints? Are there current events or social justice issues you would like to better understand and develop an action plan to address? Is there a career or a project you have always been curious about but never able to pursue?

As a culminating course in Dublin's curriculum, Senior Project is designed to empower students to learn

through an intrinsic process and to practice using all of the Long-Term Transfer Goals built through their previous years of study at Dublin. This course provides the opportunity for seniors to pursue a passion or field of study in a year-long course combining research with analysis and creative expression. The course will commence with a seminar to develop project proposals and train students in advanced research techniques, including experiential research techniques, that will diversify their sources of new knowledge. Next, students explore how to apply or synthesize their learning in a project-based format. Each project will be individual in its design, but all projects will include a major paper, collaboration with an on- and/or off-campus mentor, and interdisciplinary work. The expectation is that seniors will be motivated and persistent in their work on Senior Project. However, adult mentors and teachers will provide assignments and structure as needed to support and spur students to dive deeper at key points in the process, to build resilience in the face of obstacles, and to self-reflect and better understand their own work habits and learning styles. Students are expected to work independently and strive toward college-level research, writing and communication skills. Students may also choose to do a practicum or off-campus internship in connection with their project, as well as apply for funding in order to support their learning endeavor. At the end of the fall term, students will present their work to a panel of adults and students to gain insights and perspectives on what they have accomplished and to reflect on their process and project goals. Ultimately students will share their journey to greater independence and expertise in a public display or performance of learning on Mayfair weekend in the spring semester.

Learning Lab - Through the Learning Skills Program (LSP)

Learning Lab is a small, collaborative course (3-4 students) designed to strengthen essential learning and academic skills as students engage actively with their coursework. Students in Learning Lab will work closely with a learning specialist and their peers to build effective strategies for studying and retention, improve reading comprehension and writing skills, and strengthen habits around academic planning and self-advocacy. Learning Lab is appropriate for students who are both comfortable seeking guidance and feedback from faculty, and who value peer collaboration as a resource for learning. The program focuses less on foundational executive function skills and more on strengthening existing academic skills as initiated by the student. Enrollment in Learning Lab is open to returning Dublin students for whom this collaborative program model is well-suited; suitability will be determined via a collaborative process between a student's advisor, teachers, and the Director of Learning Skills. The course takes place in the Griffin Learning Center. Learning Lab enrollment is by semester and sessions are built directly into a student's fall and/or spring schedule. The course occupies the regular 80-minute class block and earns .5 credits per term. There is an additional fee for Learning Lab enrollment and participation requires guardian permission. Further questions can be directed to Emily Cornell, Director of Learning Skills, at ecornell@dublinschool.org.

To determine student suitability for Learning Lab, advisors can ask the following questions:

1. Is this student comfortable seeking guidance and feedback from faculty?
2. Does this student actively seek to collaborate with peers as a learning tool?
3. Is this student mostly consistent with their nightly homework completion?
4. What are the academic skills that the student is looking to develop? (ie. academic planning, study skills, reading, writing, self-advocacy).

Learning Lab is an option for returning Dublin students who are not already enrolled in LSP Foundation or LSP Bridge.

MATHEMATICS DEPARTMENT

The Mathematics Department strives to support curious and passionate learners apply a mathematical lens to the world around them. Students will develop a problem solving mindset, where they will follow through on challenges and respond to adversity with resilience. While they work collaboratively, we will encourage them to articulate their problem solving approach, clearly and effectively. Regularly, students will see the same problem solved using multiple strategies and will learn to appreciate different approaches and perspectives. Students will be empowered to not just learn from mathematicians but to BE the mathematicians.

Algebra I

Algebra I is an introductory course in which our students engage the language of algebra and functions, with emphasis on the reading, writing, and evaluating algebraic expressions. In addition, the course deals with the fundamental operations of polynomials, linear equations, linear inequalities, quadratic equations, factoring, fractional equations, radicals, and radical equations. All of our studies are supplemented by real-world problems.

Geometry

Geometry promotes deductive reasoning, through the study of proofs, along with a more concrete understanding of the mathematics of working with shapes in two and three dimensions. The course begins with an introduction to the terminology and concepts of geometry, which are developed through proofs, largely in two dimensions. As the year progresses, a third dimension is introduced and the concepts of surface area and volume are fleshed out. *Prerequisite: Completion of Algebra I*

Algebra II

Algebra II allows students to review and build upon their understanding of the algebraic concepts covered in Algebra I in order to continue to develop a problem solving mindset. To start the year, students solve linear equations and inequalities. Throughout the remainder of the year, students will manipulate and graph linear, quadratic, polynomial, logarithmic, and exponential functions and equations. If time permits, the basics of trigonometry will also be explored. This course will include Algebra I review and problem-based projects in order to develop students' curiosity towards mathematical foundation, problem-solving abilities, and understanding of the application of algebraic concepts. *Prerequisite: Completion of Algebra I and Geometry.*

Algebra II/Trigonometry

This course covers all of the same concepts that are covered in Algebra II but in a more in-depth fashion and at a quicker pace. The course also covers matrices, sequences and series, and concludes with an extensive study of trigonometry. Students will strive to be curious and passionate learners while growing their ability to problem-solve independently and collaboratively. As they develop a stronger understanding for the complexities of algebraic concepts, they will be encouraged to communicate their approach creatively and effectively. Students will be challenged to see themselves as young mathematicians and to view the world around them through a mathematical lens. A Ti-84 Plus and a computer or iPad are used extensively in this course. *Prerequisite: Completion of Algebra I and Geometry and permission of instructor.*

Advanced Topics in Statistics

Prerequisite: Completion of Algebra II or Algebra II/Trigonometry

To be able to use and interpret data correctly is essential to making informed decisions. Data abounds in this information age; how to extract useful knowledge and gain a sound understanding of complex data sets has been more of a challenge. Students in this introductory statistics course will use hands-on

experiences to simulate statistical phenomena. They will gain a sound understanding of what statistics represent, how to organize and display data, how to analyze data, and how to draw and interpret valid inferences by using appropriate statistical tools. Areas of focus may include sports, medicine, research, lawsuits, games, advertising, engineering, etc. Curriculum units include displaying and describing data, the normal curve, regression, probability, and statistical inference with applications in the real world. Students also have the opportunity to analyze data sets using technology. This is a rigorous course with the expectation of high engagement and a desire for challenge and exploration. While not bound by the AP curriculum, this course will prepare interested students for the AP exam.

Precalculus

Prerequisite: Completion of Algebra II

Precalculus furthers the study of algebraic and graphical techniques. It is designed for students interested in science, business, and related fields, and also for students seeking to progress mathematically but not pursue math at the college level. Foundational concepts introduced in Algebra II are reviewed and built upon. These topics are developed through direct instruction, group problem solving exercises, and project based learning. The course centers on forming a deeper understanding of functions, transformations, domain, and range. Successful completion of the course will prepare students to engage in introductory level college mathematics courses and statistics.

Precalculus AB

Prerequisite: Completion of Algebra II/Trigonometry, Advanced Algebra with Trigonometry, or permission of instructor.

Intended as a preparation for Advanced Placement Calculus AB, Precalculus furthers the study of algebraic technique and is designed for students with substantial ambition in mathematics, science, engineering and related fields. Logarithms, matrices, exponentials, and trigonometry, introduced in Algebra II, are studied in greater depth and with particular regard to their applications. Basic familiarity with those topics is assumed in this class. These topics are developed through a cooperative approach, where students work in teacher-supported groups to solve increasingly complex problems and in doing so are supported in developing a problem-solving mindset. The course leads up to an introduction to the conceptual aspects of limits as applied to finding slopes, the central concept of differential calculus. Students wishing to enroll in this course must have a strong math background and a passion for intellectual challenge. The course is structured to emphasize that they, the students, are the mathematicians by centering learning on collaborative problem solving. Students enrolled in Dublin School must complete this course to be eligible to enroll in AP Calculus in the following school year.

Advanced Placement Calculus

Prerequisite: Successful completion of Precalculus AB and permission of the instructor.

Advanced Placement Calculus is designed to offer a thorough introduction to the differential and integral calculus of a single variable. The course uses a variety of methods, numerical, graphical and analytical, to explore elementary functions. This is a demanding course, offering the possibility of college credit through the College Board's AP program, and as such requires considerable commitment from our students. These students are encouraged to develop a problem-solving mindset. It is expected that students enrolling in the course will have a thorough mathematical background, such as is offered in our Precalculus course. This course seeks to equally empower all students. The AP exam in the spring is an integral aspect of the course.

Advanced Topics In Mathematics

Prerequisite: Successful completion of AP Calculus and permission of the instructor.

In the Advanced Topics course, students will explore ideas beyond those introduced in AP Calculus. These will include infinite series, vectors, parametric equations, and other concepts. Students will work to respond to adversity with resilience, as each student's problem solving prowess will surely be tested.

They will have to work together, while appreciating the many different perspectives they each bring towards problem solving. Students will spend a portion of the year preparing for the AP Calculus BC Exam, and they will also work extensively in Exeter's Math 5 curriculum.

SCIENCE DEPARTMENT

Biology

This course dives headfirst into the complexity of the living world. Areas of inquiry include ecosystems and communities, cell structure and function, cell respiration and growth, genetics, DNA and RNA, genetic engineering, and evolution. These topics themselves reveal larger scientific principles, such as how biological form affects function, the interconnectedness of life, and the cycling of materials and energy into the living world. Readings, teacher demonstrations, and multi-modal student projects are at the heart of our investigations. Throughout, you will be given opportunities to develop your scientific thinking, writing, research, and laboratory skills.

Physics

Prerequisite: Completion of Biology and Algebra I.

Physics is a full-year course designed to expose students to the fundamental laws and principles that govern the behavior of everyday objects. This course will emphasize the power of physics to explain, with precision, the world around us. To do this, we will reinforce conceptual and lab-based understanding with mathematical rules. Strong math skills are not a prerequisite for this class, but will be developed during the year. Expect to utilize Algebra and Geometry frequently. Topics may include: kinematics, Newton's laws of motion, energy, waves, sound, and light.

Note: The Science Department recommends that all students take a Physics course during their time at Dublin at either the regular or advanced level. Physics offers students mathematical reasoning skills that are found in few other science courses. In particular, any students considering a college major in engineering, pre-med/pre-health, or any science field should take a physics course in high school.

Chemistry

Prerequisites: Completion of Biology and Geometry.

Chemistry describes the small-scale interactions of atoms and molecules that govern the living and nonliving worlds that surround us. What is the structure of an atom? What does the periodic table describe? How do different types of matter interact? Through demonstrations, current periodical articles, and first-hand experimentation, you will learn to predict the outcome of certain types of reactions by finding patterns in the physical and chemical properties of various substances. More advanced concepts, such as the unique properties of acids and bases, equilibrium reactions, and electrochemistry, are explored later in the year. Laboratory work is a major part of first-year Chemistry, and in keeping with the true method of scientific inquiry, you will be asked to become increasingly self-reliant in your investigations as the year goes on.

Advanced Placement Environmental Science

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college level course in environmental science. The goal of the AP Environmental Science course is to

provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

Environmental science is interdisciplinary; it incorporates topics from all areas of science with an emphasis on biology and chemistry. Major themes of the course include; science as a process, energy conversions and the relationship to all ecological processes, the Earth is an interconnected system, humans' impact on natural systems, environmental problems and their social and cultural context, and sustainable human development for resource use and population. The laboratory component of the course will focus on the forest ecosystem surrounding Dublin, as well as field trips to the surrounding area. Assessment includes class participation, lab reports, tests, projects. Successful and timely completion of summer work as well as signatures from current teacher and AP teacher are required to enroll in this course.

AP Physics 1

Advanced Physics 1 provides an introduction to kinematics and mechanics, the description of motion and the study of moving and colliding bodies in both linear and rotational motion. As such it provides an important first look at the conservation principles that underlie so much of Physics, chiefly around energy and momentum. The course relies on and further develops students' problem-solving ability using algebra and trigonometry. Calculus is not used directly in AP Physics, however students taking calculus will be exposed to its use in physics. This is an ideal course for those intending to pursue science, engineering or medicine in college, or for anyone seeking to develop their problem-solving and critical thinking skills. Successful and timely completion of summer work as well as signatures from current science and math teachers and Department Head are required to enroll in this course.

AP Physics C: Mechanics

Advanced Physics C provides a mathematically rigorous, calculus-based introduction to the study of moving and colliding bodies in both linear and rotational motion. As such it provides an important first look at the conservation principles that underlie so much of Physics, chiefly around energy and momentum. The course relies on and further develops students' problem-solving ability; the skills practiced in this course are invaluable not only for those intending to pursue science, engineering or medicine in college, but for anyone seeking to develop their problem-solving and critical thinking skills for use in any facet of life. Successful and timely completion of summer work as well as signatures from current science and math teachers and the Department Head are required to enroll in this course.

Advanced Seminar in Science: Field Biology

Prerequisites: successful completion of Biology and Chemistry, completion of the summer assignment, and an interest in spending time outside and a proven track record of successfully completing independent work. Students will need a rain jacket for this course.

A 2-semester course designed to learn about and practice field techniques in biology and Environmental Science. Students will participate in a variety of projects from an ongoing climate and plant study on the top of Monadnock, red-backed salamander surveys, and migratory birds. Our classroom will be our local ecosystem. Students will learn to identify and measure the trees, plants and wildlife on the Dublin school campus and beyond. In the fall, we will learn data collection techniques and spend much of our class time outside. In the spring, students will carry out an independent research project for which they will design, collect and analyze their data. This class will include an overnight field trip. The spring term will entail students designing and running an independent project based on the field techniques we learned in the fall.

Fall Semester Electives

Astrophotography

This elective will be a project-based deep dive into taking images of celestial objects in the Perkin Observatory and processing them into completed astrophotos. Students will learn to use the observatory's primary astrograph and imaging system to create automated sequences that will collect exposures of their chosen target(s) overnight using different light filters. Much of the course will then be spent learning how to process and combine these exposures into single color images which will then be refined with photo-editing techniques. Along the way we will cover how digital camera sensors and telescope optics work to collect light and technical aspects of both terrestrial and astronomical photography. Once the basics are established, students will pursue independent projects according to their interest and will receive tailored instruction to support their project goals. This class will meet during regular daytime class blocks, evening sessions in the observatory will be optional. The skills taught in this class will be critical to students interested in further scientific projects using the observatory.

Evolutionary Biology: Comparative Anatomy

Prerequisite: Successful completion of Biology and Chemistry

In this one semester elective we will work our way through the phyla of the animal kingdom from porifera (sponges) to cordata (vertebrates) and everything in between. We will discover the connections between the environment that shapes and drives evolutionary change and the physical forms that these animals take. In biology form and function go hand in hand and we will look at how various creatures solve the puzzle of life with different solutions to managing a harsh world. What adaptations do different animals have in common through evolutionary time? This class will have an emphasis in dissection. We will dissect representative species from the 10 phyla to compare the anatomy and track evolutionary change. This class will include a field trip to the Harvard Museum of Natural History.

Spring Semester Electives

Astronomy

Since the dawn of time humanity has been drawn to the night sky. Over millennia, people all over the world have sought to understand the cosmos and our place within it. In this course we will re-trace their footsteps: from the naming of the constellations and earliest estimates of size and distance, to the technology to analyze the composition of stars just by collecting their light. This class will also emphasize in-person stargazing. We will learn how to use the Perkin Observatory's telescopes and binoculars, and we will often meet after dark instead of the regular class block.

Evolutionary Biology: Organ Systems

How does the human body work, and how have humans evolved to our unique body form compared to our closest evolutionary neighbors, the mammals. All mammals use similar systems to keep their body in homeostasis. In this one semester elective we will work our way through the different systems in the human body and compare them to other mammals. Systems will include digestion, circulatory, respiratory, excretory and vision. Students will learn how the system works for humans, then dissect mammal organs to compare to human body functions. Students will compare the structures of the different organ systems and connect the differences to the adaptations necessary for each species. This class will have an emphasis in dissection.

Prerequisite: Successful completion of Biology and Chemistry

TECHNOLOGY DEPARTMENT

Advanced Topics in Computer Science

This is a year-long course.

This course provides an in-depth study of modern computer science concepts and practical applications. Through a combination of individual and collaborative hands-on projects, learners will sharpen their problem-solving skills and computational creativity. The class will also complete the Create Task required by the College Board, a component of the AP Computer Science Principles exam. Additional topics to be explored include algorithmic complexity and optimization, network engineering and cybersecurity, advanced software engineering, and artificial intelligence/machine learning.

Students will not only gain a deeper understanding of contemporary computing concepts but also develop the technical and collaborative skills needed to tackle complex challenges in today's digital world. Students who have not previously completed *Programming in Python* or *Foundations of Computer Science* must receive instructor's permission to enroll in this course.

(Will be offered in 2025-2026 and then on an every other year basis)

Fall Semester Electives

Technology and Ethics

This is a required course in Technology

In our rapidly evolving world, technology and Artificial Intelligence (AI) have become integral parts of our culture and economy. With this evolution comes a pressing need to address ethical considerations in the creation and utilization of these advancements. Students will develop a holistic perspective on the role of ethical decision-making and “digital citizenship” in the use of technology. More specifically, students will critically examine the ethical implications of utilizing technology and generative AI to generate content, considering its impact on intellectual property rights and the integrity of creative work, and identifying how these tools can advance innovation. We will also explore the profound effects of technology and algorithms on mental health, acknowledge the potential for misinformation and manipulation and critique its bias. Through synthesizing their newfound knowledge, students will cultivate a strong ethical framework to guide their future endeavors in both professional careers and personal lives.

FabLab Projects

It's never been easier to turn your ideas into real-world solutions, and the Makerspace is the place where it can happen! Whether your projects are academic, artistic, or innovative, learning to use 3D printing, laser cutting, and CNC engraving will speed you along the path to success. Both individual and group projects will be undertaken depending on class size and composition, with input from the larger Dublin community. No prior experience necessary.

Technology Directed Studies: Focus on Innovation

In this flexible, project-based technology course, students will take ownership of their learning by choosing from a variety of online courses or tutorials in areas of personal interest. This class lets you dive into what excites you most while building real-world digital skills, whether you're passionate about coding, graphic design, digital media, cryptography, or something else! Along the way, you'll complete individual and collaborative projects that highlight the connections between different tech disciplines. With guidance and mentoring, you'll reflect on your learning, build a portfolio, and showcase your

growth through a final capstone project. This is a great course for self-starters, creative thinkers, and future tech leaders!

CourseKata Statistics and Data Science I

Embark on an exciting journey into the world of data analysis with CourseKata Statistics and Data Science. Dive into the fundamentals of computational logic and data science in a fun and engaging way designed just for you. Learn to use the coding language R to filter, visualize, and summarize large real-life datasets. From understanding and interpreting data to uncovering the power of statistics, this course equips you with the skills to navigate today's data-driven world with confidence. Get ready to unlock the mysteries of data and become a savvy analyst in no time! Prerequisite: Algebra 2

Tinkering with Mechanical and Electrical Engineering

In this course students dive into hands-on learning to understand the engineering behind some common items such as motors, gas or electrical, and electronic systems. We may even explore tinkering with instruments and amplifiers to create new uses or alternative functions for them. Students will gain appreciation for how something works through physical manipulation and will be given the freedom to take on a personal project with an item that fits within this realm to deconstruct, re-construct and perhaps even revitalize into something new.

Film Production: Form

***See description above in Arts (crosslisted)

Midi-Lab I - Electronic Music

***See description above in Arts (crosslisted)

Spring Semester Electives

Technology and Ethics

This is a required course in Technology

Foundations of Computer Science

In this course, students will be taken on a journey into the world of technology and programming. Exploring fundamental computer science concepts such as algorithms, data representation, and computational thinking through hands-on activities, students will build their creative problem-solving skills step-by-step. We will dive into Python programming, learning to write and debug code, create functions, and understand objects. Students will demonstrate their mastery by developing a culminating project that implements an engaging logic game or puzzle. This class is designed to equip students with the fundamental skills needed for future success in practical technology projects. No prior experience is required.

(This class is a prerequisite for Advanced Topics in Computer Science)

Technology Directed Studies: Focus on Innovation

In this flexible, project-based technology course, students will take ownership of their learning by choosing from a variety of online courses or tutorials in areas of personal interest. This class lets you

dive into what excites you most while building real-world digital skills, whether you're passionate about coding, graphic design, digital media, cryptography, or something else! Along the way, you'll complete individual and collaborative projects that highlight the connections between different tech disciplines. With guidance and mentoring, you'll reflect on your learning, build a portfolio, and showcase your growth through a final capstone project. This is a great course for self-starters, creative thinkers, and future tech leaders!

CourseKata Statistics and Data Science II

Continue your journey in the world of data analysis. Dive deeper using complex computational logic and gain more advanced skills to analyze and interpret data. Advance your knowledge using the coding language R by comparing aspects of large real-life datasets, uncovering patterns, and making predictions. Today's data-driven world is ripe with discoveries to be made by savvy analysts like you. Prerequisite: CourseKata Statistics and Data Science I

Solar Energy & its Applications Are you curious and/or passionate about solar energy? Want to build a solar car? How about a solar powered device charger? This course will introduce students to the most renewable source of energy, the sun! Students will be tasked with designing and constructing their own miniature solar devices. Students will develop material knowledge and engineering methodology practices during this course. Through application, students will gain first hand experience of the pros and cons of solar energy due to our current photovoltaic cell constraints. This hands-on course will empower students with the opportunity to test their devices and share feedback regarding the effectiveness of their design process. There are no prerequisites to this course; however knowledge of programming, wiring patterns or how to use a soldering iron may give you a head start. Given the hands-on learning aspect of this course, I look to celebrate alternative styles of education and knowledge.

Film Production

***See description above in Arts (cross-listed)

Midi-Lab II - Song Scoring

***See description above in Arts (cross-listed)