

## 2025-2026 CURRICULUM GUIDE

TEACHING AND LEARNING AT THE FREDERICK GUNN SCHOOL

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## DIPLOMA REQUIREMENTS

FOR ALL STUDENTS ENROLLED AT THE FREDERICK GUNN SCHOOL, 18 CREDITS ARE REQUIRED FOR A DIPLOMA.

### THE DIPLOMA REQUIREMENTS INCLUDE:

- 4 ENGLISH (required every year)
- **3 HISTORY** (including U.S. History)
- **3 LAB SCIENCE**
- 3 WORLD LANGUAGES (through Level III)
- 3 MATHEMATICS (through Algebra II)
- 1 CREDIT VISUAL AND/OR PERFORMING ART

(This can be accomplished through three single-term courses or one full-year course.)

#### IN ADDITION, SUCCESSFUL COMPLETION OR ADHERENCE TO:

**1 TERM OF PATHWAYS** (as a freshman)

**1 TERM OF CITIZEN GUNN** (as a sophomore)

1 TERM OF THE DECLARATION (as a junior)

THE CIVIC CHANGEMAKERS PROJECT (CCP) (30-hour service commitment as a senior)
GOOD CITIZENSHIP (civility and law-abiding behavior)

Seniors must earn a final average of 70 or above and pass all cumulative final exams in diploma requirement courses to meet diploma requirements. Seniors on Academic Warning at year's end do not receive an official diploma. The school reserves the right to withhold a diploma from students with poor citizenship. In such cases, a student receives a Certificate of Attendance and may petition the Head of School in writing for a diploma upon successful, documented completion of one year of college.



#### **DIPLOMA REQUIREMENTS: 4 ENGLISH** (required every year)

Each junior/senior course is labeled with a number (1-4), indicating its level of rigor or challenge (with 4 being the most challenging). Any Honors students in their junior or senior year who are interested in taking the AP Language and Composition exam should speak to their teacher.

### REQUIRED **COURSES**

#### **ENGLISH LANGUAGE AND COMPOSITION**

English Language and Composition is an intensive course for new international students needing a thorough preparation in English listening, reading, writing, and conversation for successful academic work in a U.S. college preparatory program. Students review verbs, verbals, and syntax for both formal and informal English to address English grammar skills. They also study academic and idiomatic vocabulary. The course is open only to new international students.

#### **ENGLISH I**

English I seeks to establish a solid foundation for subsequent study in both literature and composition. Through an examination of a range of literature, students are encouraged to consider other perspectives, reflect on their own perspective. and begin to recognize patterns in literature. Class discussions and group work help to facilitate these explorations. Writing assignments are creative, expository, and critical in nature. In addition, instruction in advanced reading skills and grammar gives students a sense of the structure and the patterns found in various literary forms, including short stories, novels, poetry, and drama.

#### **ENGLISH II**

English II sets forth to explore the enduring and evolving power of literature. In this journey, students read epic poetry, novels, drama, and short fiction, pairing older and more contemporary texts to examine the human condition through subjects such as heroism, villainy, otherness, loyalty, honor, and power. Through class discussions and written reflections, students learn to engage with the assigned readings from an increasingly analytical perspective. In addition, students review grammatical concepts in order to improve their writing skills, study vocabulary in context, and continue to develop as critical thinkers.

#### **ENGLISH II HONORS**

Students in this class move into independent analytical work earlier than those in the regular course, are expected to play an active role in student-driven discussions, and will be asked to examine additional and alternative readings. Admission is based on past performance, teacher recommendations, and approval of the Academic Office and English Department Chair.

#### **LOOKING FOR AMERICA (2)**

This course explores an American landscape, literally and imaginatively, and considers how the idea of America shapes and is shaped by the stories we tell about it. Students will read a selection of fiction and non-fiction with a particular focus on the perspectives of immigrants, dreamers, outcasts, and wanderers, keeping in mind the literary and historical contexts in which they are grounded. As in English I and English II, students will continue to develop their skills as close readers, critical and creative thinkers, and analytical writers.

#### HONORS ENGLISH: THE SOCIOCRITICAL ESSAY (3)

This yearlong Honors English course, open to juniors and seniors, is designed to explore and practice the personal essay within the context of a larger society. It explores concepts of self and society through a variety of specific topics, including literacy, education, identity, and ethics. Students will engage in class discussion led by their own critical thinking and critical questioning while also centering their own lived experience. Through that process, they will learn to examine their own ideas as they work toward developing a more fully formed written voice. This course contains a robust writing component that focuses on and encourages the writing process as much as, or more than, the final written product. At the end of the fall and spring terms, students will be expected to develop portfolios showcasing their written work.

## HONORS ENGLISH: LITERARY CRITICISM AND CRAFT (3)

This yearlong Honors English course, open to juniors and seniors, is an intensive examination of literature from the writer's perspective. Students will assume the roles of writers, learning from other writers, analyzing critically the formal elements of poetry, drama, and literary short fiction to understand how those elements combine to form a fully-realized work of literature. While establishing this theoretical foundation, students will take up the pen and create original works of poetry, drama, and short fiction in their own right. Assignments will include daily reading assignments, critical essays, and opportunities to craft and workshop original works of poetry, drama, and short fiction.

## CRITICAL READING AND COMPOSITION (1)

The purpose of this course is to give students the opportunity to take a deep dive into basic approaches to critical reading, discussion, and composition. Over the course of the school year, they will explore a variety of literary forms including short fiction, the novel, drama, and poetry — with a strong emphasis placed on close reading skills. Writing assignments will include frequent journal responses as well as longer, more formal pieces, and each term will focus on at least one particular type of expository essay. Time and attention will be devoted to each stage of the writing process: from pre-writing through drafting and revision. As well, we will invest significant time in examining grammar and usage topics specifically related to the construction and revision of sentences.

#### LITERARY GENRES (2)

Literary Genres focuses on the close reading of a variety of forms of literature and the ways in which their structures help to create meaning. The class will examine scripts for stage and screen, novels, short stories, and poetry/music, spanning the 16th through 21st centuries, with each term focusing on a particular form. Students will be expected to read and engage with texts through formal and informal discussion, journal writing, and essay writing. They will also give presentations on course-appropriate topics. As in English I and English II, students will continue to develop their skills as close readers, critical and creative thinkers, and analytical writers.

## ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION (4)

The AP English Literature course focuses on the careful reading, critical analysis, and enjoyment of imaginative literature. It includes the close reading of selected works of fiction, drama, and poetry from the 16th to the 21st century; the development of critical thinking skills; formal essay and informal journal writing; and AP practice exercises. Because a high score on the AP exam may earn college credit, the course may be considered equivalent to college freshman English. A supplementary reading assignment will be required over the summer for review in the fall. Admission is based on past performance, teacher recommendations, and approval of the Academic Office and English Department Chair.

#### **NATURE WRITERS (2)**

This is a writing-intensive course for students interested in nature. New England is famously home to some of the most well-respected nature and environmental writers, and you can join in that tradition! We will read and write both poetry and nature essays while also spending time outside observing, hearing, and touching the natural world of which we are all a part. Whether on or off campus, or on a field trip, expect to experience your external — and internal — worlds in new ways, and learn how to communicate your new perspective through a variety of written genres, including a long-form, personal, scientific narrative, local history essays, and creative research projects.

## HONORS ENGLISH: READING AND RHETORIC (3)

This yearlong Honors English course, open to juniors and seniors, is designed to help students make the shift from reading and writing as skills to reading and writing as art forms. Students will explore and practice rhetorical analysis both in its classic context of speech/essay critique as well as using it as a lens for reading literature. By expanding their notion of "text" to include more than just essays, poems, and stories, students will think critically about the world around them as they observe advertisements, social media posts, posters, songs, and more. The overall goal of this course is to provide students with the skills and tools necessary to be careful, considered, and persuasive readers, writers, and thinkers.

This course seeks to track down and unmask the complicated, shadowy figure of the author by interrogating the notion of authorship itself. What, for instance, does it mean to be original? What does it mean to be creative? Where does inspiration come from, and what is the relationship between an idea and the expression that follows from it? What, ultimately, can it mean to claim ownership of an essay, a poem, a song, a story? Students will complete a number of short- and long-term creative projects and read a broad range of texts, including essays, fiction, poetry, articles, and legal opinions, to explore the above questions and the implications they have for human expression today.



#### **DIPLOMA REQUIREMENTS:** 3 WORLD LANGUAGES (through Level III)

### **REQUIRED COURSES** FRENCH LANGUAGE

#### **FRENCHI**

This course provides students with an introduction to the four basic skills of language learning: listening, speaking, reading, and writing. Students are introduced to basic French syntax and structures, verb forms, and extensive vocabulary via thematic units. They develop an awareness of Francophone culture through exposure to a variety of authentic sources. Students must earn a passing grade in the course and a minimum score of 50% on the cumulative final exam in order to receive credit and advance to the next level

#### FRENCH II AND FRENCH II HONORS

In these courses, students will continue to hone their listening, speaking, reading, and writing skills. Thematic units serve as the vehicle for expanding the students' vocabulary and exposing them to a wider variety of grammar structures. Cultural context will continue to be a key factor in increasing the students' knowledge and understanding of the Francophone world. Students must earn a passing grade in the course and a minimum score of 50% on the cumulative final exam in order to receive credit and advance to the next level. The materials for these courses are from D'accord 2 (Vista), original materials generated by the teacher, and culturally authentic sources that are adapted by the teacher.

#### FRENCH III AND FRENCH III HONORS

In these courses, students will build upon the skills they have developed over the past two years. They will continue to acquire a wider variety of verb tenses and more advanced grammar structures, expand their range of vocabulary and idiomatic expressions, and further their knowledge and understanding of the Francophone world. Students will also enhance their reading skills by reading longer passages from the text as well as a short reader. Students must earn a passing grade in the course to receive credit and fulfill their graduation requirements.

## **ELECTIVE COURSES** FRENCH LANGUAGE

#### FRENCH IV: UNDERSTANDING OF **CONTEMPORARY FRENCH CULTURE**

"Liberté, égalité, fraternité" define the French spirit and the core values and fundamental principles of French society. These three words also apply to French culture, free, diverse, but always unified. This course will introduce students to contemporary French culture by studying modern French literature, fine arts, architecture, cinema, music, sport, fashion, and gastronomy. Students will practice listening, reading, writing short paragraphs, and reviewing basic grammar concepts. This course's primary focus will be developing speaking skills through group and individual projects. Admission is based on past performance, teacher recommendation, and approval of the Department Chair.

#### ADVANCED PLACEMENT FRENCH **LANGUAGE**

This course is conducted entirely in French and prepares students to take the AP French Language and Culture Exam in the Spring Term. Students develop proficiency in listening, speaking, reading, and writing through a study of six cultural themes: les défis mondiaux, la science et la technologie, la vie contemporaine, la quête de soi, la famille et la communauté, et l'esthétique. Video clips, songs, online sources, and newspapers supplement the required texts and are used weekly to explore the Francophone world. Expectations of student participation are high. All students are required to take the Advanced Placement exam. Admission is based on past performance in French IV, teacher recommendation, and approval of the Department Chair.

## REQUIRED COURSES MANDARIN LANGUAGE

#### **MANDARIN I**

This course in Mandarin (Putōnghuà) is designed for students with minimal to no prior exposure to the Chinese language. The emphasis of this course is to develop listening, speaking, reading, and writing skills using simplified Chinese characters. These will be taught using course materials, including the "Integrated Chinese: Level 1" textbook (4th Edition), which students will progress halfway through by the end of the year, learning approximately 150 words and 175 characters. Students will develop the ability to make introductions, discuss family, schedule appointments, and share hobbies, likes, and dislikes. Cultural lessons will also complement language instruction to help students gain a broader understanding of the Chinese-speaking world. Students can certify their interpersonal language abilities by taking the AAPPL exam in the spring. A passing grade in the course and a minimum score of 50% on the cumulative final exam is required to receive credit and advance to the next level.

#### **MANDARIN II**

This course in Mandarin (Putōnghua) is designed for students who have had one full year of study or equivalent in Chinese. Students will study more complex grammar and specialized vocabulary to further develop their listening, speaking, reading, and writing skills. Greater emphasis is placed on speaking and writing at length, with the goal of practicing paragraph-length discourse. Course materials include the "Integrated Chinese: Level 1" textbook (4th Edition), which students will study during the second half of the academic year, learning over 200 new words and characters. Cultural lessons will complement language instruction to help students gain a broader understanding of the Chinese-speaking world. Students have the option to certify their interpersonal language abilities by taking the AAPPL exam in the spring. A passing grade in the course and a minimum score of 50% on the cumulative final exam is required to receive credit and advance to the next level.

#### **MANDARIN III**

This course in Mandarin (Putonghua) is designed for students who have had two full years of study or equivalent in Chinese. Students will continue to study more complex grammar and specialized vocabulary to further develop their listening, speaking, reading, and writing skills. Greater emphasis is placed on listening to and reading longer-form materials as well as speaking and writing at length, with the goal of achieving comfort producing and engaging with paragraph-length discourse. Course materials include the "Integrated Chinese: Level 2" textbook (4th Edition) as well as supplementary, authentic reading and listening materials. Students will learn hundreds of new words and characters and be expected to communicate almost entirely in Mandarin in the classroom. Cultural lessons will also complement language instruction to help students gain a broader understanding of the Chinese-speaking world. Students have the option to certify their interpersonal language abilities by taking the AAPPL exam in the spring. A passing grade in the course is required to receive credit and fulfill graduation requirements.

## ELECTIVE COURSE MANDARIN LANGUAGE

#### **MANDARIN IV**

This elective course in Mandarin (Putōnghuà) is for students who have had three full years of study or equivalent, or greater, in Chinese. Students will attend class in an immersive language environment in order to best improve their listening, speaking, reading, and writing skills. This course has no designated textbook, but will instead pull authentic language materials from a variety of sources to expose students to a more diverse spectrum of the Chinese language. Students will continue to study more complex grammar structures and specialized vocabulary, including idioms, and will routinely be expected to produce longerform compositions and spoken presentations to improve their ease of expression in both speaking and writing. Cultural lessons and discussions will also complement language instruction to help students gain a greater understanding of the Chinese-speaking world. Students are encouraged to certify their interpersonal language abilities by taking the AAPPL exam in the spring. Admission to the course is based on past performance, teacher recommendation, and approval of the World Languages Department Chair.

## **REQUIRED COURSES** SPANISH LANGUAGE

#### **SPANISH I**

This course provides students with a foundation in the four essential skills of language learning: listening, speaking, reading, and writing. Thematic units serve as the vehicle for introducing students to basic Spanish syntax and structures, verb forms, and extensive vocabulary. Students also develop an awareness of Hispanic culture through exposure to a variety of authentic sources. Students must earn a passing grade in the course and a minimum score of 50% on the cumulative final exam in order to receive credit and advance to the next level. The materials for this course are from "Senderos. Level 1" and original, culturally authentic materials generated by the teacher.

#### **SPANISH II AND SPANISH II HONORS**

In these courses, students will continue to hone their listening, speaking, reading, and writing skills. Thematic units serve as the vehicle for expanding the students' vocabulary and exposing them to a wider variety of grammar structures. Cultural context will continue to be a key factor in increasing the students' knowledge and understanding of the Hispanic world. Students must earn a passing grade in the course and a minimum score of 50% on the cumulative final exam in order to receive credit and advance to the next level. The materials for these courses are original materials generated by the teacher and culturally authentic sources that are adapted by the teacher.

#### SPANISH III AND SPANISH III HONORS

In these courses, students will build upon the skills they have developed over the past two years. They will continue to acquire a wider variety of verb tenses and more advanced grammar structures, expand their range of vocabulary and idiomatic expressions, and further their knowledge and understanding of the Hispanic world. Students will continue to enhance their reading and listening skills through various activities and projects. The materials for this course will be "Senderos, Level 2," emphasizing and refining grammar learned in Spanish II while incorporating materials from the second half of the book. Additionally, students will engage with original, culturally authentic materials created by the teacher. Students must earn a passing grade in the course to receive credit and fulfill their graduation requirements.

## **ELECTIVE COURSES** SPANISH LANGUAGE

#### **SPANISH IV**

#### POPULAR CULTURE IN LATIN AMERICA

This course will embark on historical moments vital to understanding the shaping of Latin America today. It will explore social and cultural identities crucial to understanding Latin American cultures. Taught primarily in Spanish, it will seek to refine and expand the basic skills of listening, reading, writing, and speaking. Students will research, read. and discuss various works, including music, poems, online resources, excerpts from interviews, short stories, and novels grouped into thematic units. In addition, students will screen and discuss films relevant to the themes. The course will provide students with a review and expansion of essential grammar concepts, intending to develop the student's ease of expression in conversation and writing.

#### **ADVANCED PLACEMENT SPANISH LANGUAGE**

This course is conducted entirely in Spanish and prepares students to take the AP Spanish Language and Culture Exam in the Spring Term. Students develop proficiency in listening, speaking, reading, writing, and culture through the study of six themes: global challenges, science and technology, contemporary life, personal and public identities, families and communities, and beauty and aesthetics. Video clips, songs, online sources, and newspapers supplement the required texts and are used to explore the Hispanic world. Expectations for student participation are high, and the Advanced Placement exam is required of all students. Admission is based on past performance in Spanish IV, teacher recommendation, and approval of the World Languages Department Chair.

## WORLD LANGUAGE DEPARTMENT ELECTIVE COURSE

#### **WORLD LANGUAGE CULTURES**

In this course, students will explore a comprehensive understanding of diverse cultural elements from French, Mandarin, and Spanish backgrounds. They will delve into the historical and geographical contexts of countries where these languages are spoken, engage with classic literature, including novels, and analyze related films and video clips. Additionally, students will learn about and commemorate typical holidays, develop fundamental grammar and vocabulary skills, and examine various art forms. Those with prior language experience will take on leadership roles during language basics. This course is designed to cultivate and enrich students' cultural awareness within the languages offered by the World Languages Department. Prerequisites include teacher recommendation and approval from the World Languages Department Chair. Texts include "The House on Mango Street," by Sandra Cisneros, "Colors of the Mountain," by Da Chen, and "Waiting for Godot," by Samuel Beckett.

NOTE: THE DEPARTMENT RESERVES THE RIGHT TO OFFER ONLY THOSE ELECTIVE OR ACCELERATED COURSES THAT MEET MINIMUM ENROLLMENT REQUIREMENTS.

## INDEPENDENT STUDY PROJECT

The Frederick Gunn School supports the study of languages not offered by our faculty through our Independent Study Project (ISP) option. Students with a foundation of study or speaking in a non-offered language can be supported through an online learning platform and supervised by the World Languages Department Chair. Please follow the ISP process at the end of this guide and note that an exemption can be made to the prerequisite of ISPs only being open to returning students.





## REQUIRED COURSES

#### MATHEMATICS 10 ALGEBRA I

This is an introductory course in algebra. Topics include field axioms, operations on real numbers, solving linear equations and systems of linear equations, graphing linear equations and inequalities, exponents, radicals, polynomials and factoring, and quadratic functions. There is a heavy emphasis on problem-solving strategies. A TI-84 Plus graphing calculator is required. Students must pass both the course and the cumulative final exam in order to receive credit in this diplomarequirement course.

#### **MATHEMATICS 20 GEOMETRY**

This course emphasizes problem-solving in real-life situations using geometric concepts. Formal proofs are introduced but greater attention is devoted to practical applications, such as perpendicular lines and area, as well as the language of geometry. A TI-84 Plus graphing calculator is required. Students must pass both the course and the cumulative final exam held at the end of the Winter Term in order to receive credit in this diploma-requirement course. Students will study algebra during the Spring Term.

#### **MATHEMATICS 21 GEOMETRY**

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This course stresses the language of geometry, the development of proof, and the appropriate applications from algebra. The use of definitions, postulates, and theorems to justify conclusions will be emphasized. A TI-84 Plus graphing calculator is required. Admission is based on past performance, teacher recommendation, and department chair approval. Students must pass both the course and the cumulative final exam in order to receive credit in this diploma-requirement course.

#### **MATHEMATICS 29 TOPICS IN ALGEBRA II**

This is a second course in algebra. Topics include an in-depth look at linear, quadratic, and rational functions. Other topics may include: statistics, probability, and trigonometry. Students will be asked to analyze problems analytically, numerically, and graphically. A TI-84 Plus graphing calculator is required. Students will be placed in this course based on placement test results, current teacher recommendation, and department chair approval. Students must pass both the course and the cumulative final exam in order to receive credit in this diploma-requirement course.

#### **MATHEMATICS 30 ALGEBRA II**

This is a second course in algebra. Topics include natural numbers and integers, rational numbers, linear equations, polynomials and factoring, coordinate geometry, complex numbers, relations and functions, exponents and logarithms, quadratic relations, and word problems. A TI-84 Plus graphing calculator is required. Students must pass both the course and the cumulative final exam in order to receive credit in this diploma-requirement course.

## MATHEMATICS 32 ALGEBRA II HONORS AND TRIGONOMETRY

This is a more demanding and enriched Algebra II curriculum with additional topics that include transformations of functions, exponential and logarithmic functions, trigonometry, the law of sines and cosines, and complex numbers. This class brings together talented students who enjoy math and whose scholarship indicates a strong sense of responsibility. Admission is based upon past performance, teacher recommendation, and department chair approval. A TI-84 Plus graphing calculator is required. Students must pass both the course and the cumulative final exam in order to receive credit in this diploma-requirement course.

## ELECTIVE COURSES

### MATHEMATICS 40 TOPICS IN MATHEMATICS

- M40 MONEY MATTERS: This term course is offered in the Fall Term. This financial skills class equips students with financial literacy skills to help them navigate real-world financial situations. Students will learn how to be financially responsible, budget money, make various types of investments, set goals for future financial decisions they may make. and make career considerations. By the end of this course, students will have a comprehensive toolkit to build a financially secure future. Students should enjoy project-based learning and engaging in out-ofclass projects for homework. This course is open to students who have completed Algebra II. This course can be taken with Stock Market and Business Structures for a full-year math credit, or taken for a term to earn 1/3 of a math credit.
- M40 STOCK MARKET: This term class is offered in the Winter Term. This class will allow students to develop a strong foundation in analyzing how the stock market operates, individual stocks, analyzing companies' qualities, and then extending that knowledge into an idea for a startup company of their own. Students should enjoy project-based learning and engaging in out-of-class projects for homework. This course is open to students who have completed Algebra II. This course can be taken with Money Matters and Business Structures for a full-year math credit, or taken for a term to earn 1/3 of a math credit.
- M40 BUSINESS STRUCTURES: This term course is offered in the Spring Term. Key business topics include understanding basic accounting principles and analyzing financial statements, such as income statements, balance sheets, and cash flow statements. On the personal finance side, students will gain insights into different types of insurance, employee benefits, and strategies for planning for retirement. Students should enjoy project-based learning and engaging in out-of-class projects for homework. This course is open to students who have completed Algebra II. This course can be taken with Money Matters and Stock Market for a full-year math credit, or taken for a term to earn 1/3 of a math credit.

#### **MATHEMATICS 41 STATISTICS**

This course is for students who have completed Algebra II. The course is intended to expose students to a selection of fundamental concepts in statistics while making the underlying, implicit assumptions of the field about the relationship between math and the world explicit. The fall will focus on the nature of measurement. The winter will concentrate on what "data" means, and statistics' methodological framework therein. Lastly, the spring will look at statistics in action, from student projects to how large language models (AI) work. The course will explore these topics and themes through a mixture of primarily class discussions and in-class activities.

#### **MATHEMATICS 45 PRECALCULUS**

This course is intended for students who have completed Algebra II and want to continue their study towards calculus. Topics include: analysis of polynomial functions, exponential and logarithmic functions, trigonometric functions, sequences and series, complex numbers, translating graphs, and applications. Heavy emphasis is placed on trigonometry. Admission is based on past performance, teacher recommendation, and department chair approval. A TI-84 Plus graphing calculator is required.

## MATHEMATICS 50 TRIGONOMETRY/CALCULUS A

This course is open to students who have completed Algebra II and received a recommendation from their previous teacher and the department chair. During the Fall Term, students will review functions while discussing new calculus concepts such as limits, maximum and minimum values, and concavity. During the Winter Term, students will dive into exponential, logarithmic, and trigonometric functions. During the Spring Term, students will tackle additional topics in calculus, and other topics chosen by the teacher. The course will tackle all problems with a similar approach that will be used in the AP Calculus curriculum. A TI-84 Plus graphing calculator is required.

## MATHEMATICS 51 CALCULUS AND ANALYTIC GEOMETRY

This course is intended for students who have completed Precalculus and have a knowledge of college preparatory mathematics, including algebra, axiomatic geometry, trigonometry, and analytic geometry. It does not assume that they have acquired a sound understanding of the theory of elementary functions. The development of this understanding is the first priority of the course. Differentiation and integration techniques and applications will be studied. Admission is based on past performance, teacher recommendation, and department chair approval. A TI-84 Plus graphing calculator is required.

## MATHEMATICS 52 ADVANCED PLACEMENT CALCULUS AB

This course follows the AP syllabus for Calculus AB. The course is intended for students who have completed Precalculus or Algebra II Honors and Trigonometry and have a thorough knowledge of college preparatory mathematics, including algebra, axiomatic geometry, trigonometry, and analytic geometry. Heavy emphasis is placed on the development of differential and integral calculus. Admission is based on past performance, teacher recommendation, and department chair approval. The Advanced Placement exam is required of all students enrolled in this course. A TI-84 Plus graphing calculator is required.

## MATHEMATICS 53 ADVANCED PLACEMENT CALCULUS BC

This course follows the AP syllabus for Calculus BC and is for students who have completed Calculus AB. After the introduction to differential and integral calculus, topics discussed include analytic geometry, polar coordinates, differential equations, parametric equations, and infinite series. Admission is based on past performance, teacher recommendation, and department chair approval. A TI-84 Plus graphing calculator is required. The Advanced Placement examination is required of all students enrolled in this course.

## MATHEMATICS 54 ADVANCED PLACEMENT STATISTICS

This course is for students who have completed Precalculus. Topics include: exploring data using various graphical and numerical methods, data collection and analysis, probability, statistical inference, using appropriate models, and tests of significance. Admission is based on past performance, teacher recommendation, and department chair approval. A TI-84 Plus graphing calculator is required. This course will follow and complete the Advanced Placement curriculum. The Advanced Placement exam is required of all students enrolled in this course.

#### **M55 ADVANCED MATHEMATICS**

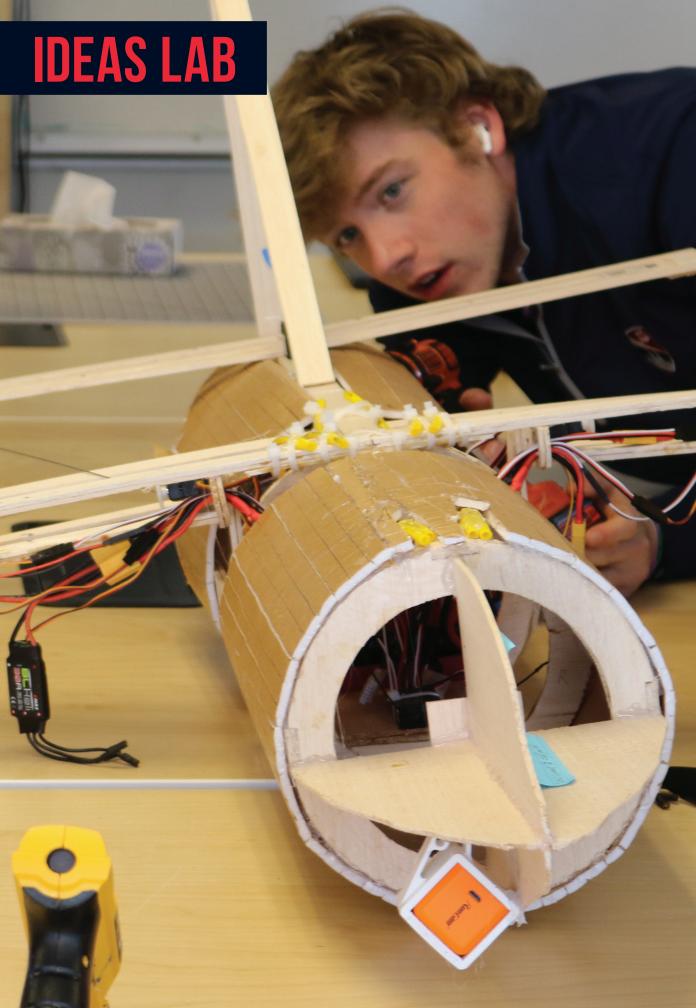
Post-AP Mathematics: This course brings together students who have completed one or two years of AP Calculus and have an interest in exploring college-level mathematics. This course is under development and will likely include linear algebra, mathematical proofs, and multivariable calculus explorations. Admission is based on a recommendation from the department head.

#### ADVANCED COMPUTER SCIENCE

Advanced Computer Science is a course designed to provide students with a comprehensive understanding of computer science concepts and their applications. The course covers topics such as algorithms, data structures, programming, and problem-solving. Utilizing the Java programming language, students will apply their knowledge to create original programs. Emphasis is placed on the development of critical thinking skills, creativity, and the ability to design and analyze algorithms. Students will be expected to participate in group projects, problem-solving activities, and individual programming assignments. Although not a requirement, this course is designed to prepare students for the AP Computer Science exam, as well as for further study in computer science or related fields.

## INDEPENDENT STUDY IN ADVANCED MATHEMATICS

The Frederick Gunn School supports the study of advanced topics in mathematics through our Independent Study Project (ISP) option. Depending on student interest, this may take the form of a nontraditional course. Please follow the ISP process. See the Independent Study Project section at the end of this guide.



## ONE-TERM COURSES

#### INTRODUCTION TO ENGINEERING

This course is designed to provide students with an introduction to the engineering design process, and provide hands-on experience using Onshape, a cloud-based computer-aided design (CAD) software. The main focus of the course will be on a one-term project, where students will work in teams to design and build a remote-controlled hovercraft. Throughout this project, students will learn the principles of engineering design, including conceptualization, prototyping, testing, and iteration. By the end of the course, students will have a deep understanding of the engineering design process and the skills needed to use computer-aided design software to begin designing and building their own projects. No prior experience necessary.

## FULL-YEAR COURSES

#### **ENGINEERING I**

In this full-year engineering course, students will dive deeper into the engineering design process as they work through a number of individual and group projects, utilizing technologies such as Onshape, Arduino, Raspberry Pi, and Python coding. Building on prior knowledge, students will experiment with more advanced CAD techniques to create, edit, analyze 3D models, and prepare their designs for fabrication. Additionally, students will work through projects that utilize both an Arduino microcontroller and a Raspberry Pi, a small, low-cost computer, to build projects that interact with the physical world. They will learn how to control these devices using Python, a widely used programming language, and use it to read sensor data, control devices, and communicate with other systems. Throughout the course, students will work to integrate the skills and technologies learned in class, culminating in a final project. Students will apply their skills and knowledge to design, build, and program their own project. Prerequisite: Introduction to Engineering or similar.

#### **ADVANCED ENGINEERING**

Advanced Engineering is a challenging course that combines hands-on engineering projects with entrepreneurship skills. The course focuses on the design, development, and commercialization of innovative engineering solutions. Students will work in teams to complete a capstone project that integrates engineering principles with business strategies. The project will require students to identify an engineering problem, conduct market research, and create a product that addresses the problem. This course is designed for students with a strong background in engineering who are interested in applying their skills in a real-world setting. Students will develop a deep understanding of how to create and launch a successful engineering-based startup, and will gain valuable experience in product development, market analysis, and business planning. The course is an excellent opportunity for students who are interested in entrepreneurship, innovation, and the commercialization of technology. Prerequisite: Engineering I or similar.

#### **INTRODUCTION TO ROBOTICS**

This full-year course will use the Vex Robotics platform as a way for students to learn the fundamental concepts of robotics and programming. Students will work in teams to design, build, and program robots using Vex Robotics kits and software. Through hands-on projects and challenges, students will learn about mechanical design, electronics, sensor integration, and programming concepts such as control structures, loops, and functions. Additionally, this course will cover the use of VEXcode, a text-based programming language that allows students to write programs to control their robots. A strong emphasis will be placed on problem-solving, critical thinking, and collaboration, as students work together to design and program their robots to complete various challenges and competitions. By the end of the course, students will have gained a solid foundation in robotics and programming, and will be able to apply what they have learned to design and build robots for various applications. No prior experience necessary.



### DIPLOMA REQUIREMENTS: 3 LAB SCIENCE

## LABORATORY COURSES

#### **EARTH AND PHYSICAL SCIENCE**

This course provides students with an introduction to conceptual physics as well as topics in earth science and chemistry. Students will explore how science relates to their lives and will practice the skills required to continue their study of science. They will learn to work with formulas, take measurements, follow and generate laboratory procedures, collect and analyze data, read articles about science, debate scientific ideas, study scientists and inventors, and prepare presentations. Major topics include forces and motion, energy conversion, and nuclear processes, among many others. Students will develop skills in observation, analysis, and reasoning in addition to pertinent content that will support future scientific studies and promote a deeper awareness of the world around them. The course will utilize the Biozone book, "Physics of the Universe."

#### **BIOLOGY**

This course introduces students to the fundamental principles of life science. Through engaging lessons, hands-on labs, and interactive activities, students will explore topics such as genetics, evolution, and ecology. Students will develop skills in data analysis, laboratory techniques, and scientific communication. By the end of the course, students will have a strong foundation in biology and an appreciation for the living world around them. Prerequisite: one year of high school-level lab science or permission of Science Department Chair.

#### **BIOLOGY HONORS**

This course introduces basic concepts in biological science, including evolution, plant biology, animal biology, cellular physiology and organization, and general ecology. There will be regular labs in and outside of the classroom that are integral to the course. There will be regular discussions and presentations on topics related to our course material. Prerequisites: one year of high school-level lab science and recommendation of the Department.

#### ADVANCED PLACEMENT BIOLOGY

This course follows the Advanced Placement curriculum and is a rigorous, full-year, college-level biology course. The curriculum focuses on the four Big Ideas of biology: Evolution, Energetics, Information Storage and Transmission, and System Interactions. Subtopics include: genetics, ecology, cell structure and function, and biological diversity. Twenty-five percent of class time is dedicated to inquiry-based lab activities. The Advanced Placement Biology examination is required of all students enrolled in this course. Prerequisites: Chemistry (with a grade of 85% or higher) and recommendation of the Science Department. Any waiver of a prerequisite must be approved by the Science Department Chair.

#### **HUMAN ANATOMY AND PHYSIOLOGY**

This course provides the student with an understanding and appreciation of the major body systems, their structures, and their functions. Clinical consideration and its impact are covered. This course is intended for students who are interested in careers in health-related fields or who simply possess a curiosity to learn more about the human body. Labs and class activities are used for reinforcement of core concepts. Prerequisite: Biology.

#### **ENVIRONMENTAL STUDIES**

This course, open to juniors or seniors, will consider the environment from the perspective of local ecology. It will be a laboratory-based course focused on learning the principles of ecology (the study of the interaction between organisms and their environment) and applying them to our local area. In this course, we will cover topics such as animal behavior, taxonomy, population biology, life histories, landscape ecology, and more. We will use the scientific method to understand and discover information about the space we live in. This course shows us that the fascinating phenomena of nature do not only happen in documentaries in far away places — they happen in our own backyard!

## ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

This full-year laboratory course in environmental science will 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 human-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 embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science. These topics include: energy conversions underlying all ecological processes; the earth as one interconnected system (biogeochemical systems); human impact on the environment, including technology and population impacts; the role of cultural, social, and economic factors in developing solutions: achieving sustainable systems and management of common resources. Prerequisites: two years of lab science, including Biology and/or Chemistry, Algebra II completed or concurrent), and recommendation of the Science Department. Any waiver of a prerequisite must be approved by the Science Department Chair.

#### **PREMED**

The objective of this one-year course is to expose highly motivated high school students, who are interested in pursuing a career in medicine, to an introduction to clinical methods with hands-on experience in medical techniques (such as taking vitals) and a brief exploration of topics such as anatomy, histology, embryology, physiology, cardiology, neuroscience, pathology, immunity, and endocrinology, among others. Prerequisite: English II or higher and at least one of the following: Chemistry, Biology, Physics, Human Anatomy and Physiology, or Environmental Studies. This course has a lab/practical component and thus qualifies as a lab science.

#### **CHEMISTRY**

The objective of this first-level chemistry course is to provide students with an understanding of basic organic and inorganic chemistry. Through lectures, problem-solving, and experimentation, students will learn the fundamentals involved in changes to matter and energy. Topics include: measurement and calculation techniques, what is matter, the elements, atoms and ions and how they interact, nomenclature, chemical composition and reactions, solutions, states of matter, bonding, and how these relate to energy. Experiments are used to familiarize students with the scientific method and good lab practices, and to relate theory to practice. Prerequisite: completion of one year of high school-level lab science.

#### **CHEMISTRY HONORS**

The objective of this first-level honors chemistry course is to provide students with an understanding of basic organic and inorganic chemistry. Through lectures, problem-solving, and experimentation, students will learn about the changes that occur in matter and energy. Topics include: chemical composition, reactions, and quantities, measurement and calculation techniques, what is matter, the elements, atoms and ions and how they interact, nomenclature, solutions, states of matter, bonding, acids-base behavior, and how these relate to energy. Experiments are used to familiarize students with the scientific method and good lab practices, and to relate theory to practice. Students will work towards proficiency in all aspects of quantitative analysis along with enhanced problemsolving skills. Students should be enrolled in Algebra II or a higher math course.

#### ADVANCED PLACEMENT CHEMISTRY

Advanced Placement Chemistry is a rigorous, full-year, college-level course. Students in this course will attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. Topics include: chemical bonding, molecular models (geometry), atomic structure and theory, states of matter (gas, liquid and solid), chemical reaction types, solutions and equations, equilibrium, chemical kinetic theory, and stoichiometry. The topics covered emphasize chemical calculations and mathematical formulation of basic chemical principles. The increased quantitative emphasis beyond that conducted within the basic chemistry class appears both in each of the topics and in the time spent by students in laboratory analysis and calculations. Prerequisites: Chemistry Honors (with average grades of 85% or higher), completed Algebra II, and recommendation by the Science Department. Any waiver of a prerequisite must be approved by the Science Department Chair.

#### **PHYSICS**

This course surveys major topics in physics: laws of motion, universal gravitation, heat transfer and thermodynamics, electricity and magnetism, vibrations and waves, sound, light, color, optics, and atomic and nuclear physics. While the course emphasis is on conceptual knowledge of physics, there is a high level of routine manipulation of algebraic equations and weekly analysis of laboratory data. An online instructional tool will be utilized throughout the course. Prerequisites: Algebra II (completed or taken concurrently), one year of a lab science completed, and Science Department recommendation.

#### **ADVANCED PLACEMENT PHYSICS 1**

This full-year laboratory course is equivalent to a first-semester college course in algebrabased physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves, simple harmonic motion and sound. Students should be enrolled in Algebra II or a higher-level math class (with average grades of 85% or higher), and be recommended by the Science Department. No prior physics course is required for this class. Waivers to prerequisites must be approved by the Science Department Chair. The Advanced Placement Physics 1 final examination is required of all students enrolled in this course. An online instructional tool will be utilized throughout the course.

#### **ADVANCED PLACEMENT PHYSICS 2**

This full-year laboratory course is equivalent to a second-semester college course in algebra-based physics. This course covers fluid mechanics: thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics. Students should have completed Algebra II and be enrolled in Precalculus or a higher-level math class (with average grades of 85% or higher); completed AP Physics 1 or an equivalent (with average grades of 85% or higher), and be recommended by the Science Department. Waivers to prerequisites must be approved by the Science Department Chair. The Advanced Placement Physics 2 final examination is required of all students enrolled in this course. An online instructional tool will be utilized throughout the course.

## SCIENCE ELECTIVES (NON-LAB COURSES)

#### **ABNORMAL PSYCHOLOGY**

This is an introductory, one-term course to clinical psychology and human psychopathology. This course introduces students to vocabulary and fundamental diagnostic procedures of people with cognitive, mental, and emotional disorders. The major classes of mental disorders are reviewed as guided and diagnosed by the DSM-5. The course material is interdisciplinary: it examines biological, medical, psychological, social, cultural, and political aspects of mental illness. Students are taught ways to formulate and analyze psychopathology, with the purpose of helping them develop an introductory but integrated understanding of mental disorder and intervention. Focus will be on diagnosis, epidemiology, course of the disorder, etiology, and treatment issues. We will also briefly examine ethical and legal issues pertaining to psychopathology. A major goal of the course is to promote greater awareness and knowledge of psychopathology in hopes that we can reduce the suffering and stigma associated with mental disorders.

#### **BOTANY**

This class provides an introduction to the fundamental principles of botany and horticulture, covering plant biology, growth processes, and practical techniques for cultivating and managing plants. Students will be exposed to a variety of living green plants, understand how to grow and harvest crops, and become educated on how to design their own garden plot. Regular labs and outside classes will take place. Experiential learning will enhance comprehension for the participants.

#### **VERTEBRATE PHYLOGENY**

This class explores the evolutionary development of vertebrates, tracing their origins and physiological adaptations from early species to modern-day forms across geological time periods. Students will start the term with the oldest ancestor of mammalian history and follow the evolution of major adaptations and extinctions that led to the animals we have on our planet today. Regular labs will occur as well as exposure to various specimens.

#### **HERPETOLOGY**

This course, offered in the Spring Term, provides an in-depth introduction to amphibians and reptiles. Students will explore the biology, ecology, behavior, and conservation of frogs, salamanders, lizards, snakes, turtles, etc. Through lectures, hands-on dissections, and frequent outdoor field studies, students will learn how to identify species, study their habitats, and understand their roles in ecosystems.



**DIPLOMA REQUIREMENTS 3 HISTORY** (including U.S. History)

## UNDERCLASSMEN REQUIRED COURSES

WORLD HISTORY, MODERN GLOBAL HISTORY, AND U.S. HISTORY (TAKEN JUNIOR YEAR) ARE REQUIRED FOR GRADUATION. STUDENTS MUST EARN THREE HISTORY CREDITS TO MEET THE GRADUATION REQUIREMENT.

#### **WORLD HISTORY**

Freshman history is a big picture, thematic, and systematic examination of the past, from the early humans to modernity. As a class, we will seek out common themes and patterns that can help us better understand people, civilizations, and the world we live in. Our focus will include our human connection to all that is around us. both environmental and cultural, and as such the class will draw on many disciplines to inform our historical analysis. Students will encounter challenging ideas and difficult questions, and through these they will learn to make multidisciplinary connections. In engaging new ideas and information from a variety of sources, students will learn how to hypothesize, ask useful questions, seek out appropriate resources, analyze documents and content, make and support specific points, and write a clear and cogent argument.

#### **MODERN WORLD HISTORY**

Sophomore history builds on the topics studied in World History by exploring important themes and historical turning points, and assessing their impact on the modern world. Students will explore the Renaissance, the Age of Exploration, the Enlightenment, the Industrial Revolution, the World Wars, and the Cold War. The course will also cover the rise of nationalism, imperialism, and decolonization as well as globalization. Students will analyze the complex and ongoing conflicts in the world with particular focus on selected tensions in the Middle East, Asia, and Africa. Emphasis is given to the continued instruction and the practice of essential skills such as research, evaluating the credibility of sources, analyzing primary sources, developing historical arguments, and respectful debate and discussion.

#### **MODERN WORLD HISTORY HONORS**

Sophomore history builds on the topics studied in World History by exploring important themes and historical turning points, and assessing their impact on the modern world. Students will explore the Renaissance, the Age of Exploration, the Enlightenment, the Industrial Revolution, the World Wars, and the Cold War. The course will also cover the rise of nationalism, imperialism, and decolonization as well as globalization. Students will analyze the complex and ongoing conflicts in the world with particular focus on selected tensions in the Middle East, Asia, and Africa, Emphasis is given to the continued instruction and the practice of essential skills such as research, evaluating the credibility of sources, analyzing primary sources, developing historical arguments, and respectful debate and discussion. This particular course differs slightly from Modern World History in both its pacing and in its conceptual rigor. Expectations in various themes and skills will be significantly increased from the Modern World History level. Students must be recommended for this course.

#### **UNITED STATES HISTORY**

This course covers specific themes in U.S. History. In the Fall Term, the course focuses on the American Revolution, looking at its causes and impact, and explores the Constitution and the Bill of Rights, historically, and in the contemporary context. The Winter Term covers the antebellum era, the Civil War, Reconstruction, and explores how this divisive time in American history affected our national and social identity. In the Spring Term, the 1960s as a defining moment in American history is the focus. Topics include the Cold War, the Civil Rights movement, and the Vietnam War. The interdisciplinary Junior Research Paper and formal (and informal) debates provide students with opportunities to sharpen research, writing, and communication skills. Other projects call upon students to work in groups and to become more creative historians. In addition, students will develop active reading and analytical skills to aid in constructing incisive research questions about United States history.

## ADVANCED PLACEMENT UNITED STATES HISTORY

The goal of this course is to provide preparation for the successful completion of the AP examination in American History. Selected documents pertaining to key economic, political, and social developments are discussed and analyzed. The Junior Research Paper, independent research projects, class discussion, and the use of primary material are included. The AP examination is administered to all students enrolled in this course. Students must be approved by the Academic Office, in consultation with the department and using criteria that take into account grades, comments, and intellectual maturity.

## UPPERCLASSMEN ELECTIVE COURSES — FULL YEAR

THE FOLLOWING ELECTIVE COURSES ARE OPEN TO JUNIORS AND SENIORS UNLESS OTHERWISE NOTED IN THE COURSE DESCRIPTION. THE DEPARTMENT RESERVES THE RIGHT TO OFFER ONLY THOSE COURSES THAT MEET MINIMUM ENROLLMENT REQUIREMENTS.

#### **ECONOMICS**

This yearlong course for juniors and seniors offers an introduction to key business concepts, financial literacy, and entrepreneurship. This course begins with a focus on the basics of business and economics. Students will explore different business structures, marketing strategies, management practices, and global commerce. The emphasis will then shift to corporate finance, covering financial statements, incentives, risk management, and capital budgeting. The course will conclude with an introduction to entrepreneurship, with a focus on identifying business opportunities, understanding the entrepreneurial mindset, conducting market research, developing business models, and learning about startup ecosystems. During the course, students will learn the basic vocabulary and concepts to understand economic current events. Throughout the year, students will participate in hands-on projects, case studies. and discussions with guest speakers. Designed to provide a background in economics and develop an entrepreneurial mindset, this course provides the knowledge and tools students need to understand how to start and grow a business, making it perfect for those interested in business, innovation, and creative problem-solving.

## ADVANCED PLACEMENT MICROECONOMICS

Some claim that free markets have an astounding power to improve lives by promoting the most efficient use of resources and distributing goods to those who will benefit from them the most. Others argue that without being constrained by governments, markets concentrate ever greater wealth in the hands of the well-off and place the harms of production on the most vulnerable. Microeconomics explores how free markets work and how government efforts to help can sometimes make problems worse, but how government involvement is also sometimes crucial to having markets arrive at fair and efficient outcomes. Microeconomics gives us a better understanding of the decisions that businesses make, how monopolies differ from competitive markets, and how a capitalist economy adjusts to changing circumstances. This course will prepare students to take the AP Microeconomics Exam in May, and will help students understand how to apply their knowledge of economics to real-world issues and recent events. Taking the AP Microeconomics Exam in May is a course requirement. Enrollment must be approved by the Academic Office, in consultation with the department, using criteria that take into account grades, comments, and intellectual maturity. Students who take this class should be confident in their ability to work with graphs.

## ADVANCED PLACEMENT MACROECONOMICS

What can governments do to make their societies more prosperous? How can they escape economic depressions, shorten recessions and make their economies more productive while avoiding inflation and unemployment? What concerns should we have about large trade deficits with other countries? Macroeconomics explores such questions by applying principles of economics to the economic system as a whole. The course gives special attention to understanding money and the financial system and how Congress and the Federal Reserve Bank can alter the economy. We also examine international trade and consider how monetary differences between countries can influence their trade. All students are required to take the AP Macroeconomics exams in May. In addition to preparing for the exam, students will engage in projects to examine important events in economic history, and they will join ongoing debates about macroeconomic policy. Enrollment must be approved by the Academic Office, in consultation with the department and using criteria that take into account grades, comments, and intellectual maturity. The AP exam emphasizes creating and interpreting graphs, so students considering this class should be confident in their ability to work with graphs.

#### AMERICAN GOVERNMENT

This course provides students with a setting to critically examine and evaluate the multiple expressions of citizenship in the United States of America. The course includes both the study of general concepts used to interpret U.S. government and politics, and the analysis of specific examples. Students will learn the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. The course content will enable students to internalize and demonstrate the values of social responsibility, responsible citizenship, and a commitment to the advancement of the common good, justice, freedom, human rights, and the rule of law.

#### **HONORS PHILOSOPHY SEMINAR**

This course introduces key philosophical, moral, economic, and political concepts from the Ancient Greeks to the 21st century. The class follows a seminar format, where students will be expected to undertake weekly reading of primary sources and engage in informed classroom discussion. Assessment will be based on participation, weekly short writing assignments, and longer essays, where students take a stand on philosophical issues.

#### **GUNN SCHOLAR**

The Gunn Scholar program is an endowed program that offers selected students opportunities to pursue research topics of their own choosing in the Paula and George Krimsky Archives and Special Collections. Students may apply to the program at the end of the junior year and complete a yearlong research project in senior year. Gunn Scholars finalize the scope of their thesis, develop a written record of their research, and present their findings at a conference in the spring. Students conduct primary-source research and place-based learning within the school's archives. In previous years, Gunn Scholars have had opportunities to expand their research to other archives and collections. including those at the National Baseball Hall of Fame and Museum in Cooperstown, New York, the National Archives Museum in Washington. D.C., and the Beinecke Rare Book & Manuscript Library at Yale University Library. A generous gift from the Class of 1957 has assured the annual publication of Gunn Scholar research and each student's illustrated paper is added to the archives. thereby enriching the school's history and creating opportunities for further study. Since 2018, Gunn Scholars have presented their papers at the annual Highlander Summit, hosted by The Frederick Gunn School.

#### **AP EUROPEAN HISTORY**

In AP European History, students investigate significant events, individuals, developments, and processes from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The AP examination is administered to all students enrolled in this course. Students must have completed a full-year course in U.S. history, and be approved by the Academic Office, in consultation with the department and using criteria that take into account grades, comments, and intellectual maturity. Summer work is required.

## UPPERCLASSMEN ELECTIVE COURSES — ONE TERM

THE FOLLOWING ELECTIVE COURSES ARE OPEN TO JUNIORS AND SENIORS UNLESS OTHERWISE NOTED. THE DEPARTMENT RESERVES THE RIGHT TO OFFER ONLY THOSE COURSES THAT MEET MINIMUM ENROLLMENT REQUIREMENTS.

## ACTIVISM AND IDENTITY: THEORY TO PRACTICE

This one-term course focuses on foundational theories of social identity and intersectionality, with an emphasis on activism and practical applications in the context of the United States. Students will seek to answer the question: How do social identities shape individual and collective experiences, and how can understanding these dynamics inspire meaningful political action and social change in the United States? Students will examine social and political theory alongside historical and contemporary movements, actions, and figures, focusing primarily on U.S. history and society. Topics will address conflicts and social issues related, but not limited, to race, gender, religion, and intersectionality within the U.S. context. Once students develop a foundational understanding, they will research practical applications for political action and activism, culminating in proposing and presenting action plans for change. Students will also reflect on their potential impact and role as agents of change.

#### 9/11 AND ITS AFTERMATH

This one-term course focuses on understanding and contextualizing the attacks on 9/11, including the previous U.S. involvement in the Middle East, ideological struggles in the Islamic world and the consequences of the attack: the invasion of Afghanistan and Irag, the rise of ISIS, and the spread of extremism. Students will examine a variety of primary and secondary sources from a range of perspectives, participate in and lead discussions, develop presentations and conduct research into a topic of their choice related to course content. This course will ultimately provide students with an understanding of the events, historical context, people, and global perspectives that create the foundation of today's geopolitical conflicts. It is designed for upperclassmen.

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#### **PUTIN AND THE NEW RUSSIAN EMPIRE**

This one-term course delves into the fall of the Soviet Union and the dashed hopes for a democratic Russia aligned with Western Europe. Students will examine how the rise of Putin reinvigorated Russia's presence on the world stage and swung Russia in an anti-Western direction. Students will investigate the current Russian-Ukrainian conflict by understanding the Cold War, the rise of authoritarianism and imperialism and the instability of the NATO alliance. The course will examine how ideologies and foreign policy impact today's world through a study of primary and secondary sources. It is designed for upperclassmen.

#### **A RISING CHINA**

This one-term elective will investigate how, over the last 50 years, China has developed from an impoverished regional power to a dominant economic powerhouse with a robust and growing international presence. Students will examine the factors and events that led to China's transformation, and the impact of these changes. In addition, students will investigate how China's newfound wealth is impacting international relationships, as some countries welcome its growing influence, and others fear it. Finally, students will reflect on the appeal of the Chinese model, as compared to the models of American and European democracy and capitalism. The course will examine how these ideas and models are playing out in today's world. It is designed for upperclassmen.

#### **GENDER AND SOCIETY**

This one-term course will engage students in an examination of historical conditions, cultural norms. and social and economic institutions that define gender identity and status, predominantly within the U.S. Students will gain an understanding of the historical forces and reflect how larger social institutions and issues influence gender experience. The course will examine the obstacles and movements that seek to address the gendered challenges of the past and today. In this course, students will engage in reading and analyzing primary and secondary sources, gender theory, and participate in vigorous class discussions and presentations. This course contains a significant writing component as students respond to the readings as well as a final project exploring how theoretical frameworks shape social change. This course is designed for upperclassmen.

### PSYCHOLOGY ONE-TERM ELECTIVES

## SOCIAL INFLUENCES IN PSYCHOLOGY: BEHAVIOR, ATTITUDES, AND BELIEFS

This one-term course in social psychology will focus on how individual behaviors, attitudes, and beliefs are shaped by social influences. Major topics will include a deep dive into the factors that influence individual behavior, including social norms, stereotypes, and prejudice. This course will also examine the ways in which individuals interact with others and form relationships.

There are no prerequisites for this course. This course can be taken independently of or in addition to Social Psychology: The Psychology of Group Dynamics.

## SOCIAL PSYCHOLOGY: THE PSYCHOLOGY OF GROUP DYNAMICS

This one-term course in social psychology will focus on the fundamental principles of group dynamics with an emphasis on how people interact in group settings. Students will explore the factors that influence group behavior, including social influence, conformity, and leadership. This course will also examine the ways in which group dynamics can impact behavior, attitudes, and beliefs. There are no prerequisites for this course. This course can be taken independently of or in addition to Social Influences in Psychology: Behavior, Attitudes, and Beliefs.

## COGNITIVE PSYCHOLOGY: LEARNING HOW WE LEARN

This one-term course in cognitive psychology will provide an overview of the cognitive processes that underlie human learning and memory. Students will explore the fundamental principles of cognitive psychology with a focus on how people acquire, process, store, and retrieve information in their daily lives. This course will also examine the factors that influence learning and memory, such as attention, motivation, and context. There are no prerequisites for this course. This course can be taken independently of or in addition to Thinking and Cognition: Understanding Decision-Making Through Cognitive Psychology.

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## THINKING AND COGNITION: UNDERSTANDING DECISION-MAKING THROUGH COGNITIVE PSYCHOLOGY

This one-term course in cognitive psychology will provide an overview of the cognitive processes involved in human thinking, motivation, and decision-making. Students will explore the fundamental principles of cognitive psychology with a focus on how people perceive, process, and use information in their daily lives. This course will also examine the factors

that influence motivation and decision-making, such as emotions, biases, and social pressures. There are no formal prerequisites for this course. This course can be taken independently of or in addition to Cognitive Psychology: Learning How We Learn.

## DEVELOPMENTAL PSYCHOLOGY: NAVIGATING THE COMPLEXITIES OF HUMAN DEVELOPMENT

This one-term foundational course in psychology will provide an overview of human development from infancy through adolescence. Students will explore the physical, cognitive, and emotional changes that occur during each stage of development. The course will also explore the roles of genetics and environment in shaping development as well as the impact of culture, parenting, and other social factors. Topics will include: prenatal development and birth, infancy and early childhood development, middle childhood development, adolescence and emerging adulthood, cognitive development, socioemotional development, including attachment, self-concept, and socialization, and cultural and social influences on development. There are no prerequisites for this course.

## CENTER FOR ENTREPRENEURSHIP ONE AND TWO-TERM ELECTIVES

#### **SPORTS BUSINESS SEMINAR**

This one-term class will look at how the sports business industry works and how to plan for a career in the industry. The class will follow a workshop format as the various business topics that are studied will be applied to understanding the structure and revenue flows of the U.S. and global sports business markets. We will have speakers with relevant industry experience come to class and share their real-life experiences with the students. At the end of the term, students will develop a business case covering one of the major sports leagues of their choosing and analyze one of the major franchises of that league, understanding the profit and loss statements, the human resource requirements, talent management, growth plans, marketing efforts and competitive positioning. Students will be required to write, to use spreadsheets, and to use graphical displays in presenting their business plan. Students will also be required to present their arguments orally. Both verbal and written communication is a must! This class will look at successful leagues and franchises and ask what made them successful in their chosen path. Students in this class will focus on being independent problem solvers. This class will also focus on exposing students to some of what they will see in the real world of sports business and equip them with an understanding of recruiting practices and how to maximize their chances of getting a job in the industry. Speakers, videos, discussions, and project work will make up a majority of this class, and class participation is expected. Students who sign up for this class must be ready to be proactive and try new things. No other knowledge is required!

#### **BECOMING AN ENTREPRENEUR**

This is a one-term class that will explore the building of a business through case studies. This course is inspired by the NPR podcast, "How I Built This." Students will explore business case studies across multiple industries. This course will provide students with background information about how a business is built, the challenges of startups, and business operations. Guest speakers will provide opportunities for students to engage with, interact with, and ask guestions of real-life entrepreneurs. Students will be introduced to a diverse group of entrepreneurs, including a prominent casting director in the fashion industry, a YouTube/social influencer, a founder of a leveraged buyout firm, an entrepreneurial artist, a food company founder, a co-founder of an investment bank, an online retail CFO, and the founder of a large event emergency care team. Assignments for this course will include presentations on each case study. These will require students to work on both their visual and oral presentation skills. Students who sign up for this course should be ready to engage in discussion daily and be eager to explore pushing the boundaries of the business world. No prior knowledge is required.

## ENTREPRENEURSHIP AND ETHICAL BUSINESS SEMINAR (TWO-TERM)

Entrepreneurship is much more than simply starting a business. It requires innovation and risk, teamwork, and organizational skills. Entrepreneurship is impactful, political, and passionate. Entrepreneurship is one of the most effective ways to address social, environmental, and economic issues in our modern economy. In the Fall Term, we will start the class by learning the foundations of entrepreneurship. This will include finances, investing, marketing, legal matters, and professional development. The majority of the work will be student-driven. Students will partake in hands-on projects that teach the importance of raising capital and engaging with the community. In the winter, we will transition to the study of corporate social responsibility and how to develop a business that is a force for good. We will explore different industries in order to identify ideas that equally balance profits with social impact and sustainability. This class will regularly feature speakers, giving students the opportunity to learn from experienced entrepreneurs. The focus will be on project work, class discussions, and written assignments. Students who sign up for this class must be ready to be proactive, try new things, and learn from their failures. No other knowledge is required!



## DIPLOMA REQUIREMENTS: 1 CREDIT VISUAL AND/OR PERFORMING ART

(This can be accomplished through three single-term courses or one full-year course.)

### PERFORMING ARTS

#### MUSIC - JAZZ BAND (JB)

This ensemble will rehearse and perform an This ensemble will rehearse and perform an eclectic variety of band music, including jazz, funk, blues, rock, popular, symphonic, holiday, film, and more. All band instruments are welcome! Brass and woodwind instruments must have at least one year of previous experience. Guitarists. percussionists/drummers, bassists, and pianists must audition or have previous experience. Students should have a basic skill level of reading music. Obligations include rehearsals during and after school (if applicable) and attendance at all performances (on campus, local, regional, national, etc.). Students will learn how to work together to perform professional-level music as an ensemble, while developing individual fundamentals towards a mastery of skills. For audition information, please contact Ron Castonguay, Director of the Arts and Music Director, at castonguayr@frederickgunn.org. Prerequisites: previous instrumental experience and/or audition. Full year, one credit; entry into the second semester is possible with permission of the instructor (2/3 year, 2/3 credit).

#### MUSIC - JAZZ BAND ADVANCED (JBA)

Requirements for students continue to increase dramatically from this level through the Conservatory level, including a more advanced skill level requirement, enhanced performance achievement tests, mandatory personal repertoire, higher individual expectations, and increased extracurricular and leadership responsibilities. Prerequisites: JB or teacher recommendation; must fulfill requirements specified by the instructor. A contract must be signed for this level; full year, one credit.

## MUSIC – JAZZ BAND CONSERVATORY (JBC)

This is the highest level for this course and is geared toward preparing students for a college music experience. A high level of musicianship is expected, including a more advanced skill level, mandatory personal repertoire, higher musical performance, and individual expectations for assessments, increased extracurricular and leadership responsibilities, mandatory weekly private lessons, and possible individual conducting performances. Prerequisites: JBA Honors or teacher recommendation; must fulfill requirements specified by the instructor. A contract must be signed for this level; full year, one credit.

#### MUSIC - CHAMBER ORCHESTRA (CO)

The instrumentation for this small symphonic ensemble consists of: violins, violas, cellos, double basses, flutes, oboes, clarinets, bass clarinets, bassoons, French horns, mallet percussionists, piano, and harp. Any player who has at least one year of playing experience and is efficient in reading music is welcome in Chamber Orchestra. However. pianists and harpists must audition to be accepted into this ensemble. The repertoire of the course will be primarily classical by nature, but exploration of film and popular music may be part of the curriculum. Obligations include rehearsals, both during the day and after school (if applicable), and attendance at all competitions and performances (on campus, local, regional, national, etc.). Students will learn how to work together to perform professional-level music as an ensemble while developing individual fundamental musicianship towards a mastery of skills. Prerequisites: previous instrumental experience and/or audition and recommendation from the instructor. Full year, one credit; entry into a second term is possible with permission of the instructor (2/3 year, 2/3 credit).

## MUSIC - CHAMBER ORCHESTRA ADVANCED (COA)

Requirements for students continue to increase dramatically from this level through the Conservatory level, including a more advanced skill level requirement, enhanced performance achievement tests, mandatory personal repertoire, higher individual expectations, and increased extracurricular and leadership responsibilities. Prerequisites: CO or teacher recommendation; must fulfill requirements specified by the instructor. A contract must be signed for this level; full year, one credit.

## MUSIC - CHAMBER ORCHESTRA CONSERVATORY (COC)

This is the highest level for this course and is geared toward preparing students for a college music experience. A high level of musicianship is expected, including a more advanced skill level, mandatory personal repertoire, higher musical performance, and individual expectations for assessments, increased extracurricular and leadership responsibilities, mandatory weekly private lessons, and possible individual conducting performances. Prerequisites: COA Honors or teacher recommendation; must fulfill requirements specified by the instructor. A contract must be signed for this level; full year, one credit.

#### MUSIC - VOCAL ENSEMBLE (VE)

Anyone who loves to sing can enter this ensemble! No audition required! Performing will be the primary objective of this ensemble, known at most schools as Chorus. Music will consist of classic choir repertoire, including sacred, secular, and spiritual as well as popular and jazz music sung in ranges from unison to six-part harmony. Obligations include rehearsals, both during the day and after school (if applicable), and attendance at all competitions and performances (on campus, local, regional, national, etc.). Proper vocal technique, choral balance in combination with healthy singing and sight-reading will be important facets of the curriculum. Students will learn how to work together to perform professional-level music as an ensemble while developing individual fundamental musicianship towards a mastery of skills, including a basic understanding of reading music. For information, please contact Ron Castonguay, Director of the Arts and Music Director, at castonguayr@frederickgunn.org. Prerequisites: none — just love to sing in a group! Full year, one credit; entry into a second term is possible with permission of the instructor (2/3 year, 2/3 credit).

## MUSIC – VOCAL ENSEMBLE ADVANCED (VEA)

Requirements for students continue to increase dramatically from this level through the Conservatory level, including a more advanced skill level requirement, enhanced performance achievement tests, mandatory personal repertoire, higher individual expectations, and increased extracurricular and leadership responsibilities. Prerequisites: VE or teacher recommendation; must fulfill requirements specified by the instructor. A contract must be signed for this level; full year, one credit.

## MUSIC - VOCAL ENSEMBLE CONSERVATORY (VEC)

This is the highest level for this course and is geared toward preparing students for a college music experience. A high level of musicianship is expected, including a more advanced skill level, mandatory personal repertoire, higher musical performance and individual expectations for assessments, increased extracurricular and leadership responsibilities, mandatory weekly private lessons, and possible individual conducting performances. Prerequisites: VEA Honors or teacher recommendation; must fulfill requirements specified by the instructor. A contract must be signed for this level; full year, one credit.

#### ADVANCED PLACEMENT MUSIC THEORY

This full-year Music Theory Advanced Placement course is intended for advanced music students who plan to continue their musical endeavors in college. This course is designed to prepare them for the AP Music Theory Exam administered in the spring. Students must have prior musical experience, including participation for a minimum of two years in a performing ensemble, and/ or they must have taken a private or classroom music theory course within the past two years. The instructor may grant special permission for entry. All topics covered in a first-year college music theory course will be included as well as the following: notational skills, scales and keys, chords and chord progressions, metric organization, rhythmic patterns, realization of Roman numeral chord progressions, repertoire identification and analysis, small musical forms, listening and dictation, sight-singing, and basic compositional techniques. Prerequisites: must have two years of previous experience in a performing ensemble and/or in a private or classroom music theory course within the last two years, or permission from instructor. An entrance exam may be required. AP Credit will only be granted once the course is successfully completed and the AP Exam is administered.

### **THEATRE**

#### INTRODUCTION TO ACTING

This active and exploratory one-term acting course introduces students to the essential tasks of the actor's imagination and technique through individual and ensemble work. Students will apply this exploratory work to improvisations, open scenes, monologues, scenes, text analysis, and reading of plays. Students develop vocal, physical, and emotional techniques and confidence and engage in exercises that enhance creativity, characterization skills, and empathy. No previous acting experience is necessary.

#### **ACTING I: THE ACTING PROCESS**

This active one-term course continues the training of the student-actor with a deeper focus on scene work, script analysis, voice, and movement. It allows students to develop an approach to character, text, and story beyond their own culture and experience. Exercises build on Acting and encourage in-depth interpretation and character choices. Students gain a well-rounded understanding of acting, theatre, plays, and theatremaking.

No previous acting experience is necessary. This class can be repeated.

## ADVANCED ACTING/GUNN THEATRE COMPANY

This one-term course continues the training of the dedicated student-actor with a deeper focus on scene work, devised material, voice, and movement. Exercises build on Introduction to Acting and Acting I, and students are introduced to heightened language and style. Vocal and physical training focuses on developing techniques to explore heightened language and theatre material. Students develop and workshop various pieces of work to be presented to The Frederick Gunn School community. Prerequisite: an earlier department acting course, involvement in a Frederick Gunn School Theatre Program production, or permission of the Director of Theatre Arts. This class can be repeated.

#### **IMPROVISATION AND THEATRE GAMES**

This introductory course will explore the elements of improvisation with a focus on spontaneity, flexibility, and fun. Life is made up as it happens, and improv is no different. Students heighten their observation, listening skills, and ensemble-building through various theatre exercises and improvisational games. Explore foundational improv tools to understand the principles of how improv works and why it works. Experience how improvisation is a way to discover more freedom, confidence, and positivity. This class can be repeated.

## ACTING THE SONG/ACTING FOR MUSICAL THEATRE

Acting the Song is a class designed to train students to incorporate strategies to connect to songs in new and more meaningful ways. Students will learn how to analyze the text and score of a song, engage their bodies to enhance storytelling, and manage performance anxiety. Students will delve deeper into the craft of acting, and transfer their work from the realm of the monologue/scene into the realm of musical theatre. Assessment is done through one- and two-person scenes and written assignments. This class can be repeated. This course is also an excellent audition prep class!

#### **COMBAT FOR STAGE AND SCREEN**

Stage combat is the illusion of violence on the stage or screen. Classwork is active, engaging, and movement-based. Students will learn and develop safe and dramatically effective techniques of choreographed violence, along with pieces rooted in movement and storytelling. Students will be introduced to safe and compelling portrayals of violence for the stage and camera. The class focuses on training and practicing unarmed and sword and dagger stage combat skills.

## ADJUNCT COURSES

#### PRIVATE DANCE INSTRUCTION

This course provides students with the opportunity to work one-on-one with a professional dance instructor. Private instruction in dance is excellent for beginning students, students who have previous dance experience and are looking to improve their technique and artistry, but also for actors, skaters, and athletes who are looking to improve their technique - or who need specific coaching on technique, choreography, or audition preparation. In private dance instruction, students can expect to work on basic skills - stretching, positions, technique, precise foot placement, and stage character - as well as musicality, strengthening of the legs and feet, and balance. Private lessons are scheduled once or twice per week for one hour. A yearlong commitment is required. The cost of private dance instruction is billed home. Full year, one day per week, 1/3 credit; credit earned for this course may not be used to fulfill the diploma requirement in Visual or Performing Arts

#### PRIVATE MUSIC INSTRUCTION

Students are encouraged to pursue private study of an instrument at The Frederick Gunn School. These lessons offer students an individualized learning experience with a private instructor. Lessons are given in all orchestral and keyboard instruments. Students may also study voice, composition, jazz, popular, and folk instruments. Students receive one 40-minute lesson per week, and are expected to practice a minimum of two hours per week. Students who are interested in private instruction should contact the Academic Office well in advance of the beginning of the academic year, so that appropriate scheduling arrangements can be made. A yearlong commitment is required. The cost of private music instruction is billed home. Full year, one day per week. 1/3 credit: credit earned for this course may not be used to fulfill the diploma requirement in Visual or Performing Arts.

### VISUAL ARTS FULL-YEAR COURSES

#### **AP STUDIO ART**

This yearlong course is for highly motivated junior and senior art students. The scope of work is equivalent to that of an introductory college course in studio art, providing a special opportunity to prepare a portfolio for admission to art schools and to acquire knowledge of the professional art world and careers in the visual arts. Students work in both traditional and experimental media. AP Studio Art students are required to document their work photographically, and to present a portfolio that demonstrates their proficiency. Students have the opportunity to submit materials to the College Board AP Studio Art Exam as well as National Open Portfolio Review Day and the Scholastic Art Awards competition. Prerequisites: Drawing and a portfolio review by the instructor.

#### YEARBOOK EDITOR

This course is a full-year, visual arts course dedicated to the production of the school's yearbook, the main chronicle of student life at The Frederick Gunn School. Students work as a team to organize pages, design layouts, and gather photos that represent their year at The Frederick Gunn School. Three to four yearbook editors will be selected each year and fulfill a leadership role in the yearbook class. Prerequisite: approval by the instructor.

## **VISUAL ARTS ONE-TERM COURSES**

#### **BLACK AND WHITE PHOTOGRAPHY**

Are you ready to step back in time and embrace the timeless elegance of black-and-white photography, where every frame tells a story in shades of gray? In this class, we'll unravel the mysteries behind the lens as we explore the fundamentals of traditional analog photography. From the click of the shutter to the development of film, you'll learn the art of capturing moments in stunning contrast. During our darkroom sessions, you will transform your negatives into beautiful prints, watching as the images magically emerge from the blank paper.

#### **CERAMICS I**

This course includes basic techniques and understanding of clay as an art medium. Coil, slab, and other hand-building techniques are introduced, followed by the opportunity to work a potter's wheel. A historical and cultural perspective is explored through slides, video, and discussion. Surface decoration is explored through glazing and firing techniques. No previous experience is required.

#### **CERAMICS II**

This course is designed for students who are proficient on the potter's wheel, and who are interested in continuing to improve their techniques. Lid and handle-making techniques are introduced. Altered forms on the wheel area also are investigated and incorporated into final pieces. High fire glazes are used for surface decoration, and students learn kiln stacking and firing procedures. Prerequisite: Ceramics I.

#### **CIVIC JOURNALISM AND MEDIA MAKING**

In this course, students learn and practice the skills of civic journalism over a variety of media platforms. Civic Journalism refers to the integration of journalism and democracy. Students learn how to use news and media outlets to facilitate healthy public engagement, conversation, and debate. They work together to write and publish The Highlander. the school's newspaper, record and produce "The Highlander Podcast," and finally, film, edit, and broadcast "The Highlander News Network." This course is open to all students and may be taken for one or more terms for 1/3 art credit per term.

#### **DIGITAL PHOTOGRAPHY**

For novice students, this course is an introduction to the camera, the photographic process, and digital software. The emphasis is on the artistic qualities of composition and image content. The course includes camera handling, exposure, darkroom techniques, and exploring the potential of digital photography. Students will master skills that will apply to all forms of image-making, and will gain an understanding of basic camera operations.

#### **DRAWING**

This introductory drawing class is based on the Betty Edwards workbook, "Drawing on the Right Side of the Brain." During this class, students explore line, shading/tonal values, positive/ negative space, and the principles and elements of design. Students work with a variety of media, including graphite pencil, charcoal, pastels, colored pencil, and mixed media. A historical and cultural perspective is explored through slides, visual aids, and discussion. No previous experience in art is required.

#### **FILM STUDIES**

Welcome to the mesmerizing world of film through the ages! During our exciting cinematic journey from the silent masterpieces of the early 20th century to the dynamic blockbusters of today, we will explore the captivating history of the silver screen and discover how cinema has shaped and reflected the world around us. From the groundbreaking techniques of pioneering directors to the evolution of storytelling through the decades, we will uncover the secrets behind film's greatest moments. Whether you're a die-hard movie buff or a casual viewer, prepare to be inspired, challenged, and utterly captivated by the power of the silver screen.

#### INTRODUCTION TO PRINTMAKING

This course is for students who like to draw or make photographs, or are just looking for a new medium to try. During the class, there will be many forms of printmaking to explore: monotype, linoleum, woodcut, engraving, etching, and gravure, to name a few. Prints can be made simply by making marks with ink on a piece of Plexiglas® and transferring the ink onto a piece of paper (monotype), or lines can be scratched (engraved) into a metal or Plexiglas® plate. The plate is then inked, and the surface is wiped clean and printed using paper and a printing press. Students in printmaking will have the opportunity to explore multiple printmaking processes during the trimester and have plenty of work to take home when done.

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#### **PAINTING**

In this class, students learn color theory and explore color relationships in their paintings. Students explore various techniques in watercolors, oils, and acrylics. Landscape, portrait, self-portrait, and abstract expressionism are covered from a historical as well as a technical point of view. Methods of painting are introduced through examining the work of master painters. Prerequisite: Drawing

## ADOBE LIGHTROOM AND PHOTOSHOP FOR CREATIVE THINKERS

Embark on a journey into the realm of digital artistry. This class introduces you to Adobe Photoshop, exploring its creative potential for image manipulation, design, and visual storytelling. Designed for beginning and intermediate Photoshop users, this class will explore the foundational features, from navigating the interface and basic tools, to essential techniques, equipping you with the skills needed to edit photos, create graphics, and unleash your artistic potential.

#### **CREATIVE PHOTOGRAPHIC PRINTING**

Thanks to digital technology, printing in the darkroom is not limited to photographs but includes many other types of two-dimensional art. If you can imagine it, we can probably print it. This class will dive into the artistry of darkroom printing with a focus on cyanotype, kallitype, and gum printing. These processes allow us to print on fabric, paper, and other types of materials. Elevate your artistic expression as you explore alternative processes that bring a touch of mystery and uniqueness to your artwork.

## MOBILE MASTERCLASS: PRO TIPS FOR PHONE PHOTOGRAPHY

Go beyond point-and-shoot picture making and learn pro-level strategies for smartphone photography. From advanced camera settings to mastering complex editing tools, you will learn composition techniques, lighting tricks, and editing tips that will turn your everyday moments into stunning works of art. This masterclass will equip you with the skills to take your mobile photography to new heights.

#### **GRAPHIC DESIGN**

This studio art course introduces students to the basics of graphic design using publication and digital-imaging software. With text and scanned graphics, students will solve design problems to create and print business cards, stationery, brochures, newsletters, and school posters. Students will explore the artistic possibilities of Adobe Photoshop. Class critiques and discussions are held at the conclusion of each project. No previous experience in art is required.

#### **YEARBOOK**

This course is a one-term, visual arts course offered in the fall and winter terms, dedicated to the production of the school's yearbook, the main chronicle of student life at The Frederick Gunn School. Students work as a team to organize pages, design layouts, and gather photos that represent their year at The Frederick Gunn School. Students from any class year may take this course.



# DIPLOMA REQUIREMENTS: 1 TERM OF PATHWAYS 1 TERM OF CITIZEN GUNN 1 TERM OF THE DECLARATION THE CIVIC CHANGEMAKERS PROJECT

#### **PATHWAYS - (FRESHMEN)**

Pathways is a mandatory, one-term diploma requirement for all freshmen. All sections of Pathways meet in the fall. The focus during the first year of our citizenship curriculum is self-awareness - emotional, physical, and intellectual - so that freshmen may adjust seamlessly to The Frederick Gunn School. Students have conversations about making healthy choices and behaving responsibly, and they learn executive functioning skills to become more intentional in their approach to learning. We also orient students to help them understand the value of our Academic Merit system, the Character Statement, our discipline system, and the Honor Code. The final project is a "Letter to Self," which is completed at the end of the trimester. Students will read the letter during their senior dinner. Essentially, students have the opportunity to take stock of themselves and find their footing on campus. Grading in this course will be on a Credit/No Credit basis.

#### **CITIZEN GUNN — SOPHOMORES**

Citizen Gunn is a one-term course that is required of all sophomores in the winter or spring term. This course will focus on helping students to become active citizens at The Frederick Gunn School through an in-depth study of Frederick Gunn's life coupled with relational and community-building initiatives to encourage students to accumulate superior interpersonal skills. Students will grow to understand the morality of our founder to help them explore their own personal moral code and reflect upon the deeper meaning of their individual life as a member of our learning community. Service to others and promotion of the common good inform many of the course activities and discussions. Civic Online Reasoning lessons will help students navigate their digital world in order to become engaged, well-informed citizens, who desire to build trust within their future communities and champion diversity, equity, and inclusion. During the conclusion of the course, each student will develop a personal statement of moral principles, which they will deliver to their class at the end of the term. Grading in this course will be on a Credit/ No Credit basis.

#### THE DECLARATION — JUNIORS

The Declaration is a one-term course that is required of all juniors. Through an in-depth study of our country's seminal documents and speeches, students will explore the ideas of liberty and equality as they pertain to citizenship. Students will study the art of rhetoric and the vital role language plays in building political friendships in our democracy. Weekly debates will help students construct and frame their perspective concerning democratic citizenship. Students will meet with local leaders to learn how they build community and political friendships in town. Over the course of the trimester, students will prepare and give a speech to the entire school community.

## CIVIC CHANGEMAKERS PROJECT — SENIORS

The Civic Changemakers Project (CCP) is a diploma requirement for all seniors that must be completed by the end of the senior winter trimester. The CCP emphasizes civic action and acting on convictions. The project may involve a range of activities, including civic media-making, alliance building, participation strategy development (e.g. contacting political officials or interest groups), or a meaningful and intentional service project.

#### **CIVIC JOURNALISM AND MEDIA MAKING**

In this course, students learn and practice the skills of civic journalism over a variety of media platforms. Civic Journalism refers to the integration of journalism and democracy. Students learn how to use news and media outlets to facilitate healthy public engagement, conversation, and debate. They work together to write and publish The Highlander, the school's newspaper, record and produce "The Highlander Podcast," and finally film, edit, and broadcast "The Highlander News Network." This course is open to all students and may be taken for one or more terms for 1/3 art credit per term.



43 INDEPENDENT STUDY

# THE PROCESS FOR ESTABLISHING AN ISP IS AS FOLLOWS:

- Interested students should approach the Academic Office with their ideas for the coming year by the midpoint of the Spring Term by requesting a meeting with the Director of Studies (email academics@frederickgunn.org).
- 2 If the project seems possible, the interested student will be asked to complete an ISP form and submit a proposal. This will include meeting with the appropriate department chair and working with both the department chair and the Academic Office to describe the learning outcomes and educational material that will be used for the ISP, to be detailed in the proposal.
- 3 The Department Chair and Academic Office will then approach a suitable faculty advisor. Assuming the right match can be found between student interest and faculty availability, the ISP will then be approved and added to the student's course load for the following year.

Prerequisites: ISPs are only open to returning students. Students in their first year should follow a standard course load at The Frederick Gunn School.