



## Lakehill Preparatory School

### Class of 2028

#### Academic Overview

At Lakehill Preparatory School, we take the word *preparatory* in our name very seriously. From kindergarten through high school, our curriculum is designed to instill in our students the importance of a well-rounded education. Throughout a student's academic career, we build on an educational program that achieves our goal of enabling graduates to attend the finest, most rigorous universities that best fit their needs and desires.

Lakehill challenges highly motivated students by providing them with a robust academic curriculum and by cultivating their unique talents. Whether these talents are in the writing lab, on the athletic field, in math, science, or the arts, every child is encouraged to strive for more and to discover new and exciting abilities along the way.

Lakehill is celebrated for the breadth of activities it provides. From kindergarten through high school, our extensive programs expose every child to new experiences. Students are encouraged to participate and challenged to excel where they may not have thought possible.

Lakehill is accredited by the Independent School Association of the Southwest (ISAS).



## ACADEMIC REQUIREMENTS

Lakehill Preparatory School maintains a stimulating, challenging, and fully accredited college preparatory curriculum. The academic program provides broad training in the liberal arts and sciences and stresses independent thinking, writing, critical reading, discipline, and creativity.

### Graduation Requirements

Students must complete a minimum of 26 credits to satisfy the requirements for graduation. The following courses are required for graduation:

#### Discipline

English	4 Credits
Mathematics	4 Credits
Science	4 Credits
Social Studies	4 Credits
World Language	3 Credits
Computer Science	1 Credit
Fine Arts	1 Credit
Physical Education	1 Credit
Electives	Varies

### Course Overview

#### English

- 9 Contemporary Literature and Composition
- 10 Western World Literature and Composition
- 11 AP English Language and Composition
- 12 AP English Literature and Composition
- 12 Sci Fi/Weird Fiction and Composition

#### Mathematics

##### Sequence A

- 8 Algebra I
- 9 Geometry
- 10 Algebra II
- 11 Pre-Calculus or AP Pre-Calculus
- 12 Statistics, AP Statistics, AP Calculus AB or BC

##### Sequence B

- 9 Algebra I
- 10 Geometry
- 11 Algebra II
- 12 Pre-Calculus, AP Pre-Calculus, Statistics, AP Statistics, Advanced Integrated Mathematics (AIM)

#### Science

- 9 Biology
- 10 Chemistry
- 11 and 12 Anatomy and Physiology, AP Biology, AP Chemistry, AP Environmental Science, Physics\*, AP Physics I\*, AP Physics C, Aquatic Science  
*(\*physics course required for graduation)*

#### Social Studies

- 9 AP Human Geography
- 10 AP World History
- 11 AP United States History
- 12 AP United States Government and Politics / Economics

#### World Language

Three years of French, Latin, or Spanish are required, with the same language taken in sequence.

#### Computer Science

Two semesters of Computer Science (programming) are required, typically taken during 9th grade.

#### Fine Arts

Students are required to choose at least two Fine Arts electives from among the following: Art History, Computer Graphic Design, Digital Photography, Film Production, Drama, Drawing, Musical Theater, Painting, AP Drawing, Sculpture, Ceramics, Ceramics 2, Upper School Choir, or Yearbook.

#### Athletics

Students are required to participate in two semesters of athletics.

#### Electives

Electives vary from year to year and are announced prior to Spring Advising.

#### Report Cards

Report Cards are issued each quarter, with semester reports issued at the end of each semester. These reports are intended to communicate to students and parents areas of strength and weakness. If a child is experiencing difficulty in a specific subject, the teacher will be happy to offer assistance.



### Grading Scale for Grades 9 – 12

A+	97-100	4.0
A	94-96	3.85
A-	90-93	3.7
B+	87-89	3.5
B	84-86	3.25
B-	80-83	3.0
C+	77-79	2.8
C	74-76	2.4
C-	70-73	2.0
D+	67-69	1.8
D	64-66	1.4
D-	60-63	1.0
F	Below 60	

### Honor Roll

To qualify for the Headmaster's High Honor List, a student must receive an A in all courses each quarter. To earn Honor Roll status, a student must receive a B or above in all courses each quarter.

### AP Courses

Advanced Placement (AP) courses provide skills that are critical for college success. In addition to the knowledge gained in an AP subject, students will learn time-management, study skills, and problem-solving techniques. With the support of AP teachers, students will build confidence to succeed.

National Advanced Placement (AP) examinations are given in May to all students enrolled in AP classes. Students enrolled in AP courses who have diagnosed learning differences with accompanying documentation from a physician and/or psychologist may apply to the College Board for permission to take the examination with accommodations.

### Transfer Credits

Students with special interests and talents are encouraged to pursue outside studies, keeping in mind that core educational requirements must be met within the confines of the course offerings at Lakehill. Exceptions are limited to transfer students who are unable to meet the requirements for graduation or placement, and these exceptions must meet with the approval of the school.

### Cumulative Grade Point Average

The cumulative grade point average is calculated using semester grades. Grades for all high school courses except non-academic electives (i.e., study hall and athletics) will be averaged into the GPA, including those courses that were repeated. Cumulative grade point averages will be rounded out to four decimal places as needed.

### Ranking

Lakehill does not rank; however, for Texas public institutions Lakehill will report rank up to the Top 10% according to the university's admission policy in relation to Texas House Bill 588.

### Valedictorian and Salutatorian

The Valedictorian will be the graduating senior who has the highest GPA for four years. The Salutatorian will be the graduating senior who has the second highest GPA for four years. Students are eligible if they have attended Lakehill for more than one year. Students who have attended Lakehill for less than four years, but more than one year of high school will be eligible if their previous school is comparable to Lakehill in curriculum and accreditation.



## ENGLISH DEPARTMENT

### **CONTEMPORARY LITERATURE AND COMPOSITION – grade 9**

This course provides the foundation for literary analysis in high school and beyond by exposing students to a variety of texts, including contemporary masterpieces. Students will read work from a variety of genres and focus on the analysis of the literary elements, especially theme and author's choice. Emphasis is placed on the critical analysis, reasoning, and conveying of those ideas in writing. Students will demonstrate their analysis in a variety of writing assignments, including at least one major research paper. Research skills and citations according to the MLA Handbook are integrated into many of the writing assignments. Grammar, usage, punctuation, vocabulary, and composition skills are included in both reading and writing instruction. Full year, 1 credit.

### **WESTERN WORLD LITERATURE AND COMPOSITION – grade 10**

This course emphasizes the full integration of composition and literature. Grammar and usage skills are taught prescriptively from writing assignments, with greater critical emphasis on mastery in composition. There will be several essays with a continued emphasis on the development of analytical writing skills and the incorporation of scholarly criticism through the use of the Lakehill online databases. The study of literature in this course aims at an increased understanding of poetry and fiction through a chronological survey of masterpieces of Western world literature, from *The Odyssey* to contemporary works. A formal research paper using MLA documentation is required. Vocabulary enrichment continues through regular study and application. Full year, 1 credit.

### **AP ENGLISH LANGUAGE AND COMPOSITION – grade 11**

The focus of the AP English Language and Composition is argument and persuasion and aligns to an introductory college-level rhetoric course. Students will analyze texts from a variety of genres but will primarily focus on nonfiction, with emphasis on speeches and essays. Students will learn to analyze and think critically about the rhetorical situation and author's choice. Such analysis will inform the students' own writing as they develop their own arguments and synthesize evidence to integrate into their work. Writing assignments will include argument, synthesis, and rhetorical analysis essays. Full year, 1 credit.

### **AP ENGLISH LITERATURE AND COMPOSITION – grade 12**

The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to evoke meaning. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include analytical and argumentative essays that require students to analyze and interpret literary works. Vocabulary enrichment continues through regular study and application. Full year, 1 credit.

### **SCIENCE FICTION/WEIRD FICTION AND COMPOSITION – grade 12**

This course functions as a two-part course that explores Science Fiction in Fall 2024 and Weird Fiction in Spring 2025. In the fall, students will study the principles of Science Fiction and how selected texts employ them to explore questions of personhood, time, relationships, language, and philosophy. In the spring, students will study the literary lineage from Old Weird to New Weird and how Old Weird works paired with the principles of Science Fiction lead into contemporary, New Weird writings that address the contemporary, societal inquiries surrounding technology, politics, religion, and economics. This course will require students to engage with the principles of Science Fiction, the motifs of Weird Fiction, and published literary criticism through the composition of analytical and argumentative essays. Vocabulary enrichment continues through regular study and application. Full year, 1 credit.

## ELECTIVE

### **CREATIVE WRITING – grade 9 or 10 or 11 or 12**

Students in this class will encounter a myriad of creative works, from poetry and plays to short stories and works of creative nonfiction. By referencing these works as mentor texts, students will engage with these works and utilize common themes as prompts, allowing them to explore their own style in shaping creative written works. Students will have the opportunity to explore the different styles and techniques of creative writing to find their inner author. One semester, ½ credit.



## **MATH DEPARTMENT**

### **ALGEBRA I – grade 8 or 9**

Precision of language, algebraic structure, processes, and operations are stressed, as are the acquisition of necessary manipulative skills and an adequate understanding of algebraic concepts. Content includes solving and graphing equalities and inequalities in one and two variables, linear or quadratic; the quadratic equation; functions and relations; and radical and exponent laws. Applications of algebra to problem solving are emphasized. Full year, 1 credit.

### **GEOMETRY – grade 9 or 10**

This course emphasizes two-dimensional geometry, but elements of three-dimensional geometry are introduced as well. Main topics include inductive and deductive reasoning, congruent and similar polygons, coordinate geometry, and areas and volumes of solids. The student is expected to learn the relationship between algebra and geometry, the role of logical thinking in mathematics through the use of formal geometric proofs, and the necessity for clarity and precision of language in mathematics. When appropriate, relevant material from the PSAT and SAT will be covered in class. Prerequisite: Completion of Algebra I. Full year, 1 credit.

### **ALGEBRA II – grade 9 or 10 or 11**

This required course reintroduces and reinforces the algebraic properties of the real number line, as well as the concepts and skills associated with linear and quadratic equations and inequalities. The concept of functions, particularly polynomial, rational, logarithmic, exponential functions and irrational functions will be introduced. Conic sections, complex numbers, probability theory, and matrices will be integrated throughout the year. The use of graphing calculators will supplement the learning process. Prerequisite: Completion of Geometry. Full year, 1 credit.

### **ADVANCED INTEGRATED MATHEMATICS (AIM) – grade 11 or 12**

This course builds and strengthens the concepts of Algebra II. Students explore linear and polynomial functions, and apply these functions to investigate and model a variety of mathematical and real world problems. Students are introduced to the practical mathematics of personal finance. Students work with probability, data collection, descriptive statistics, and technological tools to analyze statistics. In Integrated Mathematics, students learn the rich connections among number systems, algebra, geometry, measurement, probability, and statistics as they are used to model the world and solve problems. AIM provides students with a way of mathematically understanding the world about them and how mathematics allows one to predict and control outcomes in a variety of applications. The content of this course provides a foundation for the further study of mathematics, problem solving and making decisions throughout students' adult lives. Prerequisite: Algebra II and **teacher recommendation**. Full year, 1 credit.

### **PRE-CALCULUS – grade 10 or 11 or 12**

This course is especially designed to prepare students for college mathematics and advanced mathematical study. It gives students a sound understanding of the concepts required in the study of Calculus. Principle topics include analytic geometry; elementary analysis; trigonometric, exponential, polynomial, and rational functions; advanced graphing techniques; sequences and series; probability, matrices, polar coordinates, determinants; vectors; the complex number field; and an introduction to differential calculus. The use of graphing calculators will supplement the learning process. Prerequisite: Completion of Algebra II. Full year, 1 credit.

### **AP PRE-CALCULUS – grade 10 or 11 or 12**

This course is equivalent to an introductory college course in precalculus. It gives students a sound understanding of the concepts required in the study of Calculus. Principle topics include polynomial and rational functions, exponential and logarithmic functions, trigonometric and polar functions, and functions involving parameters, vectors, and matrices. The use of graphing calculators will supplement the learning process. Prerequisite: Completion of Algebra II. Full year, 1 credit.

### **STATISTICS – grade 11 or 12**

This course will introduce the student to statistical concepts that would be highly useful in a scientific or business type setting through real-life examples and exercises. Topics covered will include measures of central tendency, probability, the normal distribution, hypothesis testing, estimates and sample sizes, and a basic introduction to non-parametric statistics.



The use of graphing calculators will supplement the learning process. Prerequisite: Completion of Algebra II. Full year, 1 credit.

#### **AP STATISTICS – grade 11 or 12**

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. The use of graphing calculators will supplement the learning process. Prerequisite: Completion of Algebra II. Full year, 1 credit.

#### **AP CALCULUS AB – grade 11 or 12**

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. Prerequisite: Completion of Pre-Calculus. Full year, 1 credit.

#### **AP CALCULUS BC – grade 11 or 12**

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses. The course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.. It extends the content to different types of equations (polar, parametric, vector-valued) and new topics (such as Euler's method, integration by parts, partial fraction decomposition, and improper integrals), and introduces the topic of sequences and series. Prerequisite: Pre-Calculus and permission from the instructor of the course. Full year, 1 credit.

#### **MULTIVARIABLE CALCULUS – grade 12**

This class is offered after Calculus BC. It is for students who have doubled up in math and finished Calculus BC their junior year, and extends Calculus to more than one variable. Topics covered are vectors and matrices, parametric curves, partial derivatives, double and triple integrals, and vector calculus in 2- and 3-space. Prerequisite: Calculus BC. Full year, 1 credit.



## SCIENCE DEPARTMENT

### **BIOLOGY – grade 9**

This required lab course progresses from an understanding of life on a cellular-molecular level to unicellular and more complex life forms. The five kingdoms, biochemistry, genetics, microbiology, physiology, and ecology are some of the topics explored. The approach allows students to see organisms as a whole, with all systems functioning together. Labs, demonstrations, field trips, and outside speakers enhance the understanding of inter-relationships and biological studies. Critical thinking skills are developed as students are confronted with situations that make it necessary to synthesize facts, make observations, and form conclusions and opinions. Full year, 1 credit.

### **AP BIOLOGY – grade 11 or 12**

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes - energy and communication, genetics, information transfer, ecology, and interactions. Prerequisite: Completion of 1 year of Biology and 1 year of Chemistry. Full year, 1 credit.

### **CHEMISTRY – grade 10**

Chemistry is the study of the composition of matter and the changes that matter undergoes. This course focuses on the basic principles of general chemistry, with a strong emphasis on problem solving, critical thinking, and laboratory skills. Laboratory investigation using the scientific method will be a major part of the course. Full year, 1 credit.

### **AP CHEMISTRY – grade 11 or 12**

The AP Chemistry course provides students with a college-level foundation to support future advanced course work in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. Prerequisite: Completion of 1 year of Chemistry. Full year, 1 credit.

### **AP ENVIRONMENTAL SCIENCE – grade 11 or 12**

The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. This course examines a variety of natural science fields (e.g. environmental science, ecology, geology, chemistry, geography) and several social science disciplines (e.g. economics, politics, ethics). This course is designed to fully acquaint students with the many topics and subject areas within the environmental science field and to provide them with opportunities to apply their knowledge to their daily lives. Additionally, the course promotes environmental science literacy so that students will be better prepared to make decisions on issues impacting the environment. Other course objectives include establishing a sense of stewardship for the environment and illustrating that one person can make a difference. Prerequisite: Biology and Chemistry. Full year, 1 credit.

### **PHYSICS – grade 11 or 12 \*One Physics Class is Required\***

Physics is an algebra-based, introductory physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion; electric charge and electric force; DC circuits; and mechanical waves and sound. Prerequisite: Completion of Algebra II. Full year, 1 credit.

### **AP PHYSICS 1 – grade 11 or 12 \*One Physics Class is Required\***

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion; electric charge and electric force; DC circuits; and mechanical waves and sound. Prerequisite: Completion of Algebra II. Full year, 1 credit.



### **AP PHYSICS C – grade 12**

AP Physics C: Mechanics is equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. Students should have taken or be concurrently taking Calculus. Full year, 1 credit.

### **HUMAN ANATOMY AND PHYSIOLOGY, grade 11 or 12**

Anatomy and Physiology is the study of the structural and functional characteristics of living things. The course will begin at the microscopic level with atoms and cells and proceed through each of the organ systems so that a full understanding of the human body can be gained. Student will gain knowledge of anatomical and physiological concepts through lecture and hands-on lab activities and dissections. Full year, 1 credit.

### **AQUATIC SCIENCE - grade 11 or 12**

In Aquatic Science, students explore freshwater and marine ecosystems and perform a variety of experiments in both the laboratory and the field. The focus will be to develop a deeper understanding of the importance of these ecosystems in regulating climate and biogeochemical cycles that sustain life, as habitats for an incredible diversity of organisms, and as a resource for human populations. Students study the physical and chemical characteristics of water, including its structure and bonding capabilities, its fluid dynamics, how it transitions through various physical states of matter, and its physical and chemical interactions with other substances. Additionally, students investigate how ocean currents distribute moisture, heat, and nutrients around the planet. Students also examine the diversity of aquatic habitats and the diversity and interactions of organisms that depend on the freshwater and marine ecosystems for shelter and resources. Students research how humans use water resources and the effects of our activities including extraction, diversion, and contamination on aquatic habitats. Students measure water quality variables including temperature, dissolved oxygen, salinity, and the concentration of common contaminants in our local habitats. They perform experiments to observe common interactions of organisms and dissect a variety of animals to better understand their adaptations to aquatic habitats. Students will also design experiments to test how changes in water quality variables affect the physiology and behavior of aquatic animals. Prerequisite: Biology and Chemistry. Full Year, 1 credit.





## **SOCIAL STUDIES DEPARTMENT**

### **AP HUMAN GEOGRAPHY – grade 9**

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). Full year, 1 credit.

### **AP WORLD HISTORY – grade 10**

In AP World History, students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. 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 comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures. Full year, 1 credit.

### **AP UNITED STATES HISTORY – grade 11**

In AP United States History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 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 comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society. Full year, 1 credit.

### **AP UNITED STATES GOVERNMENT AND POLITICS – grade 12**

AP United States Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project. One semester, ½ credit.

### **ECONOMICS – grade 12**

This required course provides a basic survey of topics related to the study of both microeconomics and macroeconomics. Students will explore how various institutions chose to use their scarce resources. Graphical analysis and application of ideas are heavily emphasized. In addition, students complete simulations in personal finance, business development, and stock investment. One semester, ½ credit.



## **ELECTIVES**

### **JAPANESE HISTORY - grade 9 or 10 or 11 or 12**

This course will be a survey of the history of Japan, all the way from the very early Jōmon Period to the modern day. Students will learn about the founding of the longest-reigning imperial family in human history, the rise of the famous samurai warrior class, World War II, and the modern world-influencing culture of Japan. Highly recommended for students going on the Spring 2025 Japan trip. One semester, ½ credit.

### **MODERN BLACK HISTORY - grade 10 or 11 or 12**

This course will examine in detail the experience of African Americans throughout the history of the United States. In general, the course will begin with a discussion of the Middle Passage and end with a look at the Civil Rights Movement as it extends into the new millennium. Along the way, we will touch on numerous issues facing blacks in America today, and examine how those issues are products of unique historical circumstances. The course will focus on how the experience of blacks in America has differed from that of Americans of European descent, what those different experiences imply about America as a whole, and what impact African American culture has had on American society at large. Through an extensive study of primary sources and scholarly writings and frequent responses to those readings in both written and discussion form, students will further refine their abilities to analyze, understand, and articulate history. One semester, ½ credit.



## **WORLD LANGUAGE DEPARTMENT**

### **FRENCH I/SPANISH I**

These courses provide an introduction to the language and culture of French and Spanish-speaking countries. Students will be introduced to the basics of grammar, vocabulary, pronunciation, and culture. Students are expected to develop a general understanding of the nature and function of the language in preparation for the second year of study. Instruction in this course will provide a balanced focus on the following four language skills: reading, writing, listening, and speaking. Students will be able to comprehend and produce limited, meaningful compositions and dialogues. Their reading and listening skills will be practiced through the use of scaffolded, authentic sources. Lessons are centered on communication in order to accomplish practical tasks in familiar situations. No prerequisite. Full year, 1 credit.

### **FRENCH II/SPANISH II**

Second-year French/Spanish instruction solidifies and expands the instructional concepts of the previous year and adds complexity, thus helping students form a complete and firm base in the language. Instructors help students develop the skills to interpret chunks of information and complete longer texts. As their vocabulary grows and their grammatical structures move to more complex structures, students will express themselves through connected ideas with growing fluidity. Students continue to acquire and enhance their understanding of culture through short class discussion and project-based learning. Prerequisite: French I/Spanish I. Full year, 1 credit.

### **FRENCH III/SPANISH III**

Third year language students will work toward mastery of interpersonal, presentational, and interpretative communication skills while they explore new facets of the culture, thus developing a more sophisticated mode of communication. Through the incorporation of limited idioms and cohesive devices, students increase vocabulary and develop a more fluid and organized means of self-expression. Grammar instruction at this level focuses on compound tenses and adds dimension to students' pre-existing capabilities in the target language. The incorporation of increasingly complex authentic sources helps students move beyond the recognizable and familiar to the independent exploration of the new and advanced. Prerequisite: French/Spanish II. Full year, 1 credit.

### **FRENCH IV/SPANISH IV**

These courses are for those students who would like to deepen their knowledge of the target language at an advanced level without the rigor and limitations of the AP curriculum. It is designed to help students further their level of proficiency so they may communicate with ease and increased fluidity in a native-speaking environment. On a daily basis, students will engage with authentic materials in order to strengthen their recognition of and competency with advanced grammar concepts. Interaction with professional, academic, and culturally relevant authentic sources naturally expands each student's vocabulary base in a personalized manner. Finally, students will explore the intricacies of the native speakers' culture, drawing valuable inferences and insights. The course is conducted in a seminar, discussion-based format that challenges students to synthesize their learning. Prerequisite: French/Spanish III. Full year, 1 credit.

### **AP FRENCH LANGUAGE AND CULTURE/AP SPANISH LANGUAGE AND CULTURE**

The AP French/Spanish Language and Culture courses emphasize communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP French/Spanish Language and Culture courses strive not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in French/Spanish. The AP French/Spanish Language and Culture courses engage students in an exploration of culture in both contemporary and historical contexts. The courses develop students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). Prerequisite: French/Spanish IV. Full year, 1 credit.



### **LATIN I**

In Latin I, students will begin their formal study of the Latin language. Emphasis will be placed on building a strong base of Latin vocabulary as well as introductory grammar concepts including (but not limited to), verb tenses, noun cases and declensions, and prepositional phrases. Students will also discuss some of the many challenges inherent in translating an ancient language. In addition to learning the language, students will also study the rich history and culture of Ancient Rome; reading a selection of authors from across the span of Roman history and reading and discussing some of the mythological stories that still influence the literature of the Western world. No prerequisite. Full year, 1 credit.

### **LATIN II**

In Latin II, students will expand upon their study of vocabulary and grammar, with emphasis placed on more complex grammatical constructions and fluidity of translation. Students will also study the use of rhetoric and language in Roman literature, politics, scientific writing, and philosophy. Students will also continue their study of the mythology and culture of Ancient Rome with a focus on the ways in which translation has influenced modern understanding of such well-known stories. Prerequisites: Latin I. Full year, 1 credit.

### **LATIN III**

In Latin III, students will be challenged to engage with Roman history, philosophy, culture, and language by translating and discussing the writings of the Romans themselves. The first semester will focus on the works of prose including, but not limited to, authors such as Pliny the Elder, Pliny the Younger, Cicero, and Marcus Aurelius. Focus in the second semester will be on Roman poetry in its many forms with a discussion of such writings as Ovid, Horace, and Martial. Prerequisite: Latin II. Full year, 1 credit.



## COMPUTER SCIENCE AND TECHNOLOGY DEPARTMENT

### COMPUTER SCIENCE I\* Required

In Computer Science I, students will develop a foundation of computer science knowledge and learn new approaches to problem solving that harness the power of computational thinking to become both users and creators of computing technology. Students are encouraged to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, work individually and collaboratively to solve problems, and discuss and write about the importance of these problems and the impacts to their community, society, and the world. Students will learn these concepts using the Code.org platform. One semester, ½ credit.

### COMPUTER SCIENCE II\* Required

Computer Science II is a continuation of Computer Science I and provides students with a rigorous foundation in Java for the AP Computer Science class. Students will continue to broaden their knowledge of computing topics including developing a well-rounded and balanced view about data in the world around them, the positive and negative effects of technology, and understanding the basics of how and why modern encryption works. Students will learn these concepts using the Code.org, Greenfoot, and other platforms. Prerequisite: Completion of Computer Science I. One semester, ½ credit.

## ELECTIVE COURSES

### AP COMPUTER SCIENCE

Advanced Placement Computer Science is a full-year, college-level course covering application software design and development using the Java language. As the Internet has become a way of communication, Java has become the world's programming language of choice, with its cross-platform, "write once, run anywhere," functionality. This course, approved by the College Board, provides a thorough coverage of the AP-specified core subset of the Java language and prepares students to take the College Board Exam. Prerequisite: Completion of Computer Science II with a grade of A- or better and permission of the instructor required. Full year, 1 credit.

### ROBOTICS (First Tech Challenge)

This course will foster students' creativity and innovation through the design and implementation of a robot to compete in the FIRST Tech Challenge ([www.firstinspires.org](http://www.firstinspires.org)). FIRST Tech Challenge teams are challenged to design, build, program, and operate robots to compete in a head-to-head challenge in an alliance format. Teams will also learn entrepreneurial skills such as fundraising, brand design and marketing, and community outreach. Students will gain an understanding of the principles of robotics through the study of programming and engineering design concepts. Requires outside participation on Lakehill's FIRST Challenge team. Full year, 1 credit.



## **FINE ARTS DEPARTMENT**

### **COMPUTER GRAPHIC DESIGN**

Learn how to use Adobe Creative Suite including Photoshop, Illustrator, InDesign, and MORE! Learn the fundamentals of good graphic design and photography manipulations to create content to communicate ideas that inspire, inform, and captivate. One semester, ½ credit.

### **DRAWING**

A one-semester course devoted to drawing, using pencil, charcoal, and ink. Areas of concentration include life drawing, landscape (one- and two-point perspective), and still life. One semester, ½ credit.

### **AP STUDIO ART: DRAWING**

The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The portfolios correspond to the most common college foundation courses. Students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions. Full year, 1 credit.

### **PAINTING**

A one-semester course devoted to painting, using acrylic, watercolors, and oils. Areas of concentration include self-portraits, landscape, and still life. One semester, ½ credit.

### **SCULPTURE**

A one-semester course devoted to sculpture. Media involved include constructivism and papier-mâché. One semester, ½ credit.

### **CERAMICS**

This semester-long course will focus on the basics of handbuilding with clay. Learn to make art that is also a utilitarian object. Students will learn (or review) the basics of working with clay and be able to choose projects provided or create one from their imagination. Make your own mug or bowl. Make a ceramic sculpture of your favorite animal or an abstract wonder. We will also learn about glazing and finishing our pieces. This class is perfect for a beginner or someone who has lots of experience with ceramics. Lets see what you can create! One semester, ½ credit.

### **YEARBOOK**

This course solely works toward the completion of a large finished product, the Lakehill Yearbook. In this course, students will gain skills in page design, advanced publishing techniques, copywriting, editing, and photography, while producing a creative, innovative yearbook which records school memories and events. Students will identify and report news-making events, while incorporating journalistic forms, techniques, and knowledge to document a year in the history of Lakehill and its community. Participants gain useful, real-world skills in time management, marketing, teamwork, and design principles. Students also learn Adobe Photoshop and InDesign. Out of class and after school, students will “shoot” digital photos, and create and analyze student polls. Students are responsible for the proper care and handling of digital cameras. Students are strongly encouraged to take Digital Photography and Computer Graphic Design first. Full-year class only, 1 credit.

### **FILM PRODUCTION**

Focusing on the importance of organization and experimentation within the digital production process, this course will prepare students for the planning, production, and post-production of quality films, newscasts, music videos, and documentaries, and will allow students to tell a story. With the technology of smartphones, tablets, and digital camcorders, students will be able to create digital productions ranging from fiction to non-fiction, from reality to fantasy, from local happenings to the far reaches of outer space. To successfully create, students will need to focus on the five areas of digital production: development, pre-production, production, post-production, and distribution. Each area poses its own challenges and allows for collaboration with other students, faculty, and community members. One semester, 1/2 credit.



### **DRAMA**

This elective is a formal introduction to drama, including the study of character analysis via discussion, television, and films. Emphasis is placed on students developing creative expression and confidence through participation in a full rehearsal process which concludes with the performance of a play. One semester, ½ credit.

### **MUSICAL THEATER**

Musical Theater is a one-semester course. Students will produce a full musical or musical revue which involves dancing, singing, and acting. Students must be present at all out-of-school rehearsals and all performances. One semester, ½ credit.

### **UPPER SCHOOL CHOIR**

The choir will perform at the Upper School Winter Concert, ISAS, and the Spring Choir Concert. Music performed ranges from classical choral music to pop choral styles. Choir may be mixed with boys and girls or a separate girls choir (Women's Chorale) and boys choir (Man Choir) depending on schedules. One semester or Full year, ½ or 1 credit.

### **CERAMICS 2**

This is a project based class where students will use their beginning knowledge of ceramics to dive deeper into exploring the functional and sculptural side of clay! Students will learn to center and learn the basics of throwing on a potter's wheel. Students will learn to explore a deeper understanding of glaze and how to use it. Prerequisite: Ceramics. One semester, ½ credit.

### **DIGITAL PHOTOGRAPHY**

Learn composition, effective use of light, file management, digital image manipulation and developing a photographic vision. Students entering the course must have a digital camera. This is a project based class focused on learning the techniques to make your photographs a true piece of art as well as using Adobe Photoshop to manipulate your images. One semester, ½ credit.

### **ART HISTORY**

Whether you are an art enthusiast who would like to know more about the history behind your favorite works and artists, or somebody who could not tell a Titian from a De Kooning—but would like to—the Art History elective is for you. You will take a tour of thirty millennia of artistic expression, covering artistic movements, major artists, and indispensable masterworks, and the world events and cultural trends that helped spawn them. With the help of informative film series like "How the Pyramids Were Built", "Art of the Western World", and "Godfather's of the Renaissance" you will see how and why art of the past evolved. Although your textbook is titled "Art History for Dummies" you do not have to be one to enroll in this fun and informative class. One semester, ½ credit.



## **GENERAL ELECTIVES**

### **HISTORY THROUGH FILM - grade 9 or 10 or 11 or 12**

Students will watch and deconstruct historical films within the larger context of scholarly analysis of a particular historical period or event. Films will be chosen based on time periods and eras of significance throughout antiquity all the way through modern historical events. One semester, ½ credit.

### **PERSONAL FINANCE – grade 11 or 12**

The course presents essential knowledge and skills to make informed decisions about real world financial issues. Students will learn how choices influence occupational options and future earning potential. Students will also learn to apply decision-making skills to evaluate career choices and set personal goals. The course content is designed to help the learner make wise budgeting, spending, saving, and credit decisions and to make effective use of income to achieve personal financial success. Based on student interest, the course may also include information about investing (stocks, bonds, commodities, real estate, IRAs, etc), college financing, introductory information about creating a small business, or other student financial interests. One semester, ½ credit.

### **SURVEY OF MATHEMATICS - grade 10 or 11 or 12**

This course will explore unique systems of mathematics not typically explored in traditional math classes. These include other-than base 10 number systems (binary, base five, base twenty - Mayan mathematics), non-euclidean geometries (Lobachvskian and Reimannian geometry), history of math, as well as additional topics of student interest. The only requirements are Algebra 1 and Geometry (could be concurrent with Geometry). One semester, ½ credit.

### **PSYCHOLOGY - grade 11 or 12**

Students study the science of behavior and mental processes. Students examine the full scope of the science of psychology such as the historical framework, methodologies, human development, motivation, emotion, sensation, perception, personality development, cognition, learning, intelligence, biological foundations, mental health, and social psychology. One semester, ½ credit.

### **SOCIOLOGY - grade 11 or 12**

Sociology, an elective course, is an introductory study in social behavior and organization of human society. This course will describe the development of the field as a social science by identifying methods and strategies of research leading to an understanding of how the individual relates to society and the ever changing world. Students will also learn the importance and role of culture, social structure, socialization, and social change in today's society. One semester, ½ credit.

### **LEADERSHIP THROUGH SPORTS - grade 9 or 10 or 11 or 12**

The goal of this class is to help students and student athletes develop the skills and traits needed to be leaders in school and on the field/court. Students will discuss attributes and characteristics of successful leaders as well as develop skills necessary to become a leader. Students will also read a sports focused leadership book with the goal centered on growing knowledge and understanding of what great leadership in athletics looks like. This course is for anyone interested in becoming a leader or developing leadership skills with a focus on athletics and impacting the school community in a positive way. One semester, ½ credit.

### **SPORTS MEDICINE - grade 11 or 12**

This course will serve high school students who are interested in sports medicine health care professions. They will gain introductory knowledge and concepts of sports medicine including, but not limited to: basic human anatomy, recognition, treatment, and prevention of common sports injuries, first aid, cardiopulmonary resuscitation (CPR), the use of an automated external defibrillator (AED), concussion protocol, as well as the Athletic Department's Emergency Action Plan for both campuses during athletic events. Students will be actively participating in hands-on training of athletic taping to prevent or support injuries during practices and before games. One semester, ½ credit.





## **ATHLETIC CREDIT ELECTIVES**

### **DANCE - grade 9 or 10 or 11 or 12**

This class is open to all levels focusing on movement patterning, strength, and flexibility through classic, contemporary, and street dance forms. Strongly suggested for those interested in the musical theatre elective. There will be an informal showing at the end of the semester. One semester, ½ credit.

### **YOGA - grade 9 or 10 or 11 or 12**

This course offers students the opportunity to study yoga as a movement discipline. Through learning various postures, flow sequences, breathing techniques, and relaxation methods, students will improve alignment, flexibility, strength, and endurance. Students will develop greater awareness of themselves through mindfulness practices which help increase confidence and clarity. Additional focuses include an introduction to the historical roots of yoga and a functional understanding of anatomy and physiology. One semester, ½ credit.