## **AKEHILL** PREPARATORY SCHOOL

2025 – 2026 UPPER SCHOOL COURSE GUIDE

### LAKEHILL PREPARATORY SCHO FIFTY-FIRST COMMENCEMEN



### ACADEMIC OVERVIEW

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 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. Our extensive programs expose every child to new experiences. Students are encouraged to participate and are challenged to excel in ways 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 writing, critical thinking, 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 \*Class of 2026: 2 Credits Computer Science: 1 Credit Fine Arts: 1 Credit Athletics: 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
or English IV: Genre Study

#### 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

#### MATHEMATICS

#### Sequence B

9: Algebra I
10: Geometry
11: Algebra II
12: Pre-Calculus, AP Pre-Calculus, Statistics, AP Statistics

#### **SCIENCE**

9: Biology
10: Chemistry
11 & 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 Geography10: AP World History11: AP United States History12: AP United States Government andPolitics / Economics

#### WORLD LANGUAGE

Three years of French, Latin, or Spanish are required with the same language taken in sequence. \*Two years for the Class of 2026.

#### **COMPUTER SCIENCE**

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

#### FINE ARTS

Students are required to complete one credit from the following: Computer Graphic Design, Digital Photography, Film Production, Drama, Musical Theater, Beginning 2D Art, Intermediate 2D Art, Advanced 2D Art, Beginning 3D Art, Intermediate 3D Art, Advanced 3D Art, Upper School Choir, Music Theory Applied: Group Piano, 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 challenge. 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.

#### **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 taken in grades 9th-12th 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.

#### **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.

### 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.

#### ENGLISH IV: GENRE STUDY – GRADE 12

This course functions as a two-part course that explores various genres. For those students who are interested, Dr. Shierry will gather information about the Genres they wish to engage and then design the course to fit their needs and voice. Genre possibilities may range from Science Fiction to Mystery to Dystopian Literature and more. This course will require students to engage with the principles of literary analysis through the composition of analytical and argumentative essays. Vocabulary enrichment continues through regular study and application. Full year, 1 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 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.



#### MATH DEPARTMENT PRE-CALCULUS – GRADE 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 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 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 AP Pre-Calculus. 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.

#### **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 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.

#### 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.



#### SCIENCE DEPARTMENT

#### 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. Students 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.

#### **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.

#### 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.

#### 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.

#### **BEGINNING 2D ART**

This introductory course invites students to explore the fundamentals of two-dimensional art. Students will experiment with a variety of mediums, including drawing, painting, and collage, while developing foundational skills in line, shape, color, and composition. Emphasis will be placed on creative problem-solving and personal expression as students create unique projects. No prior art experience is required—just curiosity and a willingness to try new things. One semester, ½ credit.

#### **INTERMEDIATE 2D ART**

Building on the skills learned in Beginning 2D Art, this course allows students to deepen their understanding of 2D techniques and concepts. Students will work with more advanced media, including ink, watercolor, and mixed media, and explore topics such as perspective, texture, and dynamic composition. Assignments encourage independent thinking and experimentation, with opportunities to develop a personal style. Students should have prior experience with basic art concepts or instructor approval. One semester, ½ credit.

#### **ADVANCED 2D ART**

This course is designed for experienced art students who are ready to refine their skills and create a portfolio of cohesive, professional-quality work. Advanced 2D Art emphasizes conceptual development, technical mastery, and artistic voice. Students will undertake self-directed projects with guidance from the instructor, explore themes of personal significance, and experiment with both traditional and contemporary approaches to 2D art. Regular critiques and discussions will help students prepare for college-level art programs or personal artistic pursuits. Prerequisite: Intermediate 2D Art. Participation in the TAPPS competition is expected, plus one other competition. One semester, ½ credit.



#### FINE ARTS DEPARTMENT BEGINNING 3D ART - CERAMICS

This introductory course offers students an engaging exploration of three-dimensional art, with a strong focus on ceramics. Students will learn basic hand-building techniques such as pinch, coil, and slab construction, as well as foundational skills in glazing and surface decoration. Projects will include functional pottery and sculptural forms, encouraging creativity and craftsmanship. No prior experience is necessary—just a willingness to get your hands dirty and discover the possibilities of working in 3D! One semester, ½ credit.

#### **INTERMEDIATE 3D ART - CERAMICS**

In this course, students will expand their knowledge of 3D design and ceramics, building on the techniques introduced in Beginning 3D Art. They will focus on more advanced hand-building methods and explore intricate surface treatments and glazing techniques. Projects will emphasize technical precision, creative problem-solving, and individual expression. Students will also delve into sculptural approaches and explore how form and function interact in three-dimensional art. Prerequisite: Beginning 3D Art. One semester, ½ credit.

#### ADVANCED 3D ART - CERAMICS

Designed for experienced students, this course provides an opportunity to create sophisticated and highly personalized 3D art projects, with ceramics as the primary medium. Students will refine their skills in hand-building and may choose to explore wheel-throwing and experimental techniques as they develop a cohesive body of work



reflecting their artistic voice. Regular critiques, independent projects, and discussions about contemporary ceramic art will prepare students for college-level work or personal artistic endeavors. Prerequisite: Intermediate 3D Art Participation in TAPPS competition is expected. One semester, ½ credit.

#### YEARBOOK, GRADES 10-12

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.

#### FINE ARTS DEPARTMENT 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, post-production, and distribution. Each area poses its own challenges and allows for collaboration with other students, faculty, and community members. One semester, ½ 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.. Full year, 1 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.

#### MUSIC THEORY APPLIED: GROUP PIANO

Students in Group Piano will have opportunities to engage with other musically interested students in the application of music theory to the playing of piano. Students will build toward a recital opportunity each semester. One semester, ½ credit.



#### **ELECTIVES**

#### **BUSINESS PRINCIPLES AND ENTREPRENEURSHIP - GRADES 10 -12**

This course will give students the opportunity to learn about the business fundamentals that go into creating and pitching a business startup. From Shark Tank innovation ideas to business operations, marketing, and communications, students will explore a wide variety of topics that enhance their understanding of business for their study and life after Lakehill. One semester, ½ credit.

#### JOURNALISM - GRADES 9-12

This course will provide students the opportunity to learn the fundamentals of journalism and engage in interviewing, reporting, and news gathering practices. Learning about different types of journalistic writing, ranging from news and opinion, breaking and long-form, students will learn to write and report on a variety of different topics and engage with their school and local communities. One semester, ½ credit.

#### **ROBOTICS (FIRST TECH CHALLENGE) - GRADE 9-12**

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). 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.

#### PERSONAL FINANCE - GRADE 11-12

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.

#### **PSYCHOLOGY - GRADE 11-12**

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.



#### **ELECTIVES** SPORTS MEDICINE - GRADE 11-12

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.

#### **SPEECH AND DEBATE - GRADES 9-12**

Students engaged in Speech and Debate will develop their communication skills and improve their ability to publicly, speak, argue, and think critically. Through a wide variety of different events and opportunities, students will participate in several in class debates and forums and think about presentation style and the manner in which they engage an audience. Students will have the opportunity and be expected to publicly present their work both in-class and through showcase and competition opportunities. One semester, ½ credit.

#### **MOCK TRIAL - GRADES 9-12**

Mock Trial is the study of courtroom procedures. Students will learn about legal practices and learn to develop arguments, question witnesses using both direct and cross examination techniques, the rules of courtroom procedure, rules of evidence and objections. Mock trial will engage the legal community's expertise to learn more about best practices to help prepare students for the task ahead. One semester, ½ credit.

#### MODEL UNITED NATIONS - GRADES 9-12

Model United Nations provides those students interested in international relations, political science, and world affairs to bring their interest to life. Representing different countries in various simulations, Model United Nations students will work to understand global issues and dynamics through interactive, simulated conferences. One semester, ½ credit.

#### ATHLETIC CREDIT ELECTIVES

#### DANCE - GRADE 9-12

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 9-12

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.

# **LAKEHILL** PREPARATORY SCHOOL

2025 – 2026 UPPER SCHOOL COURSE GUIDE

www.lakehillprep.org