



Khan Lab School

Middle School CURRICULUM GUIDE

2026-2027

Effective: August 1, 2026

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Mission and Vision

School Model

As a lab school, KLS grounds its programmatic choices in educational best practices and research on how students learn. We continuously assess our practices and outcomes, and consider feedback from students, families, faculty, and staff on how to improve our model and contribute to the broader education field.

Khan Lab School operates on core beliefs that create a learner-centered environment: mastery learning, personalized pacing with high expectations, learning that extends beyond the traditional classroom, the use of online tools, the combination of skill development with content knowledge, and deeper experiential learning opportunities.

As a lab school, our programmatic choices are grounded in educational best practices and learning science. We continuously assess our practices, outcomes, and stakeholder feedback to improve our model and contribute to the broader education field.

Khan Lab School operates on core beliefs that create a learner-centered environment: mastery learning, learning without time or space constraints, personalized pacing with high expectations, leveraging online tools, combining skill development with content knowledge, and providing deeper experiential learning opportunities.

Our Founding Vision

Our founding vision has guided KLS since its inception. In 2024, as part of our 10th anniversary, we completed a comprehensive process of refining and updating this vision to reflect a decade of experience and the evolving educational landscape. The principles below remain central to our philosophy and chart our course for the next decade. These beliefs describe the school we are committed to being. Families can expect to see them reflected throughout the KLS program. The following outlines our founding vision, which has guided Khan Lab School since its inception. As we celebrated our 10th anniversary in 2024, we completed a comprehensive process of refining and updating this vision. The principles outlined here remain central to our philosophy, and we have enhanced them to reflect our decade of experience and the evolving educational landscape. This updated version incorporates new insights and aspirations to chart our course for the next decade of innovative education.

KLS is:

- Learner-centered – Students take ownership of their learning in a supportive environment where teacher-guides foster independence through motivation, active engagement, and personalized guidance.
- Mastery-based – Students have ongoing opportunities to close gaps and demonstrate mastery, ensuring strong foundations and encouraging lifelong learning.
- Self-paced – Students have opportunities to progress at their own pace—accelerating, revisiting, or reinforcing learning as needed—within a framework of ambitious expectations and targeted support.
- Content-rich and skill-driven – KLS values both deep content knowledge and essential 21st-century skills like critical thinking, collaboration, and communication.
- Rooted in well-being and purpose – Social-emotional well-being, personal responsibility, and passion-driven learning are central to helping students grow into purposeful, resilient individuals.
- Collaborative and student-led – Teachers and students learn from and teach one another, with students regularly stepping into leadership and peer-teaching roles.
- Flexible and real-world aligned – Learning happens beyond the classroom through outdoor, community-based, or self-directed experiences that reflect real-world learning.

- Advancement-ready – Students have opportunities to engage in accelerated or college-level work as readiness allows.
- Tech-enabled, experience-rich – Online tools support core skill development and free time for experiential, hands-on, and interdisciplinary learning.
- Essential by design – KLS focuses on essential content and flexible exploration, helping students build a strong foundation while pursuing personal interests.
- Affordable and replicable – By focusing on academic mastery, character development, and student passions, KLS offers a high-quality, cost-efficient educational model.
- Open-minded and critically engaged – KLS nurtures independent thinkers by welcoming diverse perspectives and encouraging respectful exploration of complex ideas.

Reference: [KLS Vision 10th Anniversary Update](#) (long version)

Our Approach to Learning and Teaching

Our approach to learning, teaching, assessment, and school-wide decisions are all grounded in our school's mission and vision.

Laboratory Model

As a lab school, our programmatic choices are grounded in educational best practices and learning science. We continuously assess our practices, outcomes, and stakeholder feedback to improve our model and contribute to the broader education field.

Khan Lab School operates on core beliefs that create a learner-centered environment: mastery learning, learning without time or space constraints, personalized pacing with high expectations, leveraging online tools, combining skill development with content knowledge, and providing deeper experiential learning opportunities.

At Khan Lab School, having a clear and shared understanding of mastery is essential to our educational approach. The following definition guides how we assess student learning and determines when students are ready to advance in their educational journey.

Definition: At Khan Lab School, mastery learning means that a student has developed a sufficient and reliable understanding of key concepts and skills, and can apply them independently, accurately, and consistently in familiar contexts.

To determine mastery, we look at four key indicators:

- **Proficiency:** How well a student demonstrates accurate, meaningful understanding of the targeted learning outcome
- **Independence:** How much support or prompting a student needs to apply their learning

- **Consistency:** How reliably a student demonstrates their understanding over time and across multiple opportunities
- **Contextuality:** How well a student applies their understanding across different familiar situations, and occasionally in novel or complex ones

Achieving mastery signals readiness to build on existing knowledge, *not* perfection or advanced performance. This is distinct from the overall **Mastery** designation awarded at the end of a course for Middle and Upper School students. More information about the KLS academic program is included in the Middle and Upper School Academic Handbook.

Peer-to-Peer Learning

Students learn from each other and teach one another. Older students learn how to teach younger students through regular interactions, in which both give and receive feedback. The mixed-age setting is intended to foster collaboration and authentic relationships rather than competition. Students are also supported in designing and leading their own courses.

Student Agency

We believe in creating an environment for students to develop their ability to take action, assume responsibility for their behavior in a safe learning environment, and apply all this in unfamiliar situations. To support the development of student agency, students learn how to set meaningful goals and hold themselves accountable for their learning and development. Students own their learning and have a voice in their school experience. Student leadership regularly collaborates with administration on school-wide policies and events, attending conferences alongside teachers, participating in professional development opportunities, and co-designing experiences for their classmates.

Role of Khan Academy in the Curriculum

At KLS, Khan Academy supports our mastery-based, student-centered approach to learning by providing personalized instruction that meets students where they are. Its data-driven platform empowers teachers with real-time analytics and instructional insights. It is integrated differently across subject areas to reflect their distinct pedagogical needs.

Math

Khan Academy serves as the *primary curriculum* for most math courses. It structures students' learning pathways and allows them to demonstrate their mastery of key skills.

Progress on Khan Academy is one of the central ways students show readiness to move to the next level, alongside in-person assessments and projects. Students are required to complete 90% of the course, complete all unit assessments at 90%, and score at least 90% on a proctored Course Challenge to complete a math class.

History

In History, Khan Academy acts as a curricular resource, reinforcing key ideas through practice questions, videos, and articles. Teachers identify specific Khan Academy materials and exercises in their course syllabi to guide students toward the most relevant Khan Academy content. It is also used for extension work—students who finish core assignments early can use Khan Academy to pursue topics that interest them more deeply. Completion of the whole Khan Academy course is not required for Mastery in history.

Science

Students taking science courses taught by KLS Middle teachers are expected to complete the associated Khan Academy content when assigned. It is used as part of a “flipped classroom” model and for extension work. Completion of the whole Khan Academy course is not required for Mastery in science.

Middle School Course Descriptions (Grades 6-8)



Art

The Middle School Art program helps students develop technical skills, visual literacy, an understanding of art history, and confidence as makers. Across grades 6 through 8, students

engage with drawing, painting, sculpture, digital design, printmaking, and mixed media while exploring how artists use materials, ideas, and processes to communicate meaning.

The art program follows a deliberate progression across the middle school years. In sixth grade, students build foundational skills through the elements and principles of design, experimenting with a variety of materials and techniques. Seventh graders expand on that foundation by exploring art through different historical periods, cultures, and artistic movements, deepening both their technical abilities and their creative decision-making. In eighth grade, Advanced Art students develop greater independence through sustained projects, sketchbook practice, critique, and reflection, working toward a more personal and intentional studio practice.

By the end of middle school, students leave with a broad understanding of art as both a discipline and a way of understanding, questioning, and connecting with the world around them.

Art 6: Fundamentals to Personal Expression

Grade 6 Art introduces students to the foundations of visual art through hands-on exploration. Students are introduced to different mediums while learning the elements and principles of design such as understanding balance, perspectives, composition, color theory and its purpose

The course encourages experimentation, curiosity about fundamentals, and comfort with the creative process. Students learn how to observe closely, develop ideas, and transform simple materials into meaningful artwork. Projects include observational drawings, cardboard sculptures, texture studies, self-portraits, collaborative pieces, and introductory design challenges. Alongside skill-building, students begin learning how artists use visual language to communicate ideas and emotions.

Art 7: Exploring Artistic Influences & Creating Meaning

Grade 7 Art builds on foundational skills while introducing students to art history, artistic movements, and cultural influences from different time periods. Through studio projects connected to historical and contemporary artists, students explore how art reflects identity, society, storytelling, and change over time.

Students continue developing technical skills across different mediums while being encouraged to take greater ownership of their creative choices. Projects include surrealist-inspired compositions, creating zines, learning about Dali, Matisse, Picasso's style of work, clay work, or mixed media pieces connected to movements such as Impressionism, Cubism, Pop Art, or street art. The course emphasizes experimentation, reflection, and learning how artists across history approached materials & ideas differently.

Art 8: Studio Practice & Creative Exploration

Advanced Art is designed for students who are ready for a more focused and independent studio experience. The course supports students in developing stronger technical skills, personal themes, and longer-term projects while building confidence in their individual artistic voice.

Students maintain sketchbooks, or process journals to document ideas throughout the year. Projects include acrylic painting, portfolio development, installation work, experimental sculpture, cyanotype printing, or independently driven concepts based on personal interests that students are driven to pursue. Alongside creating artwork, students engage in critique, reflection & peer feedback about how artists can better understand how ideas evolve through process and practice.

English

The Middle School English program develops students into confident, critical readers and writers who can engage with complex texts, construct evidence-based arguments, and express their ideas with clarity and purpose. Across grades 6 through 8, students encounter a deliberately curated range of texts, fiction and nonfiction, classical and contemporary, spanning Shakespeare to science fiction, poetry to memoir to investigative journalism. At each grade level, the theme and texts mirror what students are studying in history: in 7th grade, for example, they focus on world literature and world history. As they progress from one year to the next, students build increasingly sophisticated analytical and writing skills across multiple modes: informative, literary, argumentative, and narrative. Writing is treated as a process: students draft, receive feedback, revise, and reflect. Critical thinking is at the heart of the program. Students are regularly asked not just to comprehend what they read, but to interrogate it, connect it to broader contexts, and defend their own interpretations. By the time students complete 8th grade, they leave as practiced writers and independent thinkers, equipped to engage seriously with literature, ideas, and the world.

English 6: Finding Our Place

In English 6, students are encouraged to discover and develop their unique voices while preparing for success in an academic environment. Students learn how to express themselves and, importantly, convey complex thoughts through articulate and elaborative writing. The year begins with an introduction to design thinking and effective communication. As the course progresses, students explore challenging and philosophical questions about their place within the Earth's ecosystem. Each week, students participate in a one-hour Socratic Seminar for which they are expected to prepare textual evidence in advance and articulate and defend their interpretations in discussion with peers. Throughout the year, students enhance their skills by engaging in diverse research methods, collaborative discussions, and various writing assignments. A self-paced grammar course allows students to progress at their own speed, fostering personal understanding and skill development. We focus on a variety of texts, including *The Boy Who*

Harnessed the Wind, *Look Back*, *The Arrival*, *Superman: Secret Identity*, *Flowers for Algernon*, *The Ones Who Walk Away from Omelas*, *Who Can Replace a Man*, and *Other Words from Home*, each examining what it means to be human and how these profound questions inspire individuals to reach greater heights. The course is integrated with our Ancient History curriculum, creating a comprehensive, cross-curricular learning experience.

English 7: World Literature

In this global culture-focused course, students explore a range of voices, perspectives, and literary traditions from around the world through short stories, literature circles, and shared texts. In literature circles, students select from a curated set of texts representing diverse cultures and experiences, engaging in collaborative discussion and analysis with peers. Through *The Spirit Catches You and You Fall Down* by Anne Fadiman, students examine what happens when cultural beliefs clash within systems of power, investigating themes of assimilation, identity, and resistance through reflective writing and independent research. The course culminates with Shakespeare's *Romeo and Juliet*, where students bring the critical lens they have developed across the year to one of literature's most enduring explorations of loyalty, tradition, and personal and communal conflict. Across all units, students build analytical writing, research, and public speaking skills, producing a range of multimedia projects and literary essays that trace stories of change from the personal to the global.

English 8: American Literature

English 8 runs alongside American History to offer students an interdisciplinary exploration of the American experience. Through a wide range of genres and voices — including fiction, nonfiction, memoir, journalism, and poetry — students examine themes of power, identity, injustice, and resistance, asking what happens when individuals confront or are shaped by the societies they inhabit. Anchor texts include *The Nickel Boys* by Colson Whitehead and *Ender's Game* by Orson Scott Card, but the course deliberately draws from a broad spectrum of perspectives to explore not only what divides us, but what unifies us as a society. Throughout the course, there is a strong emphasis on writing: students learn to construct arguments grounded in textual evidence, develop their ability to explain and analyze rather than simply summarize, and practice representing multiple perspectives with accuracy and nuance. By the end of the year, students leave with a sophisticated understanding of how literature illuminates history and human experience, and with the writing skills to engage seriously with both.

History

A strong command of historical facts, geography, and chronology is not incidental to the work of this program. It is the foundation upon which genuine historical thinking is built. Students who know the world's civilizations, their locations, their timelines, and their defining characteristics are far better equipped to analyze causes and consequences, evaluate competing perspectives, and construct evidence-based arguments. Across three years, the program traces an intentional arc: students begin in 6th grade with the ancient world, exploring the earliest human civilizations and the geographic and cultural forces that shaped them; move in 7th grade through the medieval world and the rise of complex global networks; and arrive in 8th grade at American history, examining how the ideals, conflicts, and contradictions of a young nation connect to the world students inhabit today. Curricular resources are teacher-curated from multiple sources, drawing heavily from the TCI curriculum. Writing is woven throughout all three years, with Document Based Questions (DBQs) serving as a through-line that grows in complexity and sophistication from grade to grade. By the time students complete 8th grade, they leave with a coherent understanding of how human societies have developed from their origins to our early modern global community and with the historical thinking skills to continue asking hard questions about where we go from here.

History 6: Ancient History

Ancient History takes students on a journey through the world's earliest civilizations, from Mesopotamia and Ancient Egypt to India, China, Greece, and Rome. Students examine how geography shaped the development of these cultures — influencing how they governed themselves, organized their societies, traded with neighbors, and expressed their beliefs. While each civilization is distinct, the course continually asks students to identify patterns across time and place, tracing the common threads of human experience alongside the remarkable diversity of solutions early peoples found to shared challenges. Writing is a core component of the course, with students developing the skills to analyze primary and secondary sources, construct evidence-based arguments, and begin working with Document-Based Questions (DBQs) — a foundational practice they will build on through 7th and 8th grade. By the end of the year, students come away with a richer understanding of our shared human past and the historical thinking skills to engage seriously with it.

History 7: World History

World History takes students into the rich and complex history of the medieval and early modern world, spanning from the fall of the Roman Empire to the Age of Enlightenment. Students investigate the rise and influence of major civilizations across Europe, the Middle East, Africa, and Asia, examining how political systems, religious movements, cultural traditions, and technological

innovations shaped societies over time. Through inquiry-based lessons, primary source analysis, and interactive simulations, students explore key topics such as feudalism, the spread of Islam, the kingdoms of West Africa, imperial China, and the lasting effects of the Crusades and the Black Death. Writing is central to the course, with students continuing to develop their skills in constructing evidence-based arguments and working with Document Based Questions (DBQs), building on the foundation established in 6th grade. Throughout the year, emphasis is placed on developing critical reading and writing skills, building historical thinking competencies, and drawing meaningful connections between the medieval past and the forces that continue to shape our world today.

History 8: American History

Students in American History explore the development of the United States from the earliest peoples of North America through the Reconstruction era, examining how geography, migration, colonization, revolution, and expansion shaped the nation. Through inquiry-based lessons and analysis of primary sources, students investigate the political, social, economic, and cultural forces that influenced American society over time, studying key topics such as Indigenous cultures, European exploration and settlement, the growth of slavery and trade, the American Revolution, the founding principles of the Constitution, westward expansion, reform movements, and the causes and consequences of the Civil War. Writing is central to the course, with students working with Document Based Questions (DBQs) to synthesize evidence from multiple sources and construct well-reasoned historical arguments, building toward the full command of the form they have been developing since 6th grade. Emphasis is placed on developing historical thinking skills, critical reading and writing, and the ability to evaluate multiple perspectives, while drawing connections between the nation's past and the challenges and debates that continue to shape the United States today.

Math

At the heart of our approach to teaching math in the Middle School is a strong emphasis on both content mastery and conceptual understanding. We recognize that fluency with foundational material is essential for higher-level mathematical thinking and problem-solving. Students gain not only the what of mathematics but the why. Our tailor-made curriculum, developed by our faculty, is mapped to Khan Academy's comprehensive framework to ensure rigorous coverage of core mathematical concepts and utilizes the Art of Problem Solving text series as a source of challenging problem sets. Our course sequence spans Pre-Algebra A through PreCalculus and is not tied to specific grade levels.

While courses from Algebra I onward are high-school level courses, our instruction is designed to meet middle school students where they are, with highly interactive, engaging lessons tailored to

their neurodevelopmental stage. To push beyond routine computation and build the habits of mind that define mathematical thinking, students regularly encounter problems before being given methods, working through approaches via guided discussion and then defending their reasoning. By the time students complete our program, they are mathematical thinkers who can construct arguments, work through complex multi-step problems, and approach new material with confidence and flexibility.

Pre-Algebra A: Foundational Math

Prerequisites: Math 5

In Pre-Algebra A, students build a strong foundation in mathematics by covering the key concepts of Grade 6 and the first half of the traditional Grade 7 math curriculum. This combined course is designed to ensure a smooth transition from elementary to middle school math. Topics include operations with whole numbers, fractions, and decimals; ratios and proportional relationships; expressions and equations; integers and rational numbers; and an introduction to geometry and data analysis. As they explore these topics, students develop critical thinking and problem-solving skills, preparing them for the challenges of the Pre-Algebra 2 course and beyond. The goal is to nurture a deep understanding of mathematical principles and an appreciation for the role math plays in the world around them

Pre-Algebra B: Building Toward Algebra

Prerequisites: Pre-Algebra A or placement exam

Pre-Algebra B is a continuation of the Pre-Algebra A course, covering the second half of Grade 7 and all of Grade 8 content. This combined course is designed to build upon the strong mathematical foundation established in Pre-Algebra A. Students explore a wide range of topics including solving multi-step equations and inequalities, rational numbers, ratios and proportions, percents, linear functions and graphing, geometry, real numbers and right triangles, perimeter, area, and volume, as well as statistics and probability. Throughout the course, students deepen their mathematical understanding, strengthen their problem-solving abilities, and prepare for the transition to Algebra 1. The focus is on equipping students with the skills and confidence needed to tackle complex mathematical concepts while fostering a lifelong appreciation for the beauty and logic of math.

Algebra 1: Algebraic Reasoning and Problem Solving

Prerequisites: Pre-Algebra B or placement exam

This foundational algebra course serves as a gateway to the world of mathematical thinking and problem-solving. Through a systematic exploration of topics such as linear equations, inequalities,

polynomials, functions, exponents, and radicals, students develop essential skills for modeling real-world scenarios and making informed decisions. Whether preparing for advanced mathematics, science, or simply aiming to enhance quantitative aptitude, Algebra 1 lays the groundwork for their mathematical journey, fostering logical reasoning and analytical prowess that extend far beyond the classroom.

Geometry: Proofs, Patterns, and Spatial Reasoning

Prerequisites: Algebra 1 or placement exam

This geometry course serves two purposes. First, students are introduced to the beauty of Euclidean geometry, learning the fundamentals of points, lines, 2D shapes, 3D objects, and how they all are related. Second, and just as important, students develop critical mathematical practices, including reasoning abstractly, modeling real-world situations, attending to precision, and developing detailed proofs. For many students, this is the first time they have rigorously constructed a proof. Understanding how the body of knowledge in math can be derived from a few fundamental axioms is one of the joys of this course.

Algebra 2: Predictive Modeling through Functions

Prerequisites: Algebra 1 or placement exam

The purpose of this course is to extend students' understanding of functions and the real numbers, and to increase the tools students have for modeling the real world. They extend their notion of number to include complex numbers and see how the introduction of this set of numbers yields the solutions of polynomial equations and the Fundamental Theorem of Algebra. Students deepen their understanding of the concept of function, and apply equation-solving and function concepts to many different types of functions. The system of polynomial functions, analogous to the integers, is extended to the field of rational functions, which is analogous to the rational numbers. Students explore the relationship between exponential functions and their inverses, logarithmic functions. Trigonometric functions are extended to all real numbers, and their graphs and properties are studied.

Finally, students' statistics knowledge is extended to understanding the normal distribution, and they are challenged to make inferences based on sampling, experiments, and observational studies. Algebra 2 is divided into four modules: Polynomial, Rational, and Radical Relationships, Trigonometry, Exponential and Logarithmic Functions and Inferences and Conclusions from Data. Upon successful completion of Algebra 2, students should be able to demonstrate: quantitative reasoning skills, Building of arguments and critical reasoning skills, how to model with mathematics, which tools to use, how to use those tools and when to use them.

Precalculus: Foundations for Calculus and Advanced Modeling

Prerequisites: Geometry and Algebra 2 or placement exam

Precalculus bridges the gap between Algebra 2 and Calculus. Students extend their knowledge of functions to include polynomial, rational, exponential, logarithmic, and trigonometric types, and explore sequences and series, parametric equations, polar coordinates, and vectors. They analyze and graph these functions, use them to model real-world phenomena, and are introduced to limits and continuity as a foundation for Calculus. The course emphasizes connections between algebraic, graphical, and numerical representations while developing critical thinking, quantitative reasoning, and the ability to construct mathematical arguments. Upon successful completion, students are well-prepared for Calculus.

Science

The KLS science program offers a rigorous, high school-level curriculum in chemistry, biology, and physics, aligned to the Next Generation Science Standards (NGSS) and adapted to meet middle school students where they are through highly interactive lessons tailored to their developmental level. Using a flipped classroom model supported by Khan Academy for content mastery, students arrive prepared to spend class time participating in hands-on labs, collaborative projects, and inquiry-based learning rather than lecture. Across all three years, the emphasis is on discovering and applying scientific concepts. They could be investigating local environmental challenges in 6th grade chemistry, exploring the molecular mechanisms of life in 7th grade biology, or designing and building a working arcade game in 8th grade physics.

Science 6: Chemistry

Science 6 students begin the year uncovering the world of atoms and how their patterns on the periodic table reveal chemical behavior. They explore how atoms combine to form molecules and dive into the world of chemical reactions, seeing how substances change and why. Through stoichiometry (unit conversion), students learn to predict how much product a reaction will make, and through thermochemistry (energy conversion), they discover how energy drives change. Later, they explore why reactions speed up or slow down, how balance is achieved in chemical systems. Along the way, students connect chemistry to real-world phenomena and develop problem-solving and lab skills.

Science 7: Biology

Science 7 students begin the year uncovering the world of cells and how they work together to build complex organisms. Students then dive into body systems and homeostasis to understand how the body stays balanced, and explore how energy powers life through photosynthesis and

cellular respiration. As the year progresses, students uncover how cells grow and divide, how traits like eye colors or hair textures are passed down from parents to child, and how populations evolve over time. Along the way, students connect biology to real-world phenomena and develop problem-solving and lab skills.

Science 8: Conceptual Physics

In this hands-on course, students will apply foundational physics concepts such as kinematics, rotational motion, forces, energy, waves, electricity, and circuitry while mastering content through Khan Academy's comprehensive physics curriculum. Throughout the year, students will engage in collaborative design challenges and laboratory investigations that emphasize real-world problem solving and engineering thinking. The course culminates in an in-depth exploration of the physics behind space travel and astronomy. Students will investigate the applications of gravity, energy transfer, and wave behavior in the context of interstellar travel, artificial gravity, the search for extraterrestrial life, and the challenges of communicating across vast cosmic distances.

Spanish

The KLS Spanish program immerses students in the language from day one, with classes conducted primarily in Spanish to build comfort and confidence. Required in 6th grade and strongly encouraged in 7th and 8th, the program develops all four language skills—reading, writing, listening, and speaking—through highly interactive, communicative lessons using the Reporteros curriculum from Klett World Languages. Beyond the classroom, students apply their skills in real-world contexts through local field trips and international travel during Intersession. Across three years, students progress from foundational conversations to creative writing, oral presentations, and nuanced discussion. Those completing the sequence at mastery level or higher generally continue to Spanish 3 in high school.

Spanish 6: Foundations of Communication

No prerequisite

Spanish 6 is an engaging introduction to Spanish language and culture designed for middle school learners. Through interactive activities, students build foundational skills in speaking, listening, reading, and writing. They learn to engage in simple conversations on familiar topics and ask and answer questions about themselves and others. Students also explore cultural practices and products from Spanish-speaking communities, developing cross-cultural understanding. Conducted mostly in Spanish (75–90%), the class provides an immersive environment and meets twice per week.

Spanish 7: Language and Culture

Prerequisites: Spanish 6 or placement exam

Spanish 7 is an immersive introduction to Spanish language and Hispanic culture. Through contextual, real-life communicative activities, students build skills in speaking, listening, reading, and writing. Students learn to engage in simple conversations, present basic information, and write short descriptions on familiar topics. Students also develop interpretive skills to understand the main ideas in conversations and texts. Cultural exploration is woven throughout the course, allowing students to recognize and compare practices from Spanish-speaking communities with their own. The class is conducted primarily in Spanish (75–90%) to support language development and confidence.

Spanish 8: Communicating with Confidence

Prerequisites: Spanish 7 or placement exam

Spanish 8 builds on the foundation in Spanish 7 and enhances students' understanding of the material. In this course, students expand their vocabulary and master the use of different past tenses, including imperfect and present perfect or compound. They also improve their creative writing skills and oral proficiency through presentations, communicative activities, games, cultural activities, and reading-centered discussions. Class is conducted 80–90% in Spanish to ensure students develop the fluency to carry real conversations with confidence.

Exploratory Courses

The Exploratory course series are courses offered in addition to our core academic courses. We have chosen the name "Exploratory" rather than just "Electives" to emphasize a proactive and adventurous approach to learning, inviting students to explore beyond their usual academic boundaries.

These credit/no credit courses are taught by faculty and may also have Upper School students participate as teaching assistants. Although we run on a two-term academic cycle, there are three sessions of Exploratory throughout the year (fall, winter and spring to give students more options.

Please note that while some offerings span two or three sessions, students can always enroll in a different Exploratory course during the next session if they no longer wish to participate in the one they were enrolled in for the previous session. Courses must have a minimum enrollment of 6 students in order to run.

Exploratory Offerings

FALL	WINTER	SPRING
Latin	Latin*	Latin*
Mathletes	Mathletes	PSAT/SAT Prep
Science Olympiad	Science Olympiad*	Science Olympiad*
Speech & Debate	Speech & Debate	Theater
Coding	Coding	Coding
NaMoWriMo	TBD	Ethics Bowl

*Only open to previously enrolled students

Coding

Students at all levels—from beginner to advanced—will embark on personalized coding journeys tailored to their individual interests using the CodeHS platform. Learners may choose from three themed pathways: Coding Explorations in Music, where they investigate how code can be used to create and enhance music by building programs that generate beat patterns, chord progressions, and musical sequences with visualizations; Sports, where they develop their own sports video games and simulations, building multi-level games that can be played with friends; or Art, where they explore the digital art medium by building coding programs that create collages, imitate techniques of famous artists like Jackson Pollock and Andy Warhol, and tell stories through a sequence of multimedia scenes. Students who have a different passion in mind may also propose an alternate focus using CodeHS resources. The teacher acts as a guide who provides resources, coaching, and targeted feedback, allowing students to independently explore programming fundamentals at their own pace. Students learn to articulate logic through code, build creative projects, and progressively develop more sophisticated programs throughout the semester. This supportive, student-centered environment ensures each participant acquires practical coding skills applicable to their other classes and personal projects, with no prior programming experience required.

Ethics Bowl

Imagine a competition where your brain is your best equipment and arguing respectfully actually wins you points! The Ethics Bowl is a team-based contest where teams go head-to-head to tackle tough, real-world dilemmas. Unlike a regular debate where you are simply trying to prove the other side wrong, here you compete to show who can come up with the deepest, most thoughtful solutions to tricky problems. You and your teammates will score points by sharing smart ideas, answering tough questions, and politely challenging the other team's arguments.

Latin

This exploratory course introduces students to Latin using the Cambridge Latin Course, a highly regarded curriculum known for its engaging, story-based approach and its emphasis on Roman culture, history, and mythology. Through a combination of reading comprehension, grammar instruction, and historical context, students will build foundational Latin skills while gaining insight into the ancient world. The Cambridge Latin Course is widely praised for its effectiveness in helping students develop language proficiency through meaningful narratives and cultural immersion. Students who continue through all three terms are eligible to participate in the National Latin Exam, a prestigious nationwide assessment administered each spring that recognizes student achievement in Latin language and culture. Upon completion of all three terms, this course is equivalent to Latin I. This Exploratory offering is ideal for students who enjoy language, storytelling, or ancient civilizations.

Mathletes

Mathletes offers students a fun, collaborative, and highly engaging environment to strengthen their mathematical problem-solving skills through participation in dynamic competitions and interactive learning experiences. Guided by our math faculty, students prepare for and compete in prestigious national and international contests—including the AMC 8/10, MOEMS (5 days), NOETIC (Fall and Spring), and the Purple Comet—proctored on campus, as well as participate in local in-person tournaments.

To successfully dive into these advanced problem-solving strategies, students should expect about 2–3 hours of homework time per week. Ultimately, Mathletes fosters creative thinking, strategic problem-solving, teamwork, and confidence, all while nurturing a genuine enthusiasm and passion for mathematics.

NaNoWriMo Novelist Challenge

This Exploratory offers students a creative, supportive, and highly engaging environment to strengthen their storytelling skills through participation in the internationally recognized National Novel Writing Month (NaNoWriMo) challenge. Students prepare for and embark on the ultimate literary marathon—drafting an entire original novel in one month. The curriculum spans the entire writing process from world-building to character development and outlining. To successfully reach their ambitious word-count goals, students should expect about 2–3 hours of independent writing time per week, particularly during the one-month writing frenzy. Ultimately, this course fosters creative resilience, discipline, and self-confidence, all while nurturing a genuine enthusiasm and passion for creative writing.

Science Olympiad

Science Olympiad is both an exciting Exploratory course and a competitive team that invites students into a hands-on, collaborative adventure across the fascinating worlds of engineering, physics, biology, and chemistry! Team members dive into challenges where they get to design innovative projects, conduct real experiments, and bring scientific principles to life. Guided by the mentorship of our dedicated faculty, students build lasting friendships, develop sharp critical thinking skills, and unlock their creativity—all within a vibrant, deeply supportive environment.

How to get involved:

- **Student Commitment:** To help our team shine, students should plan for at least 1 hour of independent or collaborative work outside of class per week for each event, alongside participating in 3–5 exciting Saturday competitions throughout the year.
- **Family Partnership:** Science Olympiad is a wonderful community effort! Parent volunteering is a required part of our journey, and we warmly welcome and encourage parents to share their expertise as mentors. We can't wait to see what our students build and discover together!

Speech and Debate

This Exploratory course offers a fantastic opportunity for students who want to sharpen their presentation style, find their voice, and build powerful argumentation and reasoning skills! Guided by our Public Speaking & Debate faculty, students will dive into a variety of engaging topics to discuss, debate, and advocate for in a highly collaborative environment. Throughout the course, you can expect to write compelling speeches, practice dynamic vocal exercises, and participate in lively classroom debates—nourishing your ability to communicate persuasively and coherently.

Class vs. Team Distinction:

- **Exploratory Course:** This class serves as a dedicated skill-building and coaching space open to all interested students, as well as current team members looking to further curate and refine their performance materials.
- **Competitive Team:** While all students in the course receive excellent coaching and practice, those who wish to officially compete in tournaments must join the after-school KLS Speech and Debate Team. Historically, the team has met on Thursdays, 4:00-6:00 PM. Whether you want to test your skills on the competitive circuit or just build your confidence on stage, there is a place for you here!

Play Lab Offerings

Play Lab is a non-credit enrichment block designed to spark curiosity, creativity, and connection. During Play Lab, students explore interests beyond their core academic classes — from hands-on

crafts and movement-based activities to skill-building clubs and passion projects. PlayLab is a space to try something new, develop emerging talents, and experience the joy of learning simply for the sake of learning.

Play Lab Offerings

FALL	WINTER	SPRING
Soccer	Decon/Recon	Flag Football
Board Games	Climbing	Climbing
Yearbook	Yearbook	Yearbook
Robotics	Studio Time	Architecture & Design
Studio Time	Running	Studio Time
AI Projects	AI Projects	AI Projects

AI Projects

In this project-based course, students move from being users of AI to builders with it, learning to direct intelligent assistants toward real purposes rather than simply typing prompts. Over the three Exploratory sessions, students will have the opportunity to explore different applications of AI, from vibe coding, where they describe an app they imagine and bring it to life in collaboration with AI, to designing custom chatbots and assistants (a study buddy for a tough subject, a Spanish conversation partner, a homework-help tutor for younger students) and building games and personal tools that solve a problem they actually have. Along the way, they learn what AI does well, where it falls short, and how to evaluate and improve what it produces, leaving with practical skills and a portfolio of projects they designed themselves.

Architecture and Design

In this hands-on architecture elective, students will explore the principles of design, spatial planning, and human-centered architecture by reimagining new spaces within our evolving KLS campus. Using real-world constraints and opportunities, students will analyze current needs, develop creative solutions, and create models and presentations to bring their visions to life. This course blends design thinking, technical drawing, CAD, and prototyping to empower students to shape the future of our learning environment.

Board Games

Board games bring students together around the table to build the soft skills that matter far beyond game night. Through regular play, students practice strategic thinking, patience, good sportsmanship, and clear communication, learning to negotiate, collaborate, and handle both winning and losing with grace. Beyond shorter games, participants will also have the opportunity to explore long-form play through games like Dungeons & Dragons, where collaborative storytelling, problem-solving, and teamwork unfold over multiple sessions. Whether in a quick round or an ongoing campaign, students develop the focus, creativity, and social confidence that come from sustained, face-to-face play.

Climbing

The Climbing Exploratory introduces students to the exciting sport of rock climbing in a supportive and challenging environment. New climbers will learn fundamental climbing techniques, safety practices, and problem-solving skills, while more experienced climbers will have opportunities to build strength, refine their technique, and tackle increasingly difficult routes. Students will be transported to and from *Movement Gym* in Mountain View, where they will develop confidence, perseverance, and teamwork through regular climbing sessions.

Decon/Recon

Decon/Recon invites students to explore how everyday materials and objects can be taken apart, transformed, and reimaged into something new. Through hands-on projects involving paper making, sewing, and electronics deconstruction, students investigate how things are made while developing creativity, craftsmanship, and problem-solving skills. Students will experiment with a variety of materials and tools, learning to see potential in discarded objects as they design and build original creations that reflect their own ideas and interests.

Flag Football

The Flag Football Exploratory offers an opportunity for students of all skill levels to learn and play flag football. Students will learn the fundamental skills of passing, catching, and evading the defense on the run. Players will be introduced to offensive sets and defensive strategies. As students progress, we'll introduce more offensive plays and schemes. With an emphasis on teamwork, sportsmanship, and healthy competition, the flag football exploratory will be an opportunity for students of all levels to be active and have fun playing football.

Robotics

Robotics introduces students to the fundamentals of engineering, programming, and problem-solving through hands-on design challenges and robotics projects. Students will learn how to think like engineers by creating flowcharts, coding virtual and physical robots, designing robot games, and building mechanical systems using LEGO Spike robotics. As the course progresses, students will explore motors, sensors, attachments, and competition-style robotics challenges, developing technical skills, teamwork, and persistence through iterative testing and real-world design problems. By the end of the course, students will apply their learning in a FIRST LEGO League-style challenge that combines coding, engineering, strategy, and innovation.

Running

The Running Exploratory is an option for students who are interested in getting outside and building cardiovascular strength in a friendly group environment. We will run from the villa campus to and around Rengstorff Park, where there will be a variety of workouts designed to challenge runners of all levels. It's a great way to get in shape for another sport or simply build speed and endurance for cross-country and track.

Soccer

The Soccer Exploratory offers an opportunity for students of all skill levels to learn and play the team sport of soccer. We will cover fundamental skills such as dribbling, passing, shooting, and defensive techniques, while also introducing basic game rules and strategies. As students progress, we'll introduce more advanced drills, team tactics, and gameplay situations to challenge more experienced players and promote growth among beginners. With an emphasis on teamwork, communication, and sportsmanship, the soccer exploratory will be an inclusive and active class where we will play the world's most popular sport.

Studio Time

Studio Time is an open-ended block designed for self-directed artists who want to spend more time on their work and deepen their skills. Students set their own direction, whether that means developing an ongoing project, refining techniques they already have, or exploring a new medium they want to learn more about. With the freedom to follow their own creative interests, students build the focus, independence, and craft that come from sustained time in the art studio.

Yearbook

In Yearbook, students learn the craft of photography, graphic design, and visual storytelling as they capture the life of our community through pictures and words. It is a unique opportunity to curate the special moments throughout the year that define everyone's experience, deciding which stories and images best tell the tale of who we were this year. Working in partnership with the Upper School team, students develop an eye for detail, a sense of design, and sound editorial judgment. The result is a keepsake that many will hold onto for the rest of their lives.

Additional Programming

Physical Education

The Physical Education program provides students with the opportunity to learn the fundamentals of a wide variety of sports, including pickleball, flag football, soccer, and more. Through cooperative gameplay and skill-building activities, students not only improve their fitness levels but also gain valuable experience working as part of a team. The Physical Education program encourages an active lifestyle, boosts confidence, and fosters a lifelong appreciation for physical wellness.

Advisory

Advisory is a place to build community and to develop strong one-on-one relationships with both peers and advisors. At its center is the advisor, a mentor, advocate, coach, and guide who supports the whole child across every aspect of school life, academic and social-emotional alike. They are the person responsible for an overview of each student's progress, keeping an eye on academic standing, attendance, and wellbeing, and connecting students to support when they need it. The advisor makes sure every advisee has an equal opportunity to thrive and a voice in their own learning.

In Advisory, students have the opportunity to be part of a safe, trusting environment where they learn to communicate, collaborate, and get to know one another. Advisory is also when students engage in Social-Emotional (SEL) lessons and the practice of Council, a discussion format that emphasizes storytelling and deep listening, giving everyone the chance to share their own experiences and truly hear one another.

Goals and Planning (GAP)

Goals and Planning (GAP) is a weekly Monday block, held with each student's advisory, dedicated to building the executive functioning skills students need to manage their own learning. Students

practice planning projects, tracking assignments, breaking large tasks into manageable pieces, and deciding how to use their Goal Time, the study time built into their week. By making these skills explicit and reinforcing them regularly, GAP helps students work toward becoming confident, self-directed learners who can take ownership of their work.

Goal Time

Goal Time is a twice-weekly block set aside for students to complete their classwork. As a minimal-homework program (though not a no-homework one), we intend for students to be able to finish the majority of their work at school. During Goal Time, students are expected to be self-directed, prioritizing what needs to get done and managing their time well. The block is supervised, and teachers are on hand to help students stay on task and make the most of the time.

Life Skills Lab

Life Skills Lab is a required course for all middle school students, designed to build the foundational skills students need to thrive academically and beyond. Students rotate through five modules: Portfolio Studio, Digital Wellbeing, Personal Expedition Workshop, Health and Sex Education. Life Skills Lab addresses the whole student, providing support and coaching to help them expand and explore their interests and passions, navigate the digital world, and take care of their health. It is a non-credit course, but its impact carries across everything students do at school and in life.

Experiential Learning

The KLS Middle School Experiential Learning Program asks students to stretch, connect, and engage with the world in ways that go beyond what any classroom can offer. Each fall, students launch the school year with a grade-level orientation trip focused on community-building and challenge. Each spring, they choose an Intersession experience from travel destinations like Yosemite, the Southwest, and Costa Rica to an on-campus Maker Camp for those who prefer to stay local. Throughout the year, periodic field trips extend classroom learning into the wider world. Many of these experiences are built around service and hands-on learning, giving students the chance to contribute to communities, apply what they're studying, and grow through real-world experience.

Clubs

Clubs are a chance for students to pursue shared interests, build community, and develop leadership beyond the classroom. We offer both Middle School clubs and combined Middle School–Upper School clubs, and the full slate varies from year to year depending on student

interest. Don't see something you are interested in? Then we encourage you to start your own club! The core clubs offered each year are listed below. Middle School clubs are led by MS students in partnership with a faculty mentor. In MS–US clubs, Upper School students generally take the lead. Times for these clubs are usually officially set in the fall, once students have received their schedules. More information will be shared in the fall during our 6-12 Club Fair.

Club Options

Club/Team - Grade Level	Faculty Mentor/Coach	Meeting Times	Competitions	Hours of Commitment Per Week	Financial Contribution (ex. Tournament fees)
FLL Robotics (G6-8)	Baxter Smith and Parent Coaches	Wednesday + Thursday (4-6pm)	2 Competitions in the Fall. Timing TBD, schedule is yet to be released.	4-6 hs	Every team member is expected to fundraise \$50 towards team fees and costs
Library Club (G6-8)	Dacey Jackson	During Lunch	–	1 hr	–
Green Team (G6-8)	Jen Battad	During Lunch	–	1 hr	–
iGEM (G8-12)	Baxter Smith	<i>In-season</i> <i>Apr-Nov:</i> Weekly team meetings on Saturdays 12-3pm, with various subteam meetings during the week on Tues/Thurs. <i>Off-season</i> <i>Dec-Mar:</i> Limited team meetings as needed.	<i>In-season:</i> 2-3 research focused presentations, including final presentation in Paris. <i>Off-season:</i> 1 presentation or paper submission.	<i>In-season:</i> 10-14 hrs <i>Off-season:</i> 2 hrs	Every team member is expected to fundraise \$1000 towards team fees and costs. (Not expected, but team members have the possibility to travel to Paris, France for final presentation)

Speech & Debate (G6-12)	Student and Parent Led	Thursday (4-6pm)	Various – generally 4+ throughout the year	2-4 hrs	There is a contribution to cover coach and tournament fees – more details will be shared at an info meeting in the fall.
Khranicle (G6-12)	Student Led	TBD	–	2 hrs	–
Board Games Club (G6-8)	Natasha McKeown	During Lunch	–	1 hr	–
FRC Robotics (G6-12)	Chi-Ray Chien	<i>In-season</i> <i>Jan-Apr:</i> Tuesday, Wednesday, Thursday (6-8 pm) and Saturdays (9 am-5 pm) <i>Off-season</i> <i>May-July:</i> various ad hoc workshops <i>Pre-season</i> <i>Aug-Dec:</i> Saturdays 1-4 pm	2-3 in-season between March & April. 1-2 Off-season between July and November	14-20+ hrs in-season; 3 hrs pre-season	Every team-member participates in fundraising for the \$100K budget.