

Lower School Core Subjects

Course Descriptions

2024-25

Introduction:

These courses represent the totality of Lower School Core Subject offerings at the Einstein School. Their inclusion does not mean they are offered every year; many are based on student interest and/or minimum enrollment in the class. Contact us if you have a question regarding the availability of particular classes.

English Department

LS English 1 (5th Grade)

Prerequisite: None

This course exposes students to a wide range of literature in various formats. Students actively engage in reading, listening, speaking, and writing. They will also engage in class discussions, writing assignments, grammar, and vocabulary building.

LS English 2 (6th Grade)

Prerequisite: LS English 1

In this class, students read age-appropriate literature to develop knowledge of and skill in the language arts. Students listen to, read, and write about a variety of works in a variety of contexts and for a range of purposes, including expressive, aesthetic, and pragmatic. This course includes class discussions, vocabulary building, and writing assignments that include reviews of grammar, punctuation, and citations.

LS English 3 (7th Grade)

Prerequisite: LS English 2

In this class students actively engage in reading, research, listening, and speaking. Students read and analyze various authors to gain knowledge of the writers' artistic models, and then apply real life experiences to their own creative and academic writing. This enables students to explore new ideas, develop self-confidence, and further their understanding of other's values, which fosters curiosity, compassion, and respect.

LS English 4 (8th Grade)

Prerequisite: LS English 3

In this course, students will develop their interpretive and analytical skills through collaborative discussions and the study of major literary genres. Students continue to practice the mechanics of writing as they respond to the texts they read, then use their ideas as the foundation for their own analytical writings.

LS Structured English

Prerequisite: LS English 2

Structured English students develop a deeper understanding of grammar rules and parts of speech. This class explains how sentences are structured and examines their constituent words and phrases. By the end of the year students should be able to analyze the syntax and morphology of most English sentences, both verbally and visually with a tree diagram. In addition, students in this course read one novel each quarter.

Mathematics Department

LS Math 1 (5th Grade)

Prerequisite: None

LS Math 1 teaches the four basic operations, place value, part-to-whole relationships and equivalence, problem solving with expressions and equations, foundations of functions through patterning, identifying prime and composite numbers, and order of operations. Students also determine and generate solutions to expressions, classify two-dimensional figures, connect geometric attributes to the measures of three-dimensional figures, use units of measure, and represent location using a coordinate plane.

LS Math 2 (6th Grade)

Prerequisite: LS Math 1

LS Math 2 expands students' knowledge of numbers, numerical operations, computation, proportionality, expressions and equations, geometry, measurement and data, personal financial literacy, and the fundamental concepts of algebra. Students prepare for the rigor of higher math courses through sustained computational practice and problem solving and learn that the process in mathematics is as important as the final answer.

LS Math 3 (7th Grade)

Prerequisite: LS Math 2

Math 3 develops students' proportional thinking, algebraic reasoning, operations with rational numbers, geometric and spatial reasoning, statistical analysis, and problem solving. With emphasis on process and justification, students learn to evaluate their answers for reasonableness, draw conclusions, evaluate arguments, and make recommendations.

Pre-Algebra (8th Grade)

Prerequisite: LS Math 3

Pre-Algebra emphasizes readiness for Algebra, problem solving, and geometric applications. Students study real numbers and scientific notation, linear equations, functions, graphing, angle measurements, parallel lines, triangles, the Pythagorean Theorem, volume, surface area, variables on both sides of an equation or inequality along with distributing and combining like terms, transformations, dilations, similarity, proportionality, scatter plots, trend lines, mean, absolute deviation and personal financial literacy.

Science Department

LS Science 1 (5th Grade) – Physical and Space Science

Prerequisite: None

In this class, students gain a deeper understanding of matter, energy, and their relationship with ecosystems and environments. Students learn the characteristics and motion of objects in our solar system and examine how relative distance in space impacts light.

LS Science 2 (6th grade) – Earth Science

Prerequisite: None

This course integrates Earth, life, and physical sciences as they relate to the human body, the ocean ecosystem, energy and conservation, and space. Students learn how these disciplines interact and relate.

LS Science 3 (7th Grade) – Life Science

Prerequisite: LS Science 2

LS Science 3 focuses on life science while integrating chemistry, physics, and geology. The class explores environmental interactions, systems, structures, energy, and changes over time.

LS Science 4 (8th grade) – STEM Science

Prerequisite: LS Science 3

LS Science 4 focuses on STEM science while integrating chemistry, physics, and biology. Students use laboratory equipment and learn safety rules, measurement techniques, graphing and recording analysis, and interpretation of data.

Social Studies Department

LS World Geography (5th/6th Grade)

Prerequisite: None

This course transforms students into informed global citizens by equipping them with the knowledge, skills, and critical thinking abilities necessary to navigate an increasingly interconnected and diverse world.

LS World History (5th/6th Grade)

Prerequisite: LS Geography

This class delves into the most important historical eras. Students will discuss ancient civilizations, classical empires, the medieval world, the age of exploration, the modern era, and learn to recognize their importance to contemporary society.

LS Texas History (7th Grade)

Prerequisite: LS Geography

Students will explore Texas history, the structure and functions of municipal, county, and state governments, discover the influence of the U.S. Constitution on the Texas Constitution, and examine the rights and responsibilities of Texas citizens.

LS US History (8th Grade)

Prerequisite: LS Texas History

This class explains the fascinating history of the United States. Students will focus on how our country began, where it is now, and the possibilities for its future.

Twentieth Century History

Prerequisite: LS US History

Students in this class study the key events, people, and issues of the 1900s and their importance. The course is an in-depth study of major historical themes and includes units on imperialism, world wars, conflicts, and genocide.