

# Lower School Program of Studies Course Title and Prerequisite 2024-25

# **English Department**

LS English 1 (5th Grade)

Prerequisite: None

The purpose of this course is to expose students to an array of literature presented in a wide range of formats. Students will actively engage in reading, listening, speaking, and writing. They will analyze various authors and their works to gain knowledge of the writers' artistic models, as well as applying real life experiences to the student's own creative and academic writing. This course will include class discussions, writing assignments, grammar, and vocabulary building.

LS English 2 (6th Grade)

Prerequisite: LS English 1

The purpose of this course is to study age-appropriate genres of literary works to develop knowledge of and skill in the use of the language arts. Students will listen, speak, read, write, view, and represent in a wide variety of contexts and for a range of purposes -- expressive, aesthetic, and pragmatic. This course will include class discussions, writing assignments, and vocabulary building. Writing assignments will include reviews of grammar and punctuation in addition to the methods of citing source materials.

LS English 3 (7th Grade)

Prerequisite: LS English 2

Students in Lower School English 3 are exposed to an array of literature presented in a wide range of formats. They will actively engage in reading, research, listening and speaking, and oral and written conventions. Students will read and analyze various authors and their works to gain knowledge of the writers' artistic models, and then apply real life experiences to the student's

own creative and academic writing. This will enable learners to explore new ideas, develop self-confidence, and further their understanding of other's values, which will foster 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

This course examines English grammar at the word and phrase level. Students develop a deeper understanding of grammar rules and parts of speech. It reinforces how the words and parts of a sentence relate to each other and how the parts of the sentence fit together. 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 and complete several novel student activities.

# **Mathematics Department**

## Lower School (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 (6<sup>th</sup> 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 required in 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 (8<sup>th</sup> 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 fifth grade, students take a deeper, more advanced dive into matter, energy, and their relationship with ecosystems and environments. They will study 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 science course is an integrated course on the Earth, life, and physical concepts taught through the context of the human body, the ocean ecosystem, energy and conservation, and space. Interactions and relationships are shown in each unit resulting in students learning beyond the facts of science.

# LS Science 3 (7th Grade) – Life Science

Prerequisite: LS Science 2

LS Science 3 is a course which focuses on life science by integrating chemistry, physics, and geology. The concepts emphasized include environmental interactions, systems and structures, energy, and changes over time.

## LS Science 4 (8th grade) – STEM Science

Prerequisite: LS Science 3

LS Science 4 focuses on STEM science by integrating chemistry, physics, and biology. Use of laboratory equipment, safety rules, measurement techniques, graphing and recording analysis, and interpretation of data are stressed. Special emphasis is placed on environmental interactions, systems and structures, energy, and changes over time.

# **Social Studies Department**

#### LS World Geography (5th/6th Grade)

Prerequisite: None

This World Geography course encourages students to become 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

LS World History will delve into the most important eras in history. Specifically, we will discuss ancient civilizations, classical empires, the medieval world, the age of exploration, the modern era, and more, enabling students to recognize their importance to contemporary society.

# LS US History (7th Grade)

Prerequisite:

This course explores the History of the United States from the early peoples of the land of North America to modern-day U.S.A. Students focus on how our country began, where it is now, and the various possibles for the future. They will also study Texas' vast history, from the early times, through Texas' colonization, and the Texas Revolution.

#### **Twentieth Century History**

Prerequisite: LS US History

This course focuses on the world during the twentieth century. Students will study the key events, people, and issues of the century and will gain an understanding of why they developed. The course is an in-depth study of major historical themes and will include units on imperialism, world wars, the post-colonial world, conflicts, and genocide.



# LS Fine Arts Course Descriptions 2024-2025

#### LS Art

Prerequisite: None

This course is designed to improve students' basic art skills by practicing drawing, painting, sculpting, and design artwork using a variety of media and techniques. Students will develop their creativity and self-expression, and recognize and use the art elements (line, shape, color, value, form, texture and space), as well as design principles (rhythm, balance, proportion, variety, emphasis, harmony and unity). Additional fees apply per semester.

#### **LS Music Theory**

Prerequisite: None

In this course, students will learn to understand the various elements of music. By the end of the course, students will be able to recognize all the aspects of the music score when reading or composing music.

#### **LS Introduction to Performing Arts**

Prerequisite: None

In this performance-based course, students will learn the basics of theatrical performance from all positions and lenses. Students are expected to partake in all aspects of performance from acting to technical production, pre-production design, and more. Additional fees apply per semester.



# LS Languages Course Descriptions 2024-2025

#### **Introduction to American Sign Language**

Prerequisite: None

This course is an introduction to American Sign Language and the Deaf community. The main emphasis is on expressive skills (signing) while developing receptive skills (understanding signing). Students will be guided in recognizing the interrelationships of language and will develop a cultural appreciation for the Deaf community.

#### LS Japanese 1

Prerequisite: None

The purpose of this course is to give the students a fun and basic introduction to Japanese language and culture. Students will learn the basics of the language (pronunciation, basic politeness), Japanese pop culture (anime, J-pop, manga), and review cultural aspects that reflect Japanese history. Students will also play some Japanese games to add some fun.

#### LS Japanese 2

Prerequisite: LS Japanese 1

In this class the students will build upon the skills acquired in LS Japanese I. Students will be expected to master katakana and hiragana and increase their knowledge of kanji by increasing the number and difficulty of kanji learned. In Japanese 2, the students will begin to communicate in Japanese without using formulated sentence patterns. They will be able to apply the skills learned in this class to everyday activities.

#### LS Intro Spanish

Prerequisite: None

LS Introductory Spanish introduces the Spanish language to lower school students who have very little or no background in Spanish. Students will study some grammar but focus mainly on vocabulary, cultural experiences, history, geography, and differences in the Spanish-speaking world. Students develop listening and speaking skills are developed through reading text, listening to audio activities, and practicing dialogue. Students begin to develop the four basic language skills: listening, speaking, reading, and writing.



# LS Electives Course Descriptions 2024-2025

#### **LS Chargers Spirit (Cheer and Dance)**

Prerequisite: None

This course will provide students with an understanding of planning spirit-building events. Students have the option to learn cheerleading techniques, dance styles, performance skills, and the importance of teamwork and school spirit. Students not focused on cheer will learn to plan, advertise, fundraise, and host events to create a more emphatic energy here at The Einstein School. Students are expected to participate in school events both inside and outside of school. Additional fees apply.

# LS Creative Writing (7th grade and above)

Prerequisite: None

This course encourages student writers to develop versatility by exposing them to the forms, standards, and techniques used by professional authors. Students learn how to scaffold the writing process and to critically evaluate their own work while setting manageable goals for themselves as writers.

#### **LS Culinary Arts: Practice and Execution**

Prerequisite: None

This course will introduce students to basic kitchen skills, the science of food preparation, and various culinary practices. Students will also gain practical, hands-on experience as they follow and then modify recipes before innovating original dishes. The class will culminate in an exploration of world cuisines. Additional fees apply per semester.

#### LS Event Planning/Interior Design

Prerequisite: None

The event planning course is designed for students interested in learning about the event planning industry. Students are introduced to many facets of event planning including site selection, budgeting, promotion, catering, and interior design. In addition, students will assist with event planning at Einstein.

#### LS Executive Functioning

Prerequisite: None

Executive function is a skill that enables students to make plans, remember instructions, focus, and multi-task successfully.

The Executive Functioning course presents students with strategies to enhance their inhibitory control, working memory, and cognitive flexibility. Students learn to sharpen their time management, study and organizational skills. By developing these skills now, students are establishing a foundation for the future.

#### LS Journalism (7th grade and above)

Prerequisite: None

This introductory level course teaches students how to ask the right questions, look for the details, and find the story in any situation. Students will gather information, organize ideas, format stories for media production, and edit their articles.

#### LS Music Theory

Prerequisite: None

In this course, students will learn to understand the various elements of music and be able to recognize all the aspects of the music score when reading or composing music. No additional fees apply.

#### **LS Robotics**

*Prerequisite: None* 

Students in Robotics learn fundamentals of engineering design and programming by using the VEX IQ system to design, build, and program robots that compete in challenges. Arduino microcontrollers help students understand fundamentals of programming logic and physical computing. Scratch (or similar variants) is used to blink LED lights, detect button presses, and use other sensors with Arduino. Additional fees apply per semester.

#### LS Yearbook

Prerequisite: None

This course is designed to help students learn practical editorial writing and photojournalism skills. Students will design and create the school's yearbook with the direction of their teacher and a student editor. Students in yearbook will work on becoming self-starters, learning document management, journalistic writing, and how to take good photographs, all with the goal of creating a unique and creative yearbook that reflects Einstein's students.

# LS Yoga

Prerequisite: None

In this course of mindful yoga practice, students will experience the transformative journey of self-awareness and inner harmony. This yoga class is designed to cultivate a deeper connection between the mind, body, and spirit, offering an oasis of balance and tranquility amidst the unpredictable stressors and anxieties of everyday life. Additional fees apply per semester.