



# 2019 Summer Session Course Catalog



CARDIGAN  
MOUNTAIN SCHOOL



# CARDIGAN MOUNTAIN SCHOOL

## SUMMER SESSION COURSE CATALOG

The mission of the Cardigan Mountain School Summer Session Academic Program is to foster exploration and application of academic subjects in a fun learning environment. We strive to design and implement an engaging curriculum that piques curiosity and reinforces subject-level benchmarks. This is an opportunity for students to explore new subjects, cement foundational academic skills, and develop as lifelong learners. Classes are either one or two periods and each student takes five class periods per day for three weeks. Subject-specific notes are listed under the subject headings; department specific notes are listed under the department headings. Enjoy browsing this catalog and choosing your courses! If you have questions about a specific course, or any general questions, please do not hesitate to contact Director of Summer Programs Matt Rinkin at 603.523.3526. You may also contact us by email at [summersession@cardigan.org](mailto:summersession@cardigan.org). We look forward to learning with you!

*–The 2019 Summer Session Team*

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# ARTS

## **Miracle of Clay** (ART101)

2 periods / All Grades

The Miracle of Clay introduces students to methods of hand building and wheel thrown techniques. The course emphasizes wheelwork, slab and pinch pot methods of construction, and the proper use of glaze application. \$

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## **Woodshop** (ART102)

2 periods / Grades 6 to 9

Wood Shop is an introductory course that familiarizes students with hand tools and basic power tools. Students design and make their own projects using the skills they learn. \$

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## **Drama Debut** (ART103)

1 period / Grades 5 to 9

Students will put together a drama production to be performed before an audience during the Summer Session. No acting experience needed, just the desire to give it a try.

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## **Dance** (ART104)

1 period / Grades 5 to 9

Experienced dancers and novices alike will work on the basics of jazz, ballet, and hip-hop. No dance experience needed, just the desire to give it a try.

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## **Fundamentals of Drawing** (ART105)

1 period / All Grades

Drawing students will work to develop and expand their skills in shading, line drawings, and compositions. They will explore different mediums, and apply their skills to still life, portraits, and outdoor drawings. \$

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## **Explorations in Art** (ART106)

2 periods / Grades 3 to 6

Explorations in Art allows students to try a variety of forms of art. The projects will be adjusted to student interest, and may include painting, charcoal, papier-mâché, etching, drawing, and other branches of art students would like to learn. \$

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## **Mixed Medium Painting** (ART107)

2 periods / All Grades

In painting, students experiment with tempera, watercolor, acrylic, and homemade paints on various surfaces. Students learn basic color theory and practice mixing their own colors while working on class-directed and self-directed projects. \$

*\$: This course requires an additional fee to cover the cost of supplies.*

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# ARTS

## **Music History** (ART108)

1 period / All Grades

Music is constantly evolving due to changes in the views, society, and desire for something new amongst its creators, performers, and listeners. However, the ‘current’ music of each decade is not without influence from the past. Through a comprehensive listening list, students will first, broaden their musical tastes and second, make connections between different styles of and eras of American popular music of the last century, including an emphasis on the history of Rock music.

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## **Music: Create and Perform** (ART109)

1 period / All Grades

Students will learn the basics of melody and form by singing in a classroom setting--and will learn some traditional camp/campfire songs from various traditions. They may also add instruments to these songs (such as hand bells, drums, or other classroom instruments). This will teach students the basics of rhythm and harmony. The last few days of class are dedicated to preparing a piece for an end-of-session performance.

# ENGLISH

**Please note:** *Classes in the English department are not recommended for students enrolled in ESL.*

## **Reader's Workshop 1** (ENG101)

1 period / Grades 3 to 5

Young readers wishing to strengthen their reading comprehension and vocabulary skills will use short books and stories to learn and practice active reading skills. Class discussions and written reflections will also help to improve understanding.

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## **Reader's Workshop 2** (ENG102)

1 period / Grades 5 to 7

Middle grade readers will strengthen their reading comprehension using short novels or stories. Students will learn and practice active reading skills. Class discussions and written reflections will also help to improve their understanding.

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## **Reader's Workshop 3** (ENG103)

1 period / Grades 7 to 9

Older readers will use short stories and passages from a variety of genres to strengthen reading comprehension and active reading skills. Class discussions and written reflections will also help to improve their understanding.

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## **Writer's Workshop 1** (ENG104)

1 period / Grades 3 to 5

Young students will practice writing sentences and paragraphs that inform, persuade, and explain. They will use prewriting tactics to organize their work and will focus on sentence clarity and mechanics to communicate ideas.

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## **Writer's Workshop 2** (ENG105)

1 period / Grades 5 to 7

Middle-grade writers will work to write the perfect paragraph and also work on essays. They will use prewriting and outlining to create cohesive work and will practice proofreading with a focus on clarity and mechanics.

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## **Writer's Workshop 3** (ENG106)

1 period / Grades 7 to 9

Older students will write essays that inform, persuade, and explain. They will use outlining to create cohesive, organized work and will practice proofreading with a focus on clarity and mechanics. In addition, they will learn to use MLA style citations.

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## **Seuss to Shakespeare: Stories and Poems** (ENG107)

1 period / Grades 3 to 6

Young storytellers who wish to express themselves in both written and oral forms will creatively write and share both fiction and non-fiction stories and poems.

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## **Thickening the Plot: The Art of Creative Writing** (ENG108)

1 period / Grades 6 to 9

Fiction writers will create fully developed and polished final products. Frequent peer review and revision will aim to improve students' use of description, exposition, narration, and characterization.

# ENGLISH

## **Travel the World in a Book** (ENG109)

1 period / Grades 3 to 5

Stories and books will transport young adventurers to far off places and cultures. They will read, write, and research their way across the globe and create their own stories about places they dream of visiting and the adventures they will have.

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## **Utopia, Gone Wrong** (ENG110)

1 period / Grades 6 to 8

Dystopian societies are common in many currently popular books, including *The Hunger Games*, *Divergent*, and *The Giver*, as well as in classics like *Animal Farm* and *Fahrenheit 451*. Students will read, discuss, and write about the themes prevalent in these books. (Books may change for 2019.)

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## **Coming of Age Stories** (ENG111)

1 period / Grades 7 to 9

Students will choose and read books with teen protagonists like *Speak* and *Catcher in the Rye*, then discuss and write about the difficult issues that are relevant and important to becoming the adults they want to be.

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## **Newsies: Intro to Journalism** (ENG112)

1 period / Grades 3 to 6

Journalism students will practice gathering and analyzing information, interviewing, and writing about their summer adventures at Cardigan. Students will work collaboratively to create a school newsletter.

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## **Headliners: Advanced Journalism** (ENG113)

1 period / Grades 6 to 9

Journalism students will practice gathering and analyzing information, interviewing, and writing about their summer adventures at Cardigan. Students will work collaboratively to create a school newsletter.

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## **The Hero's Journey** (ENG114)

1 period / Grades 5 to 9

Both bookworms and reluctant readers will enjoy exploring the worlds of heroes like Percy Jackson while they strengthen reading comprehension, study plot devices, and analyze character development.

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## **Alone in the Wilderness** (ENG115)

1 period / Grades 5 to 7

Alone in the Wilderness will use books like *Hatchet* and the *My Side of the Mountain* trilogy to discuss issues relevant to young middle school students. Students will learn about survival skills and write their own wilderness adventure stories.

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## **Global Issues and Current Events** (ENG116)

1 period / Grades 7 to 9

Students interested in learning about what is behind the news and participating in lively Socratic-style discussions will enjoy this new class. Participants will use this engaging content to practice research skills, source analysis, and active reading.

# ESSENTIAL ACADEMIC SKILLS

EAS classes are designed to help students build and cement the skills they need to succeed scholastically. Students have the opportunity to refine their organization, handwriting, note taking, and public speaking skills through fun and engaging activities. These skills, once mastered, make learning easier and more fun!

## **Student Systems: Learning to Organize** (EAS101)

1 periods / Grades 3 to 6

Projects and classroom activities will focus on spatial and school related organization. Students will learn to plan ahead and work with others in order to accomplish various assignments. This class is not recommended for English as a Second Language Learners.

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## **Penmanship** (EAS102)

1 periods / Grades 3 to 6

Penmanship students will have fun while working on their handwriting, both print and cursive. They will play games and write stories while practicing handwriting, as well as spelling, sentence structures, and punctuation.

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## **Connecting the Dots: Note Taking Skills** (EAS103)

1 periods / Grades 6 to 9

Students will practice different forms of note-taking, using graphic organizers, and maintaining neat and organized notes. Additionally students will work on active reading skills. This class is not recommended for English as a Second Language Learners.

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## **Toast Masters** (EAS104)

1 periods / Grades 6 to 9

Improving public speaking skills will be the number one goal of this presentations class. Students will learn how to write and deliver a variety of styles of speeches and how to foster audience engagement. This class is not recommended for English as a Second Language Learners.

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## **The Research Process** (EAS105)

1 periods / Grades 6 to 9

Students will learn how to find and evaluate information using a variety of resources and practice skills necessary for quality research, including note-taking, outlining, and citing sources. This class is not recommended for English as a Second Language Learners.

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## **SSAT Prep: Verbal** (EAS106)

1 periods / Grades 6 to 8

Students will practice for the analogies and reading sections of the SSAT, and work on vocabulary development and test-taking strategies specific to this section.

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## **SSAT Prep: Math** (EAS107)

1 periods / Grades 6 to 8

Students will practice for the math section of the SSAT, and work on test-taking strategies specific to this section.

# ESSENTIAL ACADEMIC SKILLS

## **SAT Prep: Verbal** (EAS108)

1 periods / Grades 8 to 9

Older students will practice for the analogies and reading sections of the SAT, and work on vocabulary development and test-taking strategies specific to this section.

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## **SAT Prep: Math** (EAS109)

1 periods / Grades 8 to 9

Older students will practice for the math section of the SAT, and work on test-taking strategies specific to this section.

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## **SAT and Application Essays** (EAS110)

1 periods / Grades 8 to 9

Older students will practice for the timed writing section of the SAT, and learn what makes a quality SAT essay. In addition, students will write and analyze practice boarding school and college application essays.

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## **Interview Skills** (EAS111)

1 periods / Grades 8 to 9

Older students will learn how to interview confidently for boarding schools or colleges. They will prepare and practice answers for common questions and participate in mock interviews.



# MATHEMATICS

Please note: math classes are grouped according to ability and experience, not age. Prerequisites are listed in the course description, if applicable.

## **Fundamentals: Adding & Subtracting** (MAT101)

1 period

Students will practice whole number addition and subtraction through games and activities designed to help students develop a solid understanding.

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## **Fundamentals: Multiplying & Dividing** (MAT102)

1 period

Students will practice whole number multiplication and division through games and activities designed to help students develop a solid understanding.

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## **Fundamentals: Decimals and Fractions** (MAT103)

1 period

Students will practice addition, subtraction, multiplication, and division using numbers with decimals. They will play games and solve puzzles designed to help students develop a solid understanding of decimals.

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## **Operations with Fractions** (MAT104)

1 period

Students in Operations with Fractions will practice multiplying, dividing, adding, subtracting, and simplifying fractions.

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## **PEMDAS and Integers** (MAT105)

1 period

Students will learn about order of operations, integers, and rational numbers.  
Prerequisite: Ability to perform operations with fractions and decimals.

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## **Intro to Geometry** (MAT106)

1 period

Introductory Geometry will introduce students to perimeter, area, and volume, as well as the concepts of ratios and similarity.  
Prerequisite: Ability to perform operations with fractions and decimals.

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## **Graphing is Great** (MAT107)

1 period

Students will work with functions and use substitution to make charts and simple graphs. Additionally students will compare graphs with similar parent functions.  
Prerequisite: Ability to perform operations with fractions and decimals.

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## **Conquering Word Problems** (MAT108)

1 period

Students will work with strategies for solving word problems that require skills in patterns, decoding, volumes, surface areas, and simple equations.

# MATHEMATICS

## **Multi-Step Equations** (MAT109)

1 period

Multi-Step Equations will focus on operations in algebra and solving one-step and multi-step equations. Prerequisite: Ability to perform operations with fractions and decimals.

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## **Linear Functions** (MAT110)

1 period

Linear Functions will explore the relationship between points and the equation of a line. Students will use standard form, slope-intercept form, and point-slope form to describe, compare, and graph functions. Prerequisite: Ability to perform operations with fractions and decimals.

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## **Polynomials** (MAT111)

1 period

This course is an extension of Algebra 1. Students will practice factoring, multiplying, and dividing polynomials. Students will use this knowledge to then explore the characteristics of quadratic functions and their graphs and learn multiple methods to find the roots of a quadratic function.

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## **Geometry: Proofs and Triangles** (MAT112)

1 period

Students will write two-column and paragraph proofs with a focus on lines, intersections, and quadrilaterals. Students will work on right triangle geometry, and similar and congruent triangles.

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## **Statistics and Probability** (MAT113)

1 period

Students will learn how to analyze data using statistics and apply the laws of probability to real life.

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## **Coding** (MAT114)

1 period

Using a variety of educational coding applications, students will learn how to write basic programs and tell computers what to do.

# SCIENCE

## **Environmental Detectives** (SCI101)

2 periods / Grades 3 to 6

This fun environmental adventure is an introduction to earth sciences. Environmental detectives will learn about the natural world around us through outdoor investigations of the lake, forest, and fields. Students will be exploring the outdoors while fostering a sense of wonder and appreciation for nature.

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## **Environmental Science** (SCI102)

2 periods / Grades 6 to 9

This course will focus on the flora and fauna located on Cardigan's campus to help us gain insights into the natural world around us. Investigations may involve life in the lake, forests, and fields. Students will capture organisms for further study and use hand lenses and microscopes to inspect their finds.

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## **Making Things Go: On Land** (SCI103)

1 period / All Grades

Calling all future engineers and kids who love cars. This is an imaginative way to study automobiles. Students will build and run mousetrap cars, Lego-mobiles, and design their own way to make and move a land-roving vehicle. In addition, students will examine and explore the future of engineering and electric cars.

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## **Making Things Go: In the Air** (SCI104)

2 period / All Grades

This adventure follows the history of flight from early balloon flights through modern rocketry. Students will first build tissue paper balloons that can soar hundreds of feet in the air. Then they will test paper gliders and balsa airplanes before finishing their journey by making rockets out of paper and plastic.

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## **Mystery Science** (SCI105)

1 periods / Grades 3 to 6

Young students will explore methods and techniques used by real detectives to solve mysteries. This course will teach problem solving, observing, and forming solid conclusions based on evidence. Students will learn to document a crime scene, analyze fingerprints and handwriting, and examine blood spatter.

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## **CSI: Forensics** (SCI106)

2 periods / Grades 6 to 9

Students will learn how to document a crime scene and implicate a suspect after carrying out a variety of forensic techniques including simulated blood typing, blood spatter analysis, fingerprint analysis, glass analysis, luminol detection of simulated blood, and DNA analysis.

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## **Astronomy** (SCI107)

1 period / All Grades

What makes a star shine? Astronomy students will learn this and more as they study the planets, stars, and solar system. The course will include nighttime meetings to observe what they have studied.



# SCIENCE

## **Robotics Challenge** (SCI108)

2 periods / Grades 3 to 7

Students will work collaboratively to design and build robots to solve problems posed by the instructor. The challenges will require the students to build projects that integrate building pieces, a microcomputer “brain,” and a computer.

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## **Adventures with Science** (SCI109)

1 period / Grades 3 to 6

Students and their teacher will study a range of topics: one day may focus on volcanoes and the next airplanes and the next dinosaurs. This is the perfect class for anyone who just wants to know about everything.

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## **Brain Buffet: Introduction to Nutrition** (SCI110)

1 period / Grades 7 to 9

Students will learn about the macromolecules, vitamins, and minerals important to human nutrition and their significance. Additionally students will explore where to get the correct balance of nutrients and how to create a nutritious meal.

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## **Wilderness Survival 101** (SCI111)

2 periods / Grades 5 to 8

Second Session Only. Wilderness Survival will explore hiking and camping skills as well as outdoor survival skills. This course will be hands-on and include substantial time outside. \$

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*\$: This course requires an additional fee to cover the cost of supplies.*

# HISTORY

Explore mythology, art, or sports psychology through the fascinating lens of history. These history courses offer insight into a variety of historical time periods through thought-provoking discussion, engaging activities, and creative projects. Students will explore ancient worlds through art, research, and reading materials.

## **Zeus vs. Jupiter: Greek & Roman Mythology** (HIS101)

1 period / Grades 3 to 6

Throughout this Greek and Roman History course, students will explore the ancient world and its most infamous gods and goddesses. This class will survey stories about the rise and fall of ancient empires and their influence on the culture, literature, and art of the modern world. Students will create a depth of knowledge in the world of mythology.

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## **When in “Ancient” Rome** (HIS102)

1 period / Grades 6 to 9

Students will explore the history, geography, politics, and culture of the ancient Greek and Roman civilizations. They will learn about the rise of the Greek city-states, the transition of ancient Rome from republic to empire, and legends of Greek Mythology.

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## **Da Vinci to Dali: Explorations in Art History** (HIS103)

1 period / Grades 7 to 9

This course seeks to develop skills in perception and comprehension of visual art forms through historical exploration. It encourages the analysis of materials and methods through which art is created. Most importantly, the course encourages the understanding of art and aims to foster in students the ability to translate this understanding into verbal expression. In addition, we will consider new approaches to creating and exhibiting art.

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## **Getting in the Zone: JV Sports Psychology** (HIS104)

1 period / Grades 7 to 9

During this three-week course students will study the minds of athletes. Students are introduced to the history, concepts, and topics of sports psychology as well as contemporary issues and practices relevant to the field. Material is introduced and evaluated through discussion, research, and collaborative presentations.

# WORLD LANGUAGES

Beginning classes are appropriate for students with little experience in the language, intermediate for those who have taken one or two years, and advanced for those who have studied for at least three years.

## FRENCH

**Beginning French** (FRE101)

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**Intermediate French** (FRE102)

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**Advanced French** (FRE103)

## LATIN

**Beginning Latin** (LAT101)

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**Intermediate Latin** (LAT102)

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**Advanced Latin** (LAT103)

## CHINESE (MANDARIN)

**Beginning Chinese** (CHI101)

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**Intermediate Chinese** (CHI102)

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**Advanced Chinese** (CHI103)

## JAPANESE

**Beginning Japanese** (JAP101)

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**Intermediate Japanese** (JAP102)

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**Advanced Japanese** (JAP103)

## SPANISH

**Beginning Spanish** (SPA101)

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**Intermediate Spanish** (SPA102)

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**Advanced Spanish** (SPA103)



## ENGLISH AS A SECOND LANGUAGE (ESL)

Students who wish to focus on English Language studies can register for English as a Second Language (ESL). These rigorous but fun courses aim to increase students' English fluency and confidence for use in academic and social settings.

Each course features small and highly interactive classes focused on reading, writing, speaking, listening, and study abroad preparation. These courses are designed to support students who already have beginner-level abilities in written and spoken English as they move towards deeper proficiency of the language. Students learn by reading a variety of texts, practicing conversational English, composing written materials, giving presentations, and watching films. Each class is offered at multiple English language ability levels. Students will be formally assessed upon entering and leaving the program and parents will receive reports from each teacher on areas of progress and areas requiring additional development.

### **ESL: Reading and Vocabulary 1, 2, and 3** (ESL101)

1 period / All grades

A wide variety of fiction and nonfiction texts will support the reading skills learned in this course. Students will practice summarizing and identifying main ideas and supporting details, scanning and skimming, forming inferences and opinions, and developing targeted vocabulary.

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### **ESL: Writing and Grammar 1, 2, and 3** (ESL102)

1 period / All grades

The focus of this course is on the improvement of expressing ideas in clear written English. Students will develop academic writing skills by becoming familiar with the standard paragraph and essay structure. Students learn and practice a variety of writing types, including, but not limited to, expository, persuasion, compare and contrast, narrative, and descriptive. Students will receive constructive feedback on both organizational and grammatical structures.

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### **ESL: Speak Up! 1, 2, and 3** (ESL103)

1 period / All grades

Students will develop their ability to converse in classroom and social settings. Activities include conversation practices, class discussions, role-plays, interviews, presentations, and guided speaking exercises. Students are encouraged to utilize new vocabulary and sentence structures, work on pronunciation skills, and express new and challenging ideas. As a key component in any conversation, this course will also focus on listening skills.

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### **ESL: Topics in U.S. History** (ESL104)

1 period / Grades 5 to 9

Topics in U.S. History is a three-week course exploring the major time periods in United States History from the American Revolution to the present. Goals of the class are to introduce students to the principal people, events, themes, and debates from U.S. History. It is intended to provide a comprehensive overview so that students will be more prepared heading into their history classes in the fall.