ANDOVER SUMMER

SUMMER SESSION

at PHILLIPS ACADEMY

Lower School Institute

Course Catalog

Summer 2027

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LOWER SCHOOL OVERVIEW

Our Lower School Institute (LSI) is designed for rising 7th and 8th graders who are seeking a challenging, supportive summer academic experience. With 11 interdisciplinary course offerings, students in LSI have the opportunity to dive deeply into the rigorous study of a topic of interest, guided by nurturing teachers and residential staff in an environment that balances substantial structure with developmentally appropriate autonomy. While sharing the broader campus with their Upper School counterparts, LSI students live and study with their own middle-school-aged cohort, following a special LSI schedule that includes LSI athletics, evening classes and supervised study halls, and both academic and recreational off-campus trips. Required LSI-specific social activities are offered on campus on Tuesday and Saturday evenings.

COURSE SELECTION

During the application process, all students select a specific program to which they are applying. **All students in LSI must select <u>one</u> interdisciplinary course** which meets daily for up to 5 hours (spread out across 3 academic periods: 2 in the morning, and one in the evening), and may add an additional, optional SSAT course and/or music lessons to be scheduled during their free times in the afternoons.

Please note that both boarding and day students are required to attend all class sessions and mandatory LSI activities, including cluster meetings and evening class sessions.

In the pages that follow you will find the full range of possible LSI courses that are currently being offered for the summer of 2027. Please note that final course offerings are dependent upon enrollment and staffing, and courses with insufficient enrollment may be cancelled at any point prior to the start of the summer. Students enrolled in a course that is being cancelled will be notified and given the opportunity to enroll in an alternate course, based on what remains available at that time. **Our Forests, Mountains and Beaches: Field Ecology and Nature Writing course carries an additional course fee due to the 3-night field trip to the White Mountains. Fees will be added to a student's invoice after class selections are finalized.** Course enrollment is a first-come, first- served process, with our most popular courses and programs typically filling up in February or March each year.

COURSE CHANGES

Students may utilize our Family Portal to make course changes until May 15th. Once on campus, LSI students may not make course changes except for special circumstances and with permission of corresponding instructors and the assistant director of Andover Summer. Please refer to the LSI Blue Book for more details on course changes.

ACADEMIC ACCOMMODATIONS

Andover Summer can provide limited academic accommodations to admitted students. These accommodations may include extended time on testing, preferred classroom seating, and/or support at an evening study center. Once admitted, families should complete the required accommodations form in our medical portal and provide all necessary supporting documentation, in order to formally submit their request. All accommodations requests must be submitted by May 15, 2027. Requests made after this date may not be considered.

OPTIONAL COURSES AND ADD-ONS

Optional Courses and add-ons may be taken in may be taken **in addition to** the required course minimum described above. These items are not included in tuition and fees.

Princeton Review Test Prep–$1000

Princeton Review courses prepare students for the verbal, quantitative, and reading comprehension sections of the SSAT standardized test used for evaluation in secondary school admissions. Students will learn efficient test- taking strategies which, alongside full-length practice tests, will help relieve test taking anxiety and allow for students to maximize their score. SSAT Prep is open to all LSI students. We only offer the higher-level and this course is not recommended for students who have already taken an SSAT prep course.

Secondary School Program–NO FEE

All LSI students are encouraged to take part in our free secondary school program, which includes a weekly workshop led by members of the Shuman Office of Admission at Andover as well as a secondary school fair. More information about the specific dates and timing of these workshops and fair will be shared upon enrollment. Workshop topics include: Boarding School 101, Interview Process, Essay Writing, and Application and Financial Aid.

A summer secondary school fair will be held on **Sunday, July 18th from 6:00-7:30 pm** and is open to all Lower School students. A list of attendees will be provided at the start of the program.

Music Lessons–$450

Students have the opportunity to engage in optional music lessons to keep their practice going strong throughout the summer. Students may enroll in four 45-minute lessons; practice rooms and instrument rentals are also available.

Orchestra (LSIO)- $500

This ensemble gives students enrolled in academic programs the chance to keep music in their lives while at Andover. It's a wonderful way to stay connected to your instrument, collaborate with peers, and perform in a dynamic orchestral setting.

What to Expect

- 3 rehearsals per week
- At least two performances during the summer
- A supportive, high-level musical community open to a wide range of orchestral instruments

Whether you're hoping to continue your musical growth or simply want to make music with others, the LSI Orchestra is designed to fit seamlessly into your academic schedule.

Audition Information

Application Deadline: April 15, 2027

Accepted Instruments: All orchestral instruments are welcome—including piano, harp, and percussion.

Video Requirements:

- Submit a solo performance (with or without piano accompaniment.
- Ensemble or group performance videos will not be accepted.

LSI GENERAL DAILY SCHEDULE

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8:30-10:30 Continental breakfast	7:45-8:15 Breakfast sign-in	7:45-8:15 Breakfast sign-in	7:45-8:15 Breakfast sign-in	7:45-8:15 Breakfast sign-in	7:45-8:15 Breakfast sign-in	7:45-8:15 Breakfast sign-in
10:30-1:00 Brunch	8:45-12:15 Academic Block	8:45-12:15 Academic Block	Class Field Trip	8:45-12:15 Academic Block	8:45-12:15 Academic Block	9:00-11:30 Academic Block
	1:15-2:15 Sports	1:15-2:15 Sports	Class Field Trip	1:15-2:15 Sports	1:15-2:15 Sports	
12:00-5:00 Off-campus social activity (optional)	2:45-6:00 Optional Activities (SSAT, music lessons)	2:45-6:00 Optional Activities (SSAT, music lessons)	6:15-7:15 Optional Secondary School Workshop	2:45-6:00 Optional Activities (SSAT, music lessons)	2:45-6:00 Optional Activities (SSAT, music lessons)	1:00-5:00 Off-campus social activity (required)
7:30-8:45 Study Hours	7:30-8:45 Evening Class	7:30-9:00 Social Activity	7:30-8:45 Study Hours	7:30-8:45 Evening Class	7:30-8:45 Evening Class	7:30-10:00 Social Activity
9:00-9:45 Free time (in dorm)	9:00-9:45 Free time (in dorm)	9:00-9:45 Free time (in dorm)	9:00-9:45 Free time (in dorm)	9:00-9:45 Free time (in dorm)	9:00-9:45 Free time (in dorm)	10:00-10:15 Free time (in dorm)
10:00 Lights Out	10:00 Lights Out	10:00 Lights Out	10:00 Lights Out	10:00 Lights Out	10:00 Lights Out	10:30 Lights Out

The Art and Physics of Flight

How do wings lift an airplane into the air? How do drones hover perfectly and perform acrobatic maneuvers? How can the idea of flight inspire our artistic sensibilities?
These questions and more will be tackled over our five weeks together as we investigate how unmanned aerial vehicles (UAVs) are revolutionizing countless elements of our daily lives as a dynamic and emerging technology. As we consider the big questions of the impact of UAVs, we will also set out to design, build, and operate our own UAVS to gather information and data for analysis. In addition to data collection, you will learn to navigate obstacle courses and simulated emergency situations to hone your UAV skills. Not only will you have the opportunity to engage in applied math and physics, but there will also be a chance to develop your artistic skills as well. Through daily studio time, you will explore the idea of flight to create your own pieces of art (including some that fly!) Delve into the connections between art and science and get inspired by looking at the work of contemporary and historical artists who link the two disciplines. You will build your skills in various media and benefit from increased confidence in your own artwork. Your investigations into the science behind modern planes and rockets, coupled with a chance to express yourself through art is an experience not to be missed!

Beyond Robots: Engineering Design Lab

Explore the exciting world of robotics in this engaging and hands-on summer course designed exclusively for middle school students in the Lower School Institute (LSI). In LSI: Beyond Robots, you will learn the basics of building, programming, and problem-solving through fun and interactive activities. Scholars will conduct deep dives into many ethical issues regarding automation and technology with academic readings and weekly Harkness table discussions. Students will explore the math and physics of robotics through learning Newton's Laws and Dimensional Analysis. Scholars will debate the merits of the adage, "Just because we can, does that mean we should?" as it relates to Artificial Intelligence and other advanced technology.

Situated in the beautiful Phillips Academy Makerspace, this course will give you an opportunity to discover the fundamentals of robotics, including mechanical design, sensors, and programming in Scratch. The course will begin with a series of projects, games, and challenges that encourage collaboration and problem-solving. You will then learn to assemble and drive robots using the VEX V5 platform, fostering a strong foundation in robotics technology. You will develop the ability to articulate physics concepts such as gear ratio, and mechanical advantage and how to apply this knowledge to building better robots. In addition to building and programming robots in the Makerspace, your classroom learning experience will be supplemented with exciting field trips to witness robotics and AI in action. Past trips have included the Cambridge Innovation Trail, the MIT Museum, and the Boston Museum of Science. We have also had combat robotics participants visit our classroom and provide live demonstrations.

The final project of the course will give you a chance to team up and build a robot to compete in a VEX V5-style competition, joining various alliances as teams compete for the top spot. Students will also develop a poster presentation detailing their journey through the engineering design process with photos and descriptions of their team's robot build, real-world applications, ethical concerns, and physics concepts related to their robot's performance. Students will present this information to classmates and their instructors during our final class. At the end of the summer, the class will get to showcase the competition robots and projects developed during the course as part of the annual LSI Exhibition. This is your chance – join us to build new skills, ignite a passion for robotics and coding, and have a lot of fun along the way.

Charting the Natural World: Marine Biology Meets Math**

Picture yourself standing in a shallow tide pool of clear ocean water on a warm, sunny day. Hear the rhythmic crashing of the surf in the distance. Flip over a small rock and notice the teeming life beneath. Now, reach into your pocket, pull out your beaker, and scoop up a water sample. This is just one of many authentic learning experiences you'll engage in during your summer at Andover in Charting the Natural World.

In this integrated math and biology institute, you'll explore and explain the local aquatic environment. You'll learn methods of gathering and analyzing data, drawing conclusions, and communicating results. Special excursions include a visit to Boston's New England Aquarium and a trip to local tide pools for a unique opportunity to apply your knowledge of marine organisms and sampling techniques firsthand. Investigate through science. Use the power of math to analyze, solve problems, and think critically. Join us in exploring the wonders of the ocean!

***If possible, students should bring a Texas Instruments Tl-83 or Tl-84 calculator.*

CSI Andover: Anatomy of a Crime

In a quaint farming village, a shocking crime unfolds—the double homicide of a well-respected and prosperous couple. Time is of the essence as you encounter a scene filled with crucial evidence: hairs, blood pools, fingerprints, and footprints. The suspects stand ready for interrogation. Are you prepared to embrace this challenge and step into the role of a crime scene investigator? In this dynamic, hands- on class, you will employ microscopic investigation techniques, sharpen your deductive reasoning abilities, and apply the scientific method to master essential forensic objectives. You will engage in experiments that explore various forensic science techniques, including hair analysis, fingerprinting, crime scene investigation, blood spatter analysis, blood typing, and forensic pathology. So, don your gloves and goggles, and prepare for an exciting adventure in the world of forensic science!

Dig This! Archaeology in Action

Do you know a real archeological artifact when you see one? Can you look at a reconstructed dig and recreate the life of its original inhabitants? While you will have the opportunity to do hands on digging right here on our campus, you will also learn that archeology is inherently global. Through weekly current events on archeological topics of your interest to reading about the global history of archeology in locations such as Egypt, China, Zimbabwe, and Mexico, you will learn about history through the artifacts discovered at these sites. By taking a closer look at the history of archeology, you will begin to understand the historical and present dynamics between people all over the world. (Click here to see what connections LSI Dig This! 2026 students made with students from 1926!)

History is about more than reading old documents, it is an opportunity to evaluate the evidence and decide for yourself what happened. Using extensive library and internet materials, you will explore a series of case studies around repatriation, diving into the ethics of archeology through research and debate. You will understand the journey of objects from the dirt to the museum, and whether that journey should continue in the form of return of the objects to their peoples. Field trips to nearby museums, historical homes, and cultural institutions will bring local history to life, giving you a chance to connect classroom learning with real-world discovery. You will also become archaeologists-in-training, producing your own edition of an archaeology magazine complete with original writing, artwork, and design.

In this course, you will develop critical thinking, reading, and writing skills to interpret the past, using a combination of traditional written sources, electronic sources, and the archeological record. This is a unique opportunity to witness – and make - history.

Echoes and Originals

What does it mean to fit in—and what happens when someone is left out? In this course, students will dive into *The Witch of Blackbird Pond*, *The Crucible*, and *The Magic Fish* to explore big ideas about identity, conformity, and justice. Through reading, writing, discussion, and trips to historic sites, students will discover how these stories connect to real questions of belonging across different times and cultures—and to their own experiences today.

Over the course of the five-week session, students will build skills in reading comprehension, written textual analysis, narrative structure, and argumentation. Classes will prompt students to engage in discussions and debates that encourage critical thinking and perspective-taking, and to foster open dialogue and intellectual growth. *Echoes and Originals* will take students on a thrilling journey through the past, blending historical understanding with literary exploration. Join us for an enchanting summer of discovery!

Express Yourself: A Study of Performance and Creative Expression

There are poets, performance artists, and authors in all of us. In this institute, you will experience some of the many ways that we express ourselves, as human beings and as artists. You will develop skills in close reading, observation, reflection, and communication that will allow you to interpret your life in your own uniquely artistic ways.

Beginning with a study of literature, you will consider how human beings tell their stories through dramatic and narrative texts, themes you'll then apply on stage. In the performance component, you will engage not only in the role of performer, but also as director, designer, choreographer, and critic. You will stage scripted scenes as well as your own compositions. In the literature portion of the course, you'll read and analyze famous poems, narrative texts, and plays, while also working to draft, revise, and publish your own unique works. We'll supplement our classroom experiences with visits to Boston theatres, production studios, and museums. Go ahead—express yourself!

Forests, Mountains, & Beaches: New England Field Ecology & Nature Writing*

From the rocky shorelines of the Atlantic Ocean to the vistas of New Hampshire's White Mountains, the ecosystems of New England have inspired scientists and writers for hundreds of years. In this course, you will spend much of your time in the field and the laboratory, studying the habits and histories of local species of plants and animals, as well as how they interact, compete, and utilize natural resources. You will learn and apply techniques used by ecologists to collect, document, and store field data and specimens to gain a deeper understanding of ecological processes. Simultaneously, you will be reflecting on environmental issues and the natural world, drawing inspiration from your field studies to craft creative and reflective written pieces. Studying a range of authors, you will learn to develop your own voice and personal narrative style.

By opening up the classroom, exploring the environment, and studying seminal works by nature writers, this course gives you the opportunity to reflect on the relationship between nature and culture, as well as to explore your own connection to the natural world. Day and overnight field trips, lab studies, and cumulative written pieces are integral parts of the course experience, and you should come to campus prepared to get wet and muddy, to climb mountains and explore tidepools, to capture frogs and measure earthworms, among many other once-in-a-lifetime experiences!

**Please note that this course has a multi-day overnight trip that is required for students enrolled in the course, with an additional $620 camping fee associated with it.*

High School Prep Institute: Math and English Acceleration

Want to make sure you are on track to build the skills you need to succeed in high school? This interdisciplinary institute is designed to provide middle school students of all ages a pathway to academic success in math and English. Focusing on close reading of both fiction and nonfiction texts, analytical writing, and moving students to the next level of mathematical skill (regardless of their starting point), the *High School Prep Institute* will help students begin their journey towards secondary school readiness. In English classes, students will dive into a ninth-grade novel and related nonfiction texts, engaging in discussion, debate, and written analysis activities designed to build proficiency with argumentation, structure, and grammar. In their math section, students will review key mathematical skills and content from middle school by solving complex puzzles, learning a range of approaches to problem-solving that will help them to manage the types of mathematical challenges that they will face in high school.

Money Doesn't Grow on Trees: Economics and Personal Finance

When you take money out of an ATM or use a credit card, do you ever wonder where that money came from or what gives it value? Do you ever wonder how your parents make sure that there's enough money in their accounts to pay for all your daily needs? How does a given advertisement attract customers or an influencer attract followers?

These questions and more will be answered in this five-week course as we investigate the world's financial systems. In your personal finance class, you will learn about larger topics, like what stocks, bonds, and mutual funds are, and smaller topics, like how to budget the money you have. You'll even have a chance to compete with your fellow students in a simulated classroom economy. You'll also explore how to create a successful business in our entrepreneurship unit, which will culminate in creating your own business proposal. Beyond that, you will learn to be a wiser consumer, minimizing bad debt while making good financial decisions. In your economics class, you'll explore various economic theories and theorists from the ancient world to the most cutting-edge modern-day economics. You'll learn about the government's role in economics throughout different societies over the centuries. Through behavioral economics, you'll see how many of these theories impact you in your everyday life and learn how to avoid traps like the sunk-cost fallacy. Come join us in *Money Doesn't Grow on Trees* to take control of your financial future!

Musical Minds: Strings Music Institute*

There are both individual and collaborative musicians in all of us–with both musical hearts and minds! In this string focused music institute, you will play, practice, perform, and study with incredible faculty, guest artists and conductors, and forge friendships with student musicians from around the world! Falls Music Center's state-of-the-art performance hall, practice spaces, technology labs, and recording studio will be your home. You will study music theory, ear-training and music technology; have private lessons, play in a string orchestra, and chamber music groups. We will travel off campus to attend performances or events such as the Boston Symphony Orchestra at Tanglewood, Citizens Opera House and The Museum of Fine Arts. Your musical mind will be challenged, expanded, and inspired!

**This program requires submission of a recorded audition and an additional letter of recommendation from a music instructor. Detailed instructions for this process are shared upon submission of the Andover Summer application. Limited space available.*

LSI AFTERNOON ACTIVITY OFFERINGS

Badminton

Students will learn the basic rules, techniques, and strategies of badminton. Classes will include skill development, partner activities, and recreational games for all experience levels.
Equipment: Racquets and birdies, and balls are provided. Personal equipment may be used.

Basketball

Students will develop fundamental basketball skills, including dribbling, passing, shooting, defense, and teamwork. Activities will include skill-building drills and organized games in a supportive environment for all experience levels.
Equipment: Basketball shoes required. Basketballs, court space, and pinnies are provided.

Cardio Kickboxing

Students will participate in a high-energy workout that combines basic kickboxing movements with cardiovascular and strength exercises. The focus is fitness, coordination, confidence, and proper technique; no student-to-student contact is involved.
Equipment: Gloves and heavy bags are provided. Athletic clothing and sneakers are required.

Dance

Students will explore movement, rhythm, coordination, and self-expression through a variety of dance styles. Classes will include instruction, choreography, and opportunities to create and perform movement sequences.
Equipment: Comfortable athletic clothing and supportive sneakers are required.

Fitness

Students will learn safe and effective ways to improve strength, endurance, mobility, and overall fitness. Activities may include body-weight exercises, resistance training, circuits, and fitness games adapted to different ability levels.
Equipment: Workout equipment is provided. Athletic clothing and sneakers are required.

Flag Football

Students will learn the fundamentals of football through passing, receiving, defensive drills, and non-contact games. The program emphasizes teamwork, communication, and sportsmanship.
Equipment: Footballs and flags are provided. Cleats are optional but recommended.

Outdoor Games

Students will participate in a rotating selection of recreational outdoor games that promote movement, teamwork, and fun. Activities may include traditional field games, team challenges, and other group competitions.
Equipment: Game equipment is provided. Athletic clothing and supportive sneakers are required.

Running

Students will develop cardiovascular fitness, pacing, and endurance in a supportive, non-competitive setting. Workouts will be adapted to meet different experience and fitness levels.
Equipment: Proper running shoes are required.

LSI AFTERNOON ACTIVITY OFFERINGS

Soccer

Students will learn or improve their dribbling, passing, shooting, defending, and teamwork. Skill-building activities will lead into small-sided and full-team games. Exercise clothing and proper footwear are required.
Equipment: Soccer balls, pinnies, and goals are provided. Athletic shoes or cleats are recommended.

Squash

Students will have the opportunity to play in Andover's Palfrey Squash arena and get to learn the rules, safety practices, and fundamental skills of squash, including serving, striking, movement, and court positioning. Activities will include drills and match play.
Equipment: Protective goggles and squash racquets are provided and required. Squash court shoes are highly recommended.

Swimming

An opportunity to swim in the Pan aquatics center! Students will develop swimming technique, endurance, and confidence through stroke instruction and structured workouts. Participants should be comfortable in the water and prepared to swim during each class.
Equipment: Appropriate swimwear is required. Goggles are recommended but are not provided.

Tennis

Students will learn or improve their serving, groundstrokes, volleys, footwork, and understanding of the game. Classes will include skill-building drills, partner activities, and match play.
Equipment: Tennis racquets and balls are provided. Court-appropriate athletic shoes are recommended.

Volleyball

Students will develop fundamental skills such as passing, setting, serving, hitting, and team positioning. Classes will progress from drills and small-group activities to organized games.
Equipment: Volleyballs are provided. Knee pads are not provided; supportive court shoes are highly recommended.

Walking

Students will improve their fitness through purposeful walks around campus and nearby areas. The program will explore pace, distance and the physical and mental benefits of regular walking.
Equipment: Comfortable, supportive walking shoes are required.

Yoga

This class is structured to provide a series of exercises and stretching involving warm-ups, core strengthening, standing postures, and relaxation. The program supports flexibility, body awareness, meditation, and recovery.
Equipment: Yoga mats are provided. Comfortable clothing that allows movement is recommended.