



ANDOVER SUMMER

SUMMER SESSION

at PHILLIPS ACADEMY

**UPPER SCHOOL
COURSE CATALOG
SUMMER 2024**

FIRST EDITION

ANDOVER SUMMER

2024 Upper School Course Catalog

UPPER SCHOOL OVERVIEW	<u>2</u>
English Language Learners	<u>2</u>
Course Selection	<u>2</u>
Course Changes	<u>2</u>
Prerequisites and Grade Levels	<u>2</u>
Academic Accommodations	<u>3</u>
 OPTIONAL COURSES AND ADD-ONS	 <u>4</u>
Princeton Review Test Prep-\$975	<u>4</u>
Essential Study Skills-\$650	<u>4</u>
College Counseling-\$300	<u>4</u>
 REGULAR DAILY SCHEDULE	 <u>5</u>
 UPPER SCHOOL COURSE OFFERINGS	 <u>6</u>
Arts–Visual and Performing	<u>7</u>
Computer Science	<u>9</u>
English	<u>11</u>
English Language Learners (ELL)	<u>13</u>
History and Social Sciences	<u>15</u>
Mathematics	<u>19</u>
Philosophy and Religion	<u>22</u>
Science	<u>23</u>
9 th Grade Academy	<u>27</u>
 UPPER SCHOOL AFTERNOON ACTIVITY OFFERINGS	 <u>27</u>

UPPER SCHOOL OVERVIEW

Our Upper School is designed for rising 9th-12th graders (or ages ~14-17) seeking an enriching summer academic experience supplemented with afternoon activities, optional trips to area colleges and weekend trips to local destinations.

Upper School students can select from over 60 course options, each taught by a member of our distinguished summer faculty. The Upper School provides the rigorous academic environment our students seek, while providing a nurturing and supportive community of learners.

ENGLISH LANGUAGE LEARNERS

English Language Learning students will select from a specialized set of ELL courses. Any student considering our ELL program should have basic proficiency in written and spoken English. As a guideline, students should have a minimum TOEFL iBT score of 60, 6.0 on IELTS or between a 95-100 on Duolingo.

Those who are admitted to our English Language Learners program will select courses specifically identified as part of that program.

COURSE SELECTION

Upon enrollment, students and parents/guardians will submit their course requests through the Family Portal. When selecting courses, all students* should enroll in the following:

- A Period 1 course (8:30 am-10:00 am)
- A Period 2 OR Period 3 course (Period 2: 10:30am-12:00pm)
(Period 3: 1:00-2:30pm)

Students may use their free period for study, optional courses, or music lessons.

All Upper School Boarding students also participate in our afternoon activities program Tuesdays, Thursdays and Fridays from either 4-5 pm or 5-6 pm.

**Day students may opt to enroll in one (1) course, but all boarding students must enroll in (2) two courses. Please note that Princeton Review Test Prep, College Counseling and Essential Study Skills do not count toward the course minimum. While we encourage day students to make an afternoon activity selection, this is optional.*

COURSE CHANGES

Students may utilize our Family Portal to make course changes until May 15th. After May 15th, students will be able to make changes via the add/drop period which begins on the first Friday of the program and ends on the first Sunday of the program. More detailed information about the course change process can be found in the Andover Summer Blue Book.

PREREQUISITES AND GRADE LEVELS COURSE

Students and families should make themselves aware of required prerequisites and grade level restrictions (where listed) and should not enroll in any course for which they do not have the required prerequisite course or are not at the required grade level. If you have questions related to prerequisite or grade level requirements, please reach out to the summer office.

ACADEMIC ACCOMMODATIONS

Andover Summer can provide limited academic accommodations to admitted students. These accommodations may include extended time on testing, support at an evening study center. Once admitted, families should complete the required "Request for Accommodations" form and provide all necessary supporting documentation, in order to formally submit their request. All accommodations requests must be submitted by May 15, 2024.

OPTIONAL COURSES AND ADD-ONS

Optional Courses and add-ons 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—\$975

Princeton Review courses prepare students for the verbal, quantitative, and reading comprehension sections of the SAT, ACT and SSAT standardized tests. 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. SAT and ACT Prep are open to rising 10th–12th graders and SSAT Prep is open to rising 9th graders. Princeton Review courses meet 4x weekly for 1 hour. Students are scheduled into sections depending upon overall course schedule. For more information on Princeton Review Test Prep, please visit their website at: <https://www.princetonreview.com>.

Essential Study Skills—\$650

This course is designed to teach students the skills to thrive, both academically and personally, in challenging school environments. Invited to nurture the broader dispositions that lead to academic success, students will emerge from the course with a toolkit of strategies they can use throughout their academic careers and beyond for finding and maintaining curiosity and motivation, cultivating optimism and resilience, developing essential academic skills, and applying learning strategies for improved time management and effective study. Essential Study Skills courses meet 4x weekly for 1 hour. Students are scheduled into sections depending upon overall course schedule.

College Counseling—\$300

Open to Upper School students, the College Counseling Program provides students with an insider's look at the college admissions process. Students who register for the college counseling program will have access to exclusive workshops led by admissions representatives from highly selective institutions, priority sign-up for weekly college trips and a one-to-one meeting with an Andover Summer college counselor.

A summer college fair will be held on Thursday, July 18th from 6:00-7:30 pm and is open to all Upper School students regardless of registration in the college counseling program. A list of college and university attendees will be provided at the start of the program.

Music Lessons—Not Available During Summer 2024

Due to the construction of our new music facility, The Fall Music Center, we will be unable to offer our music program during the Summer 2024. We look forward to our expanded and even better music program to return in Summer 2025. We apologize for any inconvenience.



REGULAR DAILY SCHEDULE

Summer Session — Upper School Institute

MONDAY	
7:00-9:00 a.m.	Breakfast available
8:30-10:00 a.m.	Period 1: Classes
10:30 a.m.-12:00 p.m.	Period 2: Classes
11:00 a.m.- 1:30 p.m.	Lunch available
1:00-2:30 p.m.	Period 3: Classes
2:45-3:45 p.m.	Period 4: College Counseling / Optional Courses
4:00-5:00 p.m.	Period 5: Optional Courses / Open Activities
5:00-6:00 p.m.	Period 6: Optional Courses / Open Activities
5:00-6:45 p.m.	Dinner available
7:30 p.m.	Initial Dorm Sign-in
7:30-9:15 p.m.	Study Hours (<i>Study Centers open</i>)
8:45 p.m.	"Paresky Late Night" break
9:30 p.m.	Final Dorm Sign-in
10:30 p.m.	Students in their rooms / Lights Out
TUESDAY	
7:00-9:00 a.m.	Breakfast available
8:30-10:00 a.m.	Period 1: Classes
10:00-10:30 a.m.	"Milk & Cookies" break
10:30 a.m.-12:00 p.m.	Period 2: Classes
11:00 a.m.- 1:30 p.m.	Lunch available
1:00-2:30 p.m.	Period 3: Classes
2:45-3:45 p.m.	Period 4: College Counseling / Optional Courses
4:00-5:00 p.m.	Period 5: Afternoon Activities
5:00-6:00 p.m.	Period 6: Afternoon Activities
5:00-6:45 p.m.	Dinner available
7:30 p.m.	Initial Dorm Sign-in
7:30-9:15 p.m.	Study Hours (<i>Study Centers open</i>)
9:30 p.m.	Final Dorm Sign-in
10:30 p.m.	Students in their rooms / Lights Out
WEDNESDAY	
7:00-9:00 a.m.	Breakfast available
8:30-9:00 a.m.	Conference Period
9:10-10:10 a.m.	High School Meeting (<i>all students entering grades 9-12</i>)
10:15-11:15 a.m.	Connections Groups
11:00 a.m.- 1:30 p.m.	Lunch available
11:15 a.m.-6:00 p.m.	Optional College Visits
2:00-4:00 p.m.	Open Activities
5:00-6:45 p.m.	Dinner available
7:30 p.m.	Final Dorm Sign-in
7:30-9:15 p.m.	Dorm Meetings & Study Hours (meetings & activities)
10:30 p.m.	Students in their rooms / Lights Out

THURSDAY	
7:00-9:00 a.m.	Breakfast available
8:30-10:00 a.m.	Period 1: Classes
10:30 a.m.-12:00 p.m.	Period 2: Classes
11:00 a.m.- 1:30 p.m.	Lunch available
1:00-2:30 p.m.	Period 3: Classes
2:45-3:45 p.m.	Period 4: College Counseling / Optional Courses
4:00-5:00 p.m.	Period 5: Afternoon Activities
5:00-6:00 p.m.	Period 6: Afternoon Activities
5:00-6:45 p.m.	Dinner available
7:30 p.m.	Initial Dorm Sign-in
7:30-9:15 p.m.	Study Hours (<i>Study Centers open</i>)
8:45 p.m.	"Paresky Late Night" break
9:30 p.m.	Final Dorm Sign-in
10:30 p.m.	Students in their rooms / Lights Out
FRIDAY	
7:00-9:00 a.m.	Breakfast available
8:30-10:00 a.m.	Period 1: Classes
10:00-10:30 a.m.	"Milk & Cookies" break
10:30 a.m.-12:00 p.m.	Period 2: Classes
11:00 a.m.- 1:30 p.m.	Lunch available
1:00-2:30 p.m.	Period 3: Classes
2:45-3:45 p.m.	Period 4: College Counseling / Optional Courses
4:00-5:00 p.m.	Period 5: Afternoon Activities
5:00-6:00 p.m.	Period 6: Afternoon Activities
5:00-6:45 p.m.	Dinner available
7:30 p.m.	Initial Dorm Sign-in
7:30-9:15 p.m.	Study Hours (<i>Study Centers open</i>)
9:30 p.m.	Final Dorm Sign-in
10:30 p.m.	Students in their rooms / Lights Out
SATURDAY	
7:00-9:00 a.m.	Breakfast available
8:30-10:00 a.m.	Period 1: Classes
10:30 a.m.-12:00 p.m.	Period 2 and 3: Classes
11:15 a.m.-2 p.m.	Lunch available
1-5 p.m.	Optional Student Activities
5:00-6:45 p.m.	Dinner available
7:30-10:30 p.m.	Optional Student Activities
11:00 p.m.	Final Dorm Sign-in
11:45 p.m.	Students in their rooms / Lights Out
SUNDAY	
8:30-10:30 a.m.	Breakfast available
10:30 a.m.-1:30 p.m.	Brunch available
1-5 p.m.	Optional Student Activities
5:00-6:45 p.m.	Dinner available
7:30 p.m.	Initial Dorm Sign-in
7:30-9:15 p.m.	Study Hours (<i>Study Centers open</i>)
9:30 p.m.	Final Dorm Sign-in
10:30 p.m.	Students in their rooms / Lights Out

UPPER SCHOOL COURSE OFFERINGS

In the pages that follow you will find the full range of possible Upper School courses that are currently being offered for the summer of 2024. 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.

Some courses may carry additional fees for special materials, lab supplies, or academic field trips. Courses with additional fees are noted in this catalog. 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.

ARTS - VISUAL AND PERFORMING

Acting and Performance

Grades 9–12 | PERIOD 3

Working from the ground up, students learn how to use their minds, bodies, and voices as professional actors do. Beginning with physical and vocal exercises, improvisation games, and other ensemble-building workshops, the course then moves on to more advanced acting techniques. Students explore some of the most influential theatre styles, plays, and characters—as well as creating their own—through rehearsal and in-class presentation, culminating in a public performance of their work from the summer. No prior theatre experience necessary; this class is equally suited for beginners or performance pros.

NEW! Animation

Grades 9–12 | PERIOD 2

Designed for students who wish to see their artwork come to life, this course explores different animation techniques such as drawing directly on film, cutouts, Claymation, sand, flip books, and drawn animation. Basic movement and timing, soundtrack/dialogue synchronization, and editing are covered. All projects are shot and edited on our state-of-the-art computers and professional production and editing software. A wide range of animated films are screened throughout the summer. No prerequisites or requirements; just bring lots of imagination.

Applied Graphic Design

Grades 9–12 | PERIOD 3

Have you ever tried to design a poster, flyer, business card, yearbook, or class presentation and been stymied by the considerable choices you must make? In our information-driven society, graphic design principles and concepts are needed more than ever to bring balance, clarity, and visual appeal to all varieties of content. According to noted graphic designer Paul Rand, “To design is much more than simply to assemble, to order, or even to edit; it is to add value and meaning, to illuminate, to simplify, to clarify, to modify, to dignify, to dramatize, to persuade, and perhaps even to amuse. To design is to transform prose into poetry. Design broadens perception, magnifies experience, and enhances vision. Design is the product of feeling and awareness, of ideas that originate in the mind of the spectator.”

**Cross-listed under Computer Science*

Ceramics

Grades 9–12 | PERIOD 3

Express yourself through clay! This course discusses the elements of three-dimensional design and focuses on the creative potential of the student. *Ceramics* at Phillips Academy is comparable to ceramics courses taught at art schools and select universities; the Academy is equipped with facilities for pit firing, high fire gas, and Raku. Techniques, glazes, and firing procedures are introduced with the support of books, slides, and visits to the campus’s Addison Gallery of American Art and Robert S. Peabody Museum of Archaeology.

ARTS - VISUAL AND PERFORMING

Digital Photography

Grades 9–12 | PERIOD 2

Through this class, students gain an understanding of the principles of photographic composition and quality, as well as how technology can improve their images. Students learn the basics of photography and how to use digital cameras, then scan their images into Adobe Photoshop, where they can transform them by adding color and using the program's many altering techniques. The ultimate challenge is for students to push their creative limits. Students are encouraged to bring a digital camera; those who do not have one are welcome to borrow one for the duration of the program.

Drawing and Painting

Grades 9–12 | PERIOD 1

Welcome to the world of artistic expression! *Drawing and Painting* offers students an immersive and creative journey into the captivating realms of visual art. This course is designed for individuals who have a passion for drawing and painting, regardless of their skill level, and aims to cultivate and refine their artistic abilities while fostering a deeper understanding and appreciation of the visual arts. The fundamental elements of drawing—line, shape, value, perspective, and composition—are emphasized in the initial weeks of this course. Students are introduced to a variety of materials (graphite, charcoal, ink, and acrylic) through a series of exercises that celebrate drawing as a creative act. From drawing, students can expand into the realm of painting and mixed media, working from a variety of approaches.

Intensive Film Workshop

Grades 9–12 | PERIOD 1

This course is for students interested in making a serious commitment to expressing themselves through the motion picture. This intensive program leads students through an exploration of each aspect of filmmaking, from the conception of an idea to the final steps in editing. The course is segmented to include film development, pre-production scheduling, production, and editing. Students explore the genre of the fiction film, studying the styles and techniques of various filmmakers. Projects are produced using some of today's most technologically advanced materials and systems, available on campus in the Polk- Lillard Electronic Imaging Center. Students gain a greater film/video vocabulary as well as a technical background allowing them to continue with filmmaking.

Studio Art

Grades 9–12 | PERIOD 1

Do you want to become a better artist? Would you like to create a body of quality artwork that can be used later in a college portfolio? Learn the tools of the studio artist. Through study of the elements and principles of design, students will create various works of art using a variety of media. Techniques in painting, drawing, printmaking, and computer design are the course's primary focus. Classic subjects such as portraits, still lifes, landscapes, and the figure will comprise much of the subject matter in this class. Students will watch art films and visit local galleries to supplement the curriculum.

COMPUTER SCIENCE

Game Design and Development

Grades 9–12 | PERIOD 2

You know how to play games on Xbox, PlayStation, Nintendo and your mobile device but did you ever wonder how to build one yourself? The game design industry is an exciting, expanding field that requires both technical and creative ability. Dive into this interactive course where you'll learn ways to create and describe a game concept, and specifically investigate what makes a compelling game design. Students will work with their instructors to construct board games and computer-based games, design characters, build terrains, and improve the interactive user experience. If you are passionate about gaming, like working with others, and have a big imagination – this is the course for you!

Introduction to Programming

Grades 9–12 | PERIOD 3

Unlock the world of coding and software development in our exciting Introduction to Programming course designed exclusively for high school students participating in our summer program. This course is tailored to provide a comprehensive introduction to the fundamentals of programming and computer science, making it perfect for students with little to no prior coding experience. With a focus on hands-on learning, problem-solving, and creativity, students will explore the exciting universe of coding and its real-world applications. Students explore the basics of computer programming while creating animations, games, and simulations. Topics include object-oriented programming, variables, decisions, events, and the basics of game design in a graphical environment. Students do not need a strong high school math background, making this an ideal course for younger students. Though the course is not taught with a traditional programming language, all concepts can be transferred to other object-oriented languages, such as Java and Visual Basic.

Programming in Java*

Grades 11–12 | PERIOD 1

Intended as an introduction to computer programming using traditional coding methods, in a more advanced setting than the *Introduction to Programming* course offers, *Programming in Java* emphasizes methodology, algorithms, data structures, code style, and the Java programming language, as suggested by the College Board for the Advanced Placement (AP) Computer Science exam. Students learn to design and implement computer-based solutions to a variety of problems. In addition, students design programs that are expandable and understandable, and they learn how and when to write code that is reusable. Although this is not an official AP course, students are exposed to most of the topics covered on the AP Computer Science exam and will learn how to create small, structured programs using the Java language.

**Prerequisite: Successful completion of Algebra II*

COMPUTER SCIENCE

Robots: Design! Build! Program!

Grades 9–12 | PERIOD 1

Welcome to the world of competitive robotics. Science, math, engineering, creativity, and logic are combined in this exciting introductory robotics and robotics programming course, cross-listed under science. Students will be introduced to the types of challenges presented in the Vex Robotics Competition, a worldwide competition engaging students in more than 30 countries. Using the new V5 Robot Brain, V5 Controller, Vex Robotics System, and Vex Coding Studio, students will work in teams to design, build, and program robotic solutions to the new season of Vex Robotics Competition. Teams test their solutions to the challenge, on "game day", giving beginners and seasoned roboticists alike the experience of being on a development team for competitive robotics.

ENGLISH

9th Grade Academy High School Prep–English*

Grade 9 Only | PERIOD 1 and PERIOD 2

*This course may only be selected by those participating in the full 9th Grade Academy cohort. Please see full description at the end of catalog under 9th Grade Academy.

Screenwriting

Grades 9–12 | PERIOD 1

This class serves as introduction to the craft of cinematic writing. Screenwriting rewards risk-taking and finding your own personal voice; through in-class workshops, rapid writing prompts, and long-form assignments, students will develop this voice by exploring the concepts of character, dialogue, dramatic conflict, and narrative structure. By also exploring and analyzing plays by professional playwrights and screenwriters, students will gain an understanding of the variety of voices producing plays in the cinema today. The capstone project of the class will be a ten- minute screenplay written by each student.

Speech and Debate

Grades 10–12 | PERIOD 1 and PERIOD 2

In a survey, 3,000 Americans were asked what they dreaded most. Public speaking came in first—ahead of death! In an encouraging classroom atmosphere, students are taught to improve both the delivery and the content of their public speaking. Students write, revise, and speak extensively and are introduced to competitive high school speech activities, such as extemporaneous speaking, impromptu speech, and Lincoln-Douglas debate. Close analysis of contemporary American political speeches and research of cutting-edge controversial topics provide issues for classroom debate. Students develop an invaluable skill that will serve them for the rest of their lives. This course assumes no prior knowledge of public speaking or debate.

Writing for Success: Creative Writing

Grades 9–12 | PERIOD 1 and PERIOD 2

This course is for students who think of writing as an art, not just a useful skill. Students read and write in several genres—short story, poetry, and nonfiction memoir—using the readings as models for their own work. In their writing, students are expected to develop mastery of fundamental techniques of good writing, from basic grammar and usage to metaphorical language and plot structure. Required to write daily, revise, and produce polished final drafts as well as share in class, students begin to transform raw talent into true skill.

Writing for Success: Expository Writing

Grades 9–12 | PERIOD 1, PERIOD 2 and PERIOD 3

The most important writing course students will ever take--and the most sought-after writing course at Andover--*Writing for Success* emphasizes essay composition as a craft and exposes students to different uses and combinations of rhetorical modes, including definition, description, narration, process, comparison, and analysis. Over the course of the program, students practice constructing effective sentences and paragraphs to suit a variety of topics, audiences, and aims. By writing every day as well as reading and discussing the style and mechanics of published essays, students experience writing as a rewardingly rigorous, recursive, and creative process that involves brainstorming, planning, composing, editing, reverse outlining, and constructive peer review.

ENGLISH

Writing for Success: Literary Analysis

Grades 9–12 | PERIOD 1 and PERIOD 2

Explore and appreciate the world of literature in our *Literary Analysis* course. Designed for enthusiastic readers, budding writers, and future scholars of literature, this course provides students with an exploration of literary works from various genres and time periods. Through lively discussions, critical thinking exercises, and close textual analysis, students will develop the skills to appreciate, analyze, and articulate the profound themes and ideas woven into great works of literature. Students will develop an in-depth understanding and appreciation of a range of different writers, and will practice actively reading novels, plays, short stories, and/or essays, writing articulately, and discussing text using evidence. Students will learn to see themselves as independent thinkers and to give voice to their thoughts through the written word.

Writing the College Essay

Grades 10–12 | PERIOD 1 and PERIOD 3

This course will move students through the brainstorming, drafting, and revision process to create a set of polished essays that can be used during the college application process. Focusing on the prompts released by the Common Application as well as addressing common short-answer questions, this course will support students in creating essays that represent their individual personalities and ambitions. Students will be required to write daily, participate in workshop activities and critiques, and reflect on their own life experiences.

ENGLISH LANGUAGE LEARNERS (ELL)

ELL Core Course

Grades 9–12 | PERIOD 1

All ELL students will be enrolled in a first period core course divided into levels according to the results of a placement process that includes an online assessment prior to arrival. The Core Course is offered to meet the needs of students who are highly proficient in English as well as those who exhibit the need for more practice and support (*Please note: a beginner-level course is not offered; students should have scored at or above 60 on the TOEFL iBT, 6.0 on IELTS, or between 95-100 on Duolingo*). While all classes stress the development of competencies in the skills of reading, writing, listening, and speaking, close attention is paid to individual needs. Students are exposed to a wide variety of English materials and are expected to understand and respond to course materials that include, but are not limited to, American literature-based texts across a broad range of genres, films, articles, and nonfiction. Classes are small (typically 12 students) and highly interactive. It is not unusual to find eight or more cultures represented in any given group.

ELL: A Multimedia Approach to American Culture

Grades 9–12 | PERIOD 2

This intermediate/advanced course takes a close look at American culture through important historical events and documents of popular culture. Various media are investigated to gain a more complete understanding of the United States and its people. We examine American newspapers and see the United States through a number of films that focus on specific themes in American culture. Students should be comfortable expressing themselves in both written and spoken English.

ELL: Preparing for the TOEFL

Grades 9–12 | PERIOD 3

The purpose of this class is to help students improve their performance on the Test of English as a Foreign Language (TOEFL). Four different means of language skill acquisition and improvement are utilized: reading, writing, listening, and speaking. After a general introduction to the test format, each section of the TOEFL (Listening Comprehension; Written Expression and Speaking Ability; and Reading Comprehension) is considered in detail. Working individually and in groups, students read selections from various newspaper and magazine sources and practice extensively in a test preparation text. This course is designed for high-intermediate-level students whose goals include studying at a U.S. college or university.

ELL: Speak Up!

Grades 9–12 | PERIOD 2 and PERIOD 3

In this ELL course, students engage in a variety of exercises to improve their proficiency in conversational English. Discussions, role-play skits, poetry, debates, and extemporaneous and prepared speeches place students at the center of the learning process and expand both the breadth and depth of their spoken English. In order to increase students' comfort in a broad range of situations, topics for the various activities range from the mundane to the profound. Some exercises revolve around practical everyday situations, while others involve discussing topics on a deeper intellectual level. Students are challenged to employ new vocabulary, converse using complex sentence structures, and express difficult ideas. They work on pronunciation skills. Recognizing the key role of listening in any meaningful conversation, the course also focuses extensively on listening skills. This course is designed for students who are not comfortable speaking with native speakers of English and/or those who have not had many opportunities to speak English.

ENGLISH LANGUAGE LEARNERS (ELL)

ELL: Writing, Presenting, and Defending Your Work

Grades 9–12 | PERIOD 3

Reading, writing, and speaking fluently in complex academic English are essential skills in which any advanced ELL student needs to excel. This course is designed to give students the analytical reading and writing skills required for success in the pre-university scholastic environment. Assignments involve researching various topics, composing papers, and extensive presenting and defending of oral arguments. At the end of this class, students will have successfully defended their oral presentations to the class on numerous occasions and developed the skills to confidently speak before the class in English in an academic setting.

HISTORY AND SOCIAL SCIENCES

NEW! Decolonizing Andover

Grades 10–12 | PERIOD 3

Were six English pounds and a coat a fair price for the Penacook lands that came to comprise the “Plantation of Andover?” Should the first manufacturer of gunpowder for the Continental Army during the Revolutionary War and the founder of Phillips Academy be considered a “Son of Liberty” if he was raised in a household with enslaved people and may well have held enslaved people himself? Decolonizing Andover provides students with the opportunity to explore both primary sources in local and state archives as well as remaining 17th and 18th century structures and locations in Andover, Massachusetts, and its surrounding communities. We will engage in the essential work of decolonizing the historical narratives about the experiences of Indigenous and African American people prior to and during the early settlement of this Massachusetts town. We will also consider the broader implications that genocide and enslavement have had not just on our nation’s history but more importantly its future trajectory.

Entrepreneurship

Grades 10–12 | PERIOD 3

Entrepreneurship has become an established life and career path for many. Yet relatively few embark on this journey with the knowledge and skills needed to succeed and avoid its many pitfalls. At the same time, many people’s image of entrepreneurship comes from shows like Shark Tank and The Apprentice – a Darwinian, zero-sum game where people vie for investment and seem fixated on making a million – scratch that – a billion dollars. Yet this is a very limited view of entrepreneurship and the possibilities it offers. This course exposes participants to multiple forms of entrepreneurship, from for-profit ventures, to nonprofits, educational and cause-related startups, and personal-brand development. The centerpiece of the course: each participant will create, refine, and present a business plan for a venture about which they are passionate. The course is very hands-on, filled with team exercises and development of core skills such as presentation, sales, networking, financial analysis, market research, and personal health as you pursue your dream. We’ll also meet several successful entrepreneurs who will share some of their best-kept secrets to success. So come cultivate your ideas and meet fellow budding entrepreneurs!

NEW! “Innovation and Society: The Dynamics of Technological Change”

Grades 9–12 | PERIOD 1

As tens of billions of dollars pour into the development of artificial intelligence (AI) systems and machine learning infiltrates our daily lives, the world debates what AI will do to society as we know it. While the technology is new—the term artificial intelligence was coined in 1956—the key questions are old: How does society shape technology, and how does technology shape society? What are we about to unleash? This course examines how people process technological change and try to design inventions that will lead to a better world. To better understand our current AI revolution, we will see how electricity brightened cities, how telephones and the internet connected countries, and how nuclear weapons challenged what war could mean to humanity. We will study the spectrum of reactions to such changes, from Luddites smashing the mechanized weaving machines in Nottingham to the tech utopists of Silicon Valley celebrating the development of the Metaverse.

HISTORY AND SOCIAL SCIENCES

International Relations

Grades 9-12 | PERIOD 1

This course is designed to stimulate students' interest in international relations and foreign policy. As a result of their experiences in the class, they become more astute observers of the international scene and learn to better understand the problems facing the world today. Emphasis is placed on both the historical background and the realities of the modern world scene. Students are assigned readings and gain considerable experience in utilizing library sources emphasizing a variety of viewpoints. Much attention is given to the development of critical thinking, and a large portion of the course is devoted to activities that promote student involvement. Students engage in seminars; serve as prosecutors, defenders, and court members in mock World Court cases; and become involved in a major simulation modeled on the United Nations, utilizing debate, negotiation, compromise, and decision-making skills.

Law and Society

Grades 9-12 | PERIOD 1 and PERIOD 2

In this course, students will learn about the foundations of the American legal system and how they apply to social, economic, political, and individual issues. We will delve into issues of law, crime prevention, conflict resolution, advocacy, and human rights through a combination of case studies, legal analyses, and mock trials. This class will study several landmark cases from the American legal system's history and explore their impact on our society, while considering how the precedents set in these cases apply to current issues. If you love discussion, if legal issues intrigue you, if you're thinking about studying law, or if you just want to look at society from a new point of view, this is the class for you.

NEW! Media, Power and Persuasion

Grades 9-12 | PERIOD 3

What role does the media play in shaping public opinion and inciting social change? This course examines the social, political, and cultural impact of the headlines, stories, and images we see in the news every day. We will investigate how global issues such as war, immigration, civil rights, political campaigns, and environmental disaster have been represented in the media across history, platforms, and the political divide to persuade different audiences. Students will meet with media professionals and debate timely topics, from the proliferation of fake news to the role of media in democracies today. Our goal is to become more savvy consumers and producers of media content in our communities.

HISTORY AND SOCIAL SCIENCES

Medicine and Society

Grades 9–12 | PERIOD 2

The coronavirus pandemic of 2020 offered a harsh reminder of how much societies around the world depend on medicine. At the same time, it underscored the ways in which medical challenges— from disease treatment to healthcare access— are intricately connected to social values, assumptions, and structures. To make sense of the contemporary moment, therefore, we must ask why social groups have experienced disease and medicine differently across history; how the epidemiological origins of a disease shapes social perceptions of people and places; and how a medical crisis can generate social change, such as widespread calls for racial justice. Students will apply critical and international perspectives to the relationship between modern medicine and society by exploring important case studies in public health and reflecting on their own medical experiences. Together we will analyze representations of medicine in scientific literature, non-fiction, news reports, popular media, film, and art. These sources, along with field work on the Andover campus, will inspire students' in-class debates, critical writing, personal narratives, and independent research.

Money, Economy, and Society

Grades 9–12 | PERIOD 1 and PERIOD 2

Our lives are impacted by economic forces in surprising and powerful ways. Learn to appreciate these forces and you'll make smarter personal decisions and better sense of the world around you. What constitutes a "fair price" when you purchase a new iPhone? Why is LeBron James paid forty million dollars a year to play basketball when a nurse or firefighter is paid forty thousand dollars a year to save human lives? Is it possible to bring manufacturing jobs back to America by placing tariffs on Chinese imports? Can we reduce income inequality by taxing the rich and writing checks to the poor? Why is a stay-at-home-mom who cares for her children and cleans the house classified by economists as "unproductive"? To answer these and many more questions, we trace the main currents of economic thought from Adam Smith and Karl Marx to Marilyn Waring and Thomas Piketty.

Neuropsychology

Grades 10–12 | PERIOD 2

Cross-listed with the Science department. See full description under Science.

NEW! Reading Images

Grades 9–12 | PERIOD 3

How can a visual experience be translated into a verbal description? In this course, which combines critical writing skills with an introduction to art history, students will acquire a valuable set of skills known as visual literacy. As they learn to read and write about images, students will study a range of artistic genres including paintings, sculptures, photographs, and videos. Students will learn how to analyze and interpret objects through in-class discussions, writing assignments, and a close look at works of art in the Addison Gallery of American Art, which will be our second classroom. As students are introduced to the language of art history, they will learn how visual images create meaning and how artworks are embedded in a variety of contexts (historical, social, political). Each week focuses on a new way of looking and translating observations into analytical, persuasive, or research-based writing. Students will leave the course with a portfolio of essays that showcases their ability to ask critical questions, analyze images, and communicate their meaning in writing.

HISTORY AND SOCIAL SCIENCES

Social Psychology

Grades 9-12 | PERIOD 1

This summer, embark on a thought-provoking journey into the complexities of human behavior and social interactions. Whether you are interested in psychology as a potential field of study or simply want to better understand the world and people around you, this course will provide you with the tools to explore the intricacies of social psychology and its impact on our daily lives. Gain a deeper understanding of human behavior and society and develop critical thinking skills that will serve you well in any field. This course will provide an introduction to the theories and applications of social psychology in research, academic and social settings. Through class activities and discussions, students experience and reflect on constructs of social psychology that they will have read about in scientific settings. Students are also involved in discussing the relevance of gender and ethnic diversity in the construction of social values, with specific focus on their own lives and experiences. Topics include group dynamics, conformity, self- knowledge, attitude formation and change, interpersonal attraction, prejudice, and aggression.

MATHEMATICS

**All students selecting a math course will be required to take an online baseline assessment to determine math level and to confirm appropriate course placement.*

Calculus*

Grades 11–12 | PERIOD 1

Prepare to unlock the power of mathematical analysis and problem-solving in our *Calculus* course. Designed for students who have successfully completed two years of algebra and a yearlong precalculus course that includes trigonometry, it offers an accelerated mathematics course for strong math students and covers many of the topics in the Advanced Placement curriculum. Such topics are likely to include limits and continuity, derivatives and their applications, indefinite and definite integrals, techniques and applications of integration, and the Fundamental Theorem of Calculus.

**Prerequisite: successful completion of two years of algebra and one year of trigonometry*

Geometry*

Grades 9–12 | PERIOD 1 and PERIOD 2

Explore the fascinating world of shapes, angles, and spatial relationships, and get a jump on the high school geometry curriculum. For students who have had a strong elementary or middle school algebra course but no geometry, this course is a thorough study of the fundamentals. The development of logical, structured proofs and deductive reasoning is emphasized. Along with numerical solutions to problems, topics include basic postulates of geometry, lines and angles, congruent triangles, parallel lines in the plane and in space, quadrilaterals and polygons, circles, similar triangles and other figures, and the Pythagorean Theorem.

**Prerequisite: successful completion of one year of algebra*

9th Grade Academy High School Prep Institute: Math

Grade 9 Only | PERIOD 1 and PERIOD 2

This course may only be selected by those participating in the full 9th Grade Academy cohort. Please see full description under 9th Grade Academy.

Personal Finance

Grades 9–12 | PERIOD 1 and PERIOD 2

In a world of complex financial decisions and endless possibilities, *Personal Finance* is designed to empower you with the knowledge, skills, and strategies necessary to navigate your financial journey successfully. This course is tailored to equip students with the essential tools to make informed financial decisions, achieve financial security, and build lasting wealth. By developing students' financial literacy skills and emphasizing real-world applications of mathematics in the areas where students will need to be most skilled when they become financially independent, *Personal Finance* helps students set the stage for a prosperous future. Budgeting, learning to borrow and invest wisely, understanding the stock market and basics of investing, and planning for major purchases and life events will all be covered. Through a combination of reading, research, simulation activities, projects, and data analysis, students will learn to prepare for their financial futures.

MATHEMATICS

Statistics and Data Analysis*

Grades 11 and 12 | PERIOD 1

Prepare to unleash the power of data-driven decision-making, and to use mathematical analysis to better understand the world around you. This course offers a comprehensive introduction to the world of statistics, data analysis, and their real-world applications. Covering the exploratory analysis of data, students will make use of graphical and numerical techniques to study patterns and develop plans for data collection of valid information. Topics include probability as the tool for producing models, random variables, independence, normal distribution, simulation, sampling, statistical inference, confidence intervals, and tests of significance.

**Prerequisite: successful completion of one year of algebra*

Topics in Algebra I*

Grades 9-10 | PERIOD 3

A practical overview for students entering high school, this course reviews and reinforces math skills found in the pre-algebra and Algebra I curriculum. It should provide a solid foundation for Algebra II and Intermediate Algebra. Topics include several fundamental concepts of Algebra, graphing and solving linear and quadratic functions, solving systems of linear equations and properties of exponents.

**Prerequisite: successful completion of one year of algebra*

Topics in Intermediate Algebra*

Grades 10 and 11 | PERIOD 2

Engage in a more detailed exploration of fundamental algebraic concepts and techniques that build upon the foundational principles introduced in Algebra I. This course is designed for students seeking to deepen their mathematical proficiency and prepare for more advanced mathematics and science courses, and will cover math skills found in the Algebra II curriculum. It should provide a solid foundation for pre-calculus. Topics include solving linear equations and inequalities and absolute value equations and inequalities. A study of linear functions will be followed by polynomials and rational expressions. An in-depth study of quadratic functions may be followed by exponential and logarithmic functions, time permitting.

**Prerequisite: successful completion of one year of algebra*

Topics in Precalculus*

Grades 11 and 12 | PERIOD 1

Upperclassmen, take your mathematical skills to the next level with our *Topics in Precalculus* course. Designed for rising juniors and seniors who have a strong foundation in algebra and trigonometry, this course explores advanced precalculus concepts and lays the groundwork for future studies in calculus. Topics covered will include linear systems of equations, linear functions, quadratic functions, polynomial functions, logarithmic functions, and radical functions. Additional topics may include sequences and series, counting and probability, matrices, and partial fractions. A graphical calculator will be used in class, enabling students to gain both a graphical and an algebraic understanding of concepts.

**Prerequisite: successful completion of algebra I and algebra II*

MATHEMATICS

Trigonometry*

Grades 10–12 | PERIOD 2

Expand your knowledge of trigonometry, covering identities, complex numbers, and trigonometric equations. Explore the applications of trigonometric functions in various fields, and engage in a comprehensive study of circular and trigonometric functions. Topics include radian measure, trigonometric equations, solving right triangles, graphing trigonometric functions, inverse trigonometric functions, law of sines, and law of cosines. Trigonometry will be used to model real-life applications.

**Prerequisite: successful completion of one year each of algebra and geometry*

PHILOSOPHY AND RELIGION

Introduction to Philosophy

Grades 10–12 | PERIOD 1

Philosophy has been around for a long time, but what is it? This course is for anyone who has ever wondered what philosophy is about, as well for those who would like to deepen what they may already know about it. Everyone thinks, but not everyone thinks philosophically. Over the millennia, philosophers have come up with questions, ideas, and methods that allow us to look beneath the surface of things, examine our preconceptions, and gain new insights about ourselves and the world we live in. This course is about what it means to do this. We will watch philosophical films and read the works of many famous philosophers like Plato, Aristotle, René Descartes, John Locke, and Immanuel Kant. We will also take a field trip to Walden Pond, where Henry David Thoreau, one of America's great thinkers, conducted a famous philosophical experiment. Most of all, we will think, talk, and have fun exploring the fascinating world of ideas.

Justice and Ethics

Grades 10-12 | PERIOD 2

Few ideas have been more powerful in human history than the idea of justice. This idea has been central to the ways that human societies function and think of themselves—not just governments and legal systems but also religious communities, social movements, and individuals. Though the quest for justice is one of humanity's oldest aspirations, it remains a powerful ideal today. In this course, we will examine the idea of justice in connection with the human quest to live a morally worthy life. We will look first at the origins of justice in classical thought and in long-standing religious traditions. This will help us to understand how and why people today conceptualize—and argue about—justice in the way that they do. In the second half of the course, we will use concepts in moral philosophy to consider the ethical backgrounds of environmentalism, human rights theory, and contemporary social justice movements.

SCIENCE

Anatomy and Physiology

Grades 11 and 12 | PERIOD 1

Why don't we fall over when we walk? How exactly do our organs keep us alive? This course focuses on the anatomical and physiological workings of the human body. Among the anatomy and physiology topics introduced are histology, kinesiology, cardiology, and genetics. Students learn to identify anatomical structures and their functions in relation to daily bodily activities. Student work is assessed through written reports, examinations, lab practicals based on dissection, and research topics. Students have the opportunity to leave this course with their own portfolio of materials that are focused on topics introduced in the class setting.

**Please note that this course has a \$75 laboratory materials fee associated with it.*

Applied Physics: Astronomy

Grades 9–12 | PERIOD 1 and PERIOD 2

Modern astronomy is a quest for a greater understanding of the evolution and diversity of the universe, as well as an application of critical thinking skills to broader questions in physics, chemistry, biology, and environmental science. This class examines the current state of the science as well as future avenues of research and discovery. Topics include traditional areas of emphasis, such as the electromagnetic spectrum, light, telescopes, navigating the night sky, solar system formation, the planets, global climate change, comets and asteroids, the sun, and the lifecycle of stars. We also apply a critical analysis to the broader questions that include the search for life in the universe and connections to life on this planet. We keep a close eye on current research and examine the history of science through the eyes of non-conventional thinkers, including Einstein and Galileo. Lastly, we examine some of the more exotic subjects that are stretching the limits of modern science, such as black holes, ion propulsion, dark energy, and life in extreme environments. We make use of the extraordinary imagery and resources available here at Phillips Academy, including the state-of-the-art observatory in Gelb Science Center. Throughout the session, students engage the science critically and capture a snapshot of this emerging field of science.

Biology: Introductory*

Grades 9–12 | PERIOD 1

Start to unlock the secrets of life in this overview of biological concepts and principles. Designed as an intensive introductory lecture, laboratory, and field course, students will investigate and explore ecology, plant biology, animal diversity, concepts of animal structure, and cellular biology. Scientific writing is an ongoing focus. The framework anchors in a student's conceptual understanding of biology with an emphasis on biology as a process rather than an accumulation of facts.

**Please note that this course has a \$75 laboratory materials fee associated with it.*

SCIENCE

Biology: Accelerated with Prep for Advanced Placement*

Grades 10–12 | PERIOD 2

Move beyond the basics in your study of biology, and explore topics like evolution, energetics, information storage and transfer, and system interactions. This is an advanced, pre-AP course designed to introduce students to the rigors of a college level laboratory course in general biology by providing them with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the continually developing science of biology. Topics of study include but are not limited to the chemistry of life, cell biology, metabolism, cellular respiration, photosynthesis, the cell cycle, meiosis, and genetics. Laboratory work and skills in scientific writing will be developed throughout the summer.

**Prerequisite: one year of biology*

**Please note that this course has a \$75 laboratory materials fee associated with it.*

Chemistry: Introductory*

Grades 9–12 | PERIOD 1

The course enables students to understand and use basic concepts of chemistry to think critically about current issues in science and technology. Geared toward motivated students who show an interest in science, students will study essential chemical principles such as the mole concept; stoichiometry; atomic structure; chemical bonding and reactivity; gas laws, and molarity of solutions. The course is balanced by a combination of lectures, problem-solving, and laboratory work, providing a strong foundation in chemistry.

**Prerequisite: successful completion of one year of algebra*

**Requirement: scientific calculator*

**Please note that this course has a \$75 laboratory materials fee associated with it.*

Chemistry: Accelerated with Prep for Advanced Placement*

Grades 10–12 | PERIOD 3

This intensive course is intended for highly motivated students who are planning to take either an accelerated introductory chemistry course or an AP Chemistry course and who have demonstrated strong mathematical and conceptual abilities. This course teaches students essential chemical principles, such as the mole concept; stoichiometry; atomic structure; chemical bonding and reactivity; gas laws, and molarity of solutions. In addition, students will have access to exclusive AP Chem prep videos and materials. The course is balanced by a combination of lectures, problem-solving exercises, and substantial laboratory work where students will learn techniques such as spectrophotometry and titration. Utilizing a college-level textbook, the course covers most topics at a depth equivalent to that of an introductory college chemistry course.

**Prerequisite: successful completion of one year of algebra with strong grades*

**Requirement: scientific calculator*

**Please note that this course has a \$75 laboratory materials fee associated with it.*

SCIENCE

NEW! Environmental Science and Climate Justice

Grades 9–12 | PERIOD 3

Climate change, species extinction, devastating tropical storms, and nuclear disasters—all of these topics and more will be explored through our introduction to the interdisciplinary field of environmental science and social justice. Students learn scientific methodology through hands-on biology- and ecology-based lab investigations using the 500-acre Phillips Academy campus as well as the rich diversity of ecosystems within a short drive of the school. Students also will use class time and field work to study the environment in terms of history, social context, economics, and sustainability. Students will identify and analyze environmental problems (both natural and human-made) and examine possible solutions for resolving and/or preventing them.

Genetics*

Grades 10–12 | PERIOD 1

This rigorous course studies the profound implications of recent advances in genetics. It will begin with a review of the structure and function of DNA in addition to the basics of Mendelian genetics. Further exploration of the topics will lead to a deeper understanding of genetic diseases, cancer, evolution, and the new field of epigenetics. The course considers methods of detecting genetic defects and genetic engineering and includes discussions of the ethical implications of both. A significant portion of this course will include work in the lab with a variety of techniques.

**Prerequisites: successful completion of one year of biology and one year of chemistry*

**Please note that this course has a \$75 laboratory materials fee associated with it.*

Marine Biology*

Grades 9–12 | PERIOD 2

Dive into the wonders of the underwater world! This course offers a unique opportunity to explore the mysteries of the ocean, from vibrant coral reefs to the depths of the open sea. Students will be introduced to several different aspects of marine biology through lectures, laboratory investigation, and field trips. Topics include, but are not limited to, oceanography, marine invertebrate, and vertebrate zoology (including physiological adaptations to a marine environment), aquaculture, and ecology of the various habitats within aquatic ecosystems. We will examine the physical and chemical properties of seawater, organisms that have evolved to an aquatic environment, the physiological and behavioral adaptations those organisms have developed, and the different ecosystems within oceanic zones.

**Please note that this course has a \$75 laboratory materials fee associated with it.*

SCIENCE

Neuropsychology

Grades 10–12 | PERIOD 2

Come explore the neurological basis for how our brain impacts everyday behavior. Students enrolled in this course will study the relationship between the brain, nervous system structures, and human behavior, learning about basic brain anatomy and function as well as cognitive disorders and behavioral disorders from a neuropsychological perspective. Students will engage in an exploration of how everyday actions, such as using a cell phone, impact nervous system function, their own behaviors, and the behaviors of those around them. Students will have the opportunity to take a more in-depth look at an area of their choosing ranging from the study of Alzheimer's and Parkinson's to the more controversial subject of CTE in NFL athletes.

**This course is cross listed with History and Social Sciences*

Physics: Introductory*

Grades 9–12 | PERIOD 3

What are the fundamental laws that govern our world, from the motion of the stars to the behavior of subatomic particles? This course covers the main ideas of foundational principles of physics, focusing primarily on mechanics, and provides a solid foundation of concepts, confidence in problem solving, and exposure to laboratory techniques. Although this course does not cover a full year's worth of material, the techniques learned serve as excellent preparation for all introductory physics topics.

**Requirement: Texas Instruments TI-84 graphing calculator or its equivalent*

**Prerequisite: successful completion of one year of algebra*

Physics: Accelerated with Prep for Advanced Placement*

Grades 10–12 | PERIOD 1

This course is an algebra-based, advanced physics course, intended to prepare students for Advanced Placement. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves. By confronting complex physical situations or scenarios, the course is designed to enable students to develop the ability to reason about physical phenomena using important science practices, such as explaining relationships, applying and justifying the use of mathematical routines, designing experiments, analyzing data, and making connections across multiple topics within the course.

**Prerequisites: successful completion of one year of algebra and one year of physics*

9th GRADE ACADEMY*

Grade 9 Only | PERIOD 1, PERIOD 2 and PERIOD 3, plus evening commitments

**Due to additional programming and cohort activities, students enrolling in the 9GA program will have a \$650 fee added to their tuition bill*

Want to make sure you are on track to build the skills you need to succeed for the rigors and expectations of high school? 9th Grade Academy (9GA), offered exclusively to rising 9th graders attending Andover Summer, is a program designed intentionally to prepare a small cohort of students for the rigors and expectations of high school, while giving them the opportunity to participate in a close-knit, living-learning community.

All students enrolled in 9GA will...

- Enroll in *High School Prep English* and *High School Prep Math* as their two core courses
- Enroll in one section of the *Essential Study Skills* course to support the development of time-management, working memory, and long-range planning abilities.
- Live together and share a core group of house counselors and advisors during their summer experience.
- Attend 9GA evening classes and supervised study halls together as a group.
- Take part in specially planned 9GA cohort activities, while integrating into Upper School weekend trips and on-campus offerings.

Understanding the pivotal nature of the transition from middle to high school, the 9GA program ensures that students will leave Andover Summer confident and well-prepared to enter the next phase of their educational journey.

COURSES

Students who select the 9GA option will be automatically enrolled in the following courses:

High School Prep English

This course is designed to provide middle school graduates with a pathway to academic success in their high school English classes, emphasizing academic literacy skills such as close reading, annotation, analytical writing, and presentation. Texts commonly read in the 9th grade curriculum will be utilized to give students an opportunity to get ahead, digging deeply into the structure, organization, word choice, audience, and purpose so that they are prepared to excel when they encounter these texts later in the year.

High School Prep Math*

To be successful in high school math classes, students must have a solid foundation of conceptual understanding, fact fluency, and skill application. Based on the results of the Andover Summer math baseline assessment, students opting into the 9th Grade Academy program will be sectioned into either an Algebra or Geometry focused course. Reviewing the fundamentals of Algebra and/or exposing students to core concepts in Geometry, the High School Prep math course emphasizes problem-solving and mathematical reasoning. Students will be tasked with regularly monitoring their own learning and collaborating with peers to ensure each student leaves the summer course ready to launch in their particular 9th grade math placements.

**Please note that—due to the High School Prep Math course focus on algebra and/or geometry—9th Grade Academy is not appropriate for students who have surpassed the geometry math level.*

Essential Study Skills

This course is designed to teach students the skills to thrive, both academically and personally, in challenging school environments. Invited to nurture the broader dispositions that lead to academic success, students will emerge from the course with a toolkit of strategies they can use throughout their academic careers and beyond for finding and maintaining curiosity and motivation, cultivating optimism and resilience, developing essential academic skills, and applying learning strategies for improved time management and effective study.

Afternoon Activity Offerings

Grades 9-12

- Basketball (Beginner/Intermediate)
- Basketball (Intermediate/Advanced)
- Cardio Kickboxing
- Dance - modern (Beginner/Intermediate)
- Dance - modern (Intermediate/Advanced)
- Dance - Latin
- Fitness
- Gospel Choir
- Hiking
- Outdoor Games
- Power Walking and Running
- Soccer (Beginner/Intermediate)
- Soccer (Intermediate/Advanced)
- Swimming (Intermediate)
- Swimming (Advanced)
- Spinning
- Squash
- Tennis (Beginner/Intermediate)
- Tennis (Intermediate/Advanced)
- Volleyball (Beginner/Intermediate)
- Volleyball (Intermediate/Advanced)
- Yoga/Pilates