APPLYING TO CHOATE SUMMER PROGRAMS

Applications are accepted on a rolling basis at www.choate.edu/summer/apply

A completed application must include:

- Application
- Personal Statement
- Teacher Recommendation
- School Official Recommendation
- Current school transcript, which includes current academic year courses and grades
- A $100 non-refundable application fee
- Optional supplemental recommendation

DEPOSIT

For Summer Programs: Within two weeks of acceptance, students who wish to secure a spot must pay the non-refundable $1,500 deposit and have parents sign the enrollment contract. The final balance due must be paid no later than May 1. Summer Program fees include tuition, books, field trips, recreational activities, health and safety fee, laundry facilities meals, and housing (as applicable for boarding students).

Students accepted after May 1 must submit their payment in full including the non-refundable deposit.

FINANCIAL AID

Choate Rosemary Hall seeks the best qualified students from a variety of backgrounds and offers need-based financial aid to students who could not otherwise attend. Because of limited funds, Financial Aid is primarily available only for on-campus programs and to U.S. residents filing IRS income tax returns. Financial Aid can help cover the on-campus program fee (which includes tuition, books, field trips, recreational activities, meals, and housing for boarding students), but does not cover travel expenses, health insurance, or test prep courses. Please note that priority in awarding of aid is given to qualified first-time applicants, and that receiving aid for one summer does not guarantee additional funding for subsequent summers. Financial aid applicants should supply all supporting IRS documents including a copy of the 1040 form and any other income tax forms by the deadline indicated on www.choate.edu/summer. Materials that arrive after the deadline will be considered on a rolling basis for any remaining funds.

INTERNATIONAL APPLICANTS

Please note that a TOEFL, TOEFL Junior Test, or Duolingo is strongly recommended for the English Language Institute and required for all other programs.

DAY STUDENTS

Summer Programs welcomes day students who live close enough to commute to campus to take up to 3 courses or any of our immersive programs and workshops. Day students may participate in all aspects of the academic program they enroll in — including evening commitments and field trips — and are encouraged to participate in sports and recreational activities.

Course listing and descriptions are accurate as of January 26, 2023. For the most current course information, please visit www.choate.edu/summer.
high school offerings:
ACADEMIC ENRICHMENT

FIVE-WEEK COURSES

ARTS

Acting
This course explores the choices an actor makes in preparing a role and the skills helpful in presenting a variety of characters to audiences. Theater games, improvisations, monologues, and scenes are the core of individual and class exercises. Fulfills the diploma requirement in the arts.

Oil Painting
This course introduces students to the foundational techniques of oil painting. Students explore the key elements of observational painting through still life, portraiture, and landscape. Students learn how to see and mix color, modulate values, and develop form. Assignments are based on traditional and contemporary painting techniques and are designed to develop technical skill while fostering each student’s concepts of creative expression. The course culminates in an art show of students’ works at the Paul Mellon Arts Center Gallery. Fulfills the diploma requirement in the arts.

Digital Filmmaking
In this hands-on course, students plan, script, and storyboard their ideas in pre-production and learn how to use a digital video camera to collect images that communicate a story to an audience. Camera techniques and controls, balanced with good composition, are combined with sound capture and reproduction. During post-production editing, rough video footage is captured and then edited using Adobe Premiere Pro. Fulfills the diploma requirement in the arts.

Drawing
This course introduces students to the basic elements of drawing from direct observation — line, value, texture, perspective, composition, and space — and promotes the investigation of drafting materials through the practice of various drawing techniques. Students become comfortable using foundational black and white media including pencil and charcoal. These basic drawing elements, materials, and techniques work in dynamic combination with each student’s emerging concepts of self-expression. The course culminates with a show of student work at the Paul Mellon Arts Center Gallery. Fulfills the diploma requirement in the arts.

ENGLISH

Advanced Essay Writing
By definition, an essay is an attempt or effort. Designed for upper-level students, this course centers on the notion of the essay as an experiment and challenges students to hone their style and craft. To this end, students compose three pieces — analytical, expository, and personal essays — and take each through the writing process, devoting ample time for peer review and revision. Students consult models based on their readings from the anthology, 50 Essays. By the end of the course, students have a polished essay to use in the college application process. Note: Open to students who will have completed the U.S. equivalent of grades 9, 10, or 11 by the start of Summer Programs.

Intermediate Writing Skills
This popular course provides preparation for many higher-level English classes and emphasizes the understanding of a writer’s purpose and tone. Students receive instruction in writing clear, coherent, and balanced sentences and constructing unified paragraphs. They also review basic grammar and usage, work on vocabulary development, and learn academic conventions such as citation methods and how to avoid plagiarism. Readings include short stories, essays, news articles, and poems.

Introduction to Literature
This course introduces students to the critical reading and discussion of short stories, novels, poems, and plays. This course exposes students to a variety of genres, perspectives, and voices, and familiarizes them with some of the foundational texts they will likely encounter during the academic year. Students develop their writing skills and their ability to speak about literature by composing paragraphs and essays on various topics and actively engaging in classroom discussions.
Literary Works: Short Story, Short Novel 

This course focuses on the development of analytical reading and writing skills through the study of short literary works from a variety of genres and global perspectives. Through the close analysis of select texts, students examine how writers from different cultures explore similar themes, conflicts, and characters.

Public Speaking & Debate

Building a speaker's confidence is the main goal of this course. Students are introduced to various genres of speeches, methods of delivery, and effective qualities in a speaker. They have ample practice in both prepared and extemporaneous speaking, as well as instruction in debate. Students learn to be objective and analytical, to research and organize arguments, to overcome shyness and handle criticism, to reach an audience, and to prepare both on their own and as part of a team. Beginning with simple extemporaneous debates, (e.g. "winter is better than summer"), students work up to prepared group debates on substantive and nuanced issues of public policy, morality, history, and science.

Reading & Study Skills

This course emphasizes active reading and study skills to help achieve success across disciplines. Students learn strategies for note-taking, annotating and summarizing texts, mapping concepts, and varying their reading rate. Students practice "reading for the conversation" and learn strategies to determine the primary audience and significance of a text. By the end of the course, students are prepared to navigate and interpret challenging texts with confidence. Students also prepare mini-essay writing assignments to practice their new reading strategies and study skills.

The Bible as Literature

This course introduces students to one of the most influential — and most misunderstood — texts in the Western world: The Bible. The purpose of this course is not religious education; rather, this course examines the Bible as a collection of literary and historical documents that have left in their wake a vast cultural tradition. In this course, students read excerpts from the "Old Testament" (or Hebrew Bible) and the New Testament that features the greatest literary or historical merit. The class also considers whether the text works as a whole, unified, and coherent narrative. Finally, students spend some time exploring the literary tradition to which the Bible gave birth.

HISTORY, PHILOSOPHY, RELIGION, & SOCIAL SCIENCES

Please note: Students with a special interest in politics should consider the John F. Kennedy '35 Institute in Government. See description on p. 9.

Contemporary Issues

This course introduces students to major contemporary issues facing the U.S. and the world, helping students to develop fundamental research, writing, and public speaking skills. The course typically focuses on three major issues, utilizing a range of materials and providing historical context and a variety of perspectives on each issue. Sample topics include: nuclear proliferation, the Israel-Palestine conflict, modern Cuba, the Syrian refugee crisis, and climate change. This course pays particular attention to the development of critical writing, reading, note-taking, and research skills. Note: Open to students who will have completed the U.S. equivalent of grades 8 or 9 by the start of Summer Programs. Fulfills diploma requirement in contemporary global studies.

Economic Principles

This course presents a carefully-paced study of important economic concepts. How much money should be in circulation? Should the government tell business owners and consumers how to behave? Why do we have inflation? How do presidents determine economic policy? The concepts of supply and demand, opportunity cost, scarcity, national debt, and international trade are discussed to gain a greater understanding of the U.S. economy and its links to the global economy.

FBI: Finance, Banking, & Investment

Successful people don't build their wealth or a business by accident or overnight — they leverage key financial concepts to strengthen and expand their investing/business IQ. This course clarifies why understanding financial literacy is critical for budgeting, investing, starting a business, money management, and financial well-being. This activity and project-based class engages students in inhabiting an entrepreneurial mindset, creating a business plan, and developing a proposal for a personal finance case study.

From Megaphone to iPhone: American Social History in the 20th Century

What were the major events and trends that helped shape American society throughout the 20th century? How have Hollywood and television highlighted (and sometimes even helped create) social values? How have technological innovations...
affected life in America? This course focuses almost exclusively on 20th century primary sources — such as letters, film clips, TV clips, advertisements [both print and TV], music, and radio shows. Students look at issues such as: changing concepts of race and gender, advertising as a major social force, the impact of immigration, and the role of popular music as it examines and chronicles American society from the dawn of the 20th century to 1999.

**Introduction to Psychology**
Focusing on recent developments in psychology and self-understanding, this course covers several theories of personality, neuroscience, and human behavior. A developmental approach to various psychological theories [e.g. those of Freud, Horney, Skinner, Erikson, and Rogers] creates a framework for the study of identity and self-image, family and peer relationships, and conformity and prejudice. *Note: Open to students who will have completed the U.S. equivalent of grades 9, 10, or 11 by the start of Summer Programs. Serves as prerequisite for Choate’s upper-level psychology courses.*

**Moral Reasoning**
This introductory ethics course examines the process of moral reasoning. A range of classical and contemporary ethical theories serves as a basis for the discussion of personal and social issues. Topics such as capital punishment, stem cell research, and environmental ethics are presented in a way that helps students understand and appreciate various points of view, as well as formulate and express their own value systems. *Note: Open to students who will have completed the U.S. equivalent of grades 10 or 11 by the start of Summer Programs.*

**Wall Street**
Though only a mile long, Wall Street may be the most celebrated street in the world. This course emphasizes basic microeconomics, an understanding of the current stock market, a history of the stock market in the 20th and 21st centuries, and an overall investigation of the financial world and the decision-making processes of corporations. Students develop and track their own portfolio in this course while gaining an understanding of the stock market and financial terminology.

**Women in America: Introduction to Women’s Studies**
This course flips the script on traditional social studies classes by placing women at the center. Through the study of history, literature, and art, this course gives students the opportunity to explore the diverse experiences of American women throughout the 20th and 21st centuries. With a focus on women of color, LGBTQ+, immigrant communities, and themes of resistance and oppression, this course seeks to leave students with a heightened understanding of key feminist issues and themselves. *Note: Women’s Studies is open to all students and is not a course specifically for female-identifying individuals. It is a field that emphasizes consciousness, equality, and justice for all.*

**World Issues**
This course exposes students to at least five critical world issues presently confronting the global community, examining them from multiple perspectives and investigating how each issue impacts the peoples of different regions, nations, and socio-economic backgrounds. Potential topics include climate change, international human rights, cyber warfare and cybersecurity, pandemic threats, and world hunger. A variety of media sources [newspapers, magazines, social media posts, video] serve as the source material for this in-depth study of the current state of affairs around the world. Careful reading and research skills are emphasized, and students write weekly essays on important topics covered in the course. *Note: Open to students who will have completed the U.S. equivalent of grades 9, 10, or 11 by the start of Summer Programs.*

**World Religions**
This course exposes students to the beliefs, practices, ethics, and histories of five major world religions: Judaism, Christianity, Islam, Hinduism, and Buddhism. Students study each of the religions in order to gain an understanding of its meaning to individual believers and its impact on human history. *Note: Open to students who will have completed the U.S. equivalent of grades 8 or 9 by the start of Summer Programs.*

**LANGUAGES**

**Introduction to Arabic**
This course introduces students to Arabic language and culture. During the five-week intensive immersion program, students learn the Arabic alphabet and sounds, build vocabulary, acquire basic grammar and sentence structures, and read and comprehend short authentic texts in Modern
Standard Arabic. Students also gain a better understanding and appreciation of Arabic culture through music, poetry, movies, and culinary art. This multimedia course gives students a fun, hands-on learning experience and prepares them for the possibility of studying abroad.

**Introduction to French Cinema**
From the Lumière brothers’ invention of the cinématographe in 1895 to the New Wave movement and beyond, the French continue to leave an indelible mark on the cinematic medium. This bridge course is designed to expose students with a strong command of French language to the rich history of French cinema. While focusing on film, students discuss the social and historical contexts of the works studied. Note: This course is primarily taught in French.

**Introduction to Italian**
This course introduces students to Italian language and culture. During the five-week intensive course, students learn Italian pronunciation, build vocabulary, acquire basic grammar and sentence structures, and read and comprehend short authentic texts in Italian. Students also gain a better understanding and appreciation of Italian culture through music, poetry, movies, and culinary art. This multimedia course gives students a fun, hands-on learning experience and prepares them for the possibility of studying abroad.

**Introduction to Latin**
This course is designed for students with no prior Latin background who wish to gain an advantage in their future language studies. Latin is the fundamental root of all Romance languages (French, Spanish, Italian) as well as English. This course explores the structure of language, with students mastering parts of speech and basic syntax (the formation of phrases, clauses, and sentences) using Latin vocabulary. Students read short stories in Latin and focus on sentence structure, original Latin quotes, and etymology.

**Spanish World Literature**
With over 543 million Spanish speakers worldwide, the Spanish literary canon is as vast and diverse as the populations that speak it. This bridge course is designed to expose students with a strong command of Spanish language to contemporary literatures from the Spanish-speaking world. While focusing on literature, students discuss the social and historical contexts of the pieces studied. Note: This course is primarily taught in Spanish.

**MATHEMATICS, COMPUTER SCIENCE, AND ROBOTICS**

**Competition Robotics**
Competition Robotics is a project-based course where students get to experience what the Advanced Robotics Concentration (ARC) is like at Choate by working on a FIRST Robotics Competition (FRC) robot. Throughout the course, students complete a major upgrade to an existing FRC robot. Through this process, students learn the rudiments of Computer Aided Design (CAD), Computer Aided Manufacturing (CAM), how to operate CNC equipment, mechanical assembly skills as well as electrical wiring skills. No experience is required to participate in this course — just an interest in learning more about engineering and robotics! Serves as supplementary prerequisite in applying to the Advanced Robotics Signature Program. Note: This course may fulfill a Choate Rosemary Hall diploma or prerequisite requirement. Matriculating and current Choate students who wish to fulfill a diploma credit must notify the Registrar, Catherine Velez (cvelez@choate.edu), as part of the application and enrollment process. Prerequisites must be approved by the appropriate department head. Final eligibility for credit is based upon the student’s successful completion of the course.
Introduction to Computer Programming
This course provides students with a solid foundation in programming. Concepts such as program design and control, looping, Boolean logic, variables, arrays, and basic object-oriented programming are covered. By the end of the course, students have a portfolio of artistic projects including a generative art program and a game. This course does not require a background in formal computer programming, but a laptop is required. Prerequisite: Algebra I required.

Introduction to Game Theory
Game Theory is the mathematical study of competition, collaboration, and conflict. In this applied-mathematics course, students explore classic game theory games including Prisoner’s Dilemma, Chicken, Tragedy of the Commons, and Stag Hunt. Topics covered include payoff matrices, the Nash Equilibrium, zero-sum games, and various types of strategies. Armed with a newfound understanding of strategy and decision-making, students challenge each other to popular games such as poker, Settlers of Catan, Battleship, Stratego, and Connect Four, as well as mathematical games like Nim and Hex. Prerequisite: Algebra II or instructor permission.

Introduction to Geometry
This course provides an introduction to the concepts covered in a Geometry class. Topics include work with triangle identities, angle relationships, properties of parallel lines, polygon angles, the Pythagorean Theorem, and tessellations. Students also encounter the idea of a mathematical proof and work with various computer-based geometry tools to enhance their understanding of the concepts covered. Note: This course is not intended to replace a full year study of Geometry.

Introduction to Precalculus
This course introduces the concepts covered in a typical high school precalculus class, specifically trigonometry. Students are lead through the fundamentals of radian measurements and the unit circle before developing their understanding of the six trigonometric functions and their inverses. Students work through methods of solving trigonometric equations, study the domain and range of trig functions, and look to understand in depth ideas like the Law of Sines and Law of Cosines. Time permitting, students examine applications of trigonometry to the areas of physics, architecture, and navigation. Prerequisite: Algebra II or the equivalent. Note: This course is not intended to replace a full year study of Precalculus.

Introduction to Robotics
This course introduces students to the fundamentals of robotics using the VEX platform. Students learn to design and build robots, program autonomous behaviors, and use sensors to improve a robot’s ability to interact with its environment. Robots compete in challenges, including racing and navigating over and around a variety of obstacles. This course also serves as an introduction to some aspects of computer programming, including program design and control, looping, and Boolean logic. Prior programming experience is not necessary. Serves as supplementary prerequisite in applying to the Advanced Robotics Signature Program. Note: Applying to the ARC program does not guarantee admission.

Introduction to Web Design
This course introduces students to the basics of modern web design. With the skills they acquire, students can create beautiful art or personal portfolios, eye-catching travel blogs, or web apps that are designed to look great and function well on tablets and mobile devices. Topics include HTML (Hyper Text Markup Language), CSS (Cascading Style Sheets), and JavaScript, as well as best practices, mobile design, interactive elements, frameworks, and web libraries. In addition to regular small assignments that reinforce fundamentals, students work throughout the course on a personal project of their choosing which they complete as a final project. Note: iPads are provided to assist in the process of web design.

SCIENCE

Environmental Science
Environmental Science combines elements of physics, chemistry, and biology to develop an understanding of the interactions of the physical environment and the organisms that live in it, including humans. Understanding these interactions is important for anyone with an interest in science or public policy. This course introduces central concepts in environmental science and prepares students for further study in the field. Topics include soils and substrates, nutrient cycling, land use planning, water and hydrology, the atmosphere, climate, and energy resources.

Global Scientific Issues
This non-laboratory course investigates various scientific problems confronting the human species on our fragile planet and also examines ideas for combating these problems. What sources of
energy will best serve humankind in the future, while doing the least harm? How can we best employ water for personal use and irrigation without leading to health problems and soil degradation? What are the causes and effects of global warming, and how can Earth’s temperatures be stabilized? What measures have proven effective, and what innovations may be employed in the future, in controlling AIDS, malaria, and pandemics? How will the growing populations of the world obtain adequate nutrition and shelter? These questions call upon students to consider various viewpoints as they seek ways to achieve sustainability for the human species. The course includes oral presentations and debates as well as writing and assessments. Fulfills diploma requirement in contemporary global studies.

Introduction to Biology
Designed for students planning to study biology in the fall, this course is an introductory overview and explores fundamental themes in biology ranging from cell structure and function to the evolutionary history of biodiversity. In addition, science literacy skills such as basic data analysis, reading scientific and popular science literature, and writing short science articles are practiced.

Introduction to Chemistry
This course stresses the conceptual understanding and problem-solving skills necessary for successful work in chemistry, emphasizing how macroscopic observations lead to the understanding of microscopic phenomena. The use of video, virtual laboratory experiments, and data analysis helps increase student understanding of chemistry concepts. Topics include understanding the periodic table, the structure of the atom, chemical reactions, chemical equations, the mole, and stoichiometry. Note: A scientific graphing calculator is required.

Introduction to Physics
Designed for students planning to begin the study of physics in the fall, this course stresses laboratory work, report writing, and problem-solving skills necessary for success in physics. Topics include mechanics, vectors, optics, motion, force, and waves. Students practice solving problems and gaining familiarity with several fundamental principles. They also experience the excitement of laboratory work and drawing conclusions from experiments. Prerequisite: Algebra I required.

Topics in Human Anatomy & Physiology
Students study the systems of the human body and their interactions through dissections, class discussions, and readings. Laboratory experiments include dissection of mammalian organs such as the heart and eye, and recording of muscular, circulatory, and respiratory responses to rest and exercise. Prerequisite: A course in biology is required.

HIGH SCHOOL SIGNATURE PROGRAMS
In addition to Academic Enrichment courses, we offer unique and distinctive Signature Programs that allow High School students the opportunity to advance in a particular area of study. Signature Programs courses may not be combined with Academic Enrichment courses. However, students may combine 2, two-week Signature Programs to create an individualized four-week program.

FIVE-WEEK PROGRAMS

ENGLISH LANGUAGE INSTITUTE (ELI)
The English Language Institute (ELI) attracts talented students from around the world who have studied English for at least three years and who seek to enhance their English language skills in a supportive and rigorous five-week program. Through the use of a wide variety of language learning strategies, ELI courses in reading and writing drive substantive changes in each student’s ability to read, write, speak, and understand spoken English. Course placement is determined by a diagnostic test administered on the first day of classes. Several trips and activities within New England are included in the program and enable students both to practice their language skills and to experience American culture in a variety of settings. Students take a third course of their choosing from ELI eligible classes.

ELI Expository and Creative Writing
This course reviews the structures of English and expands vocabulary in an engaging style, appealing to students with a variety of interests. Students practice their writing ability by crafting personal, persuasive, expository, and dramatic essays. Language skills are further developed through discussion, grammar exercises, assigned compositions, free-writing exercises, reading, and text analysis. Texts include

This course may fulfill a Choate Rosemary Hall diploma or prerequisite requirement. Matriculating and current Choate students who wish to fulfill a diploma credit must notify the Registrar, Catherine Velez, as part of the application and enrollment process. Prerequisites must be approved by the appropriate department head. Final eligibility for credit is based upon the student’s successful completion of the course.
innovative advertising material, work by prominent authors, and theatrical pieces. In addition, students have opportunities to review and improve their work through writing conferences with the instructor.

**ELI Reading Skills**
This course strengthens strategies for reading in English through the study of a cultural novel, poetry, news articles, and historical documents. Analysis of literary devices, character development, and themes encourages students to become reflective learners and active participants in class and the world around them.

**THE JOHN F. KENNEDY ’35 INSTITUTE IN GOVERNMENT**
Established to honor the memory of President Kennedy — a member of Choate’s Class of 1935 — The John F. Kennedy ’35 Institute in Government is designed to stimulate curiosity about public policy and the desire to serve the public interest. As Kennedy Institute participants, students take three KI classes on campus over the course of four and half weeks and experience government in action during a multi-day trip to Washington, D.C. where they watch House and Senate debates, observe committee hearings on Capitol Hill, and spend time with officials in The White House and the Supreme Court. In D.C., students build on what they have learned in the classroom and get a real insider’s feel for politics in meetings with representatives of interest groups, national political parties, and the media. Prerequisite: While knowledge of politics is not necessary for the program, the desire and willingness to learn about politics, economics, U.S. history, and international affairs both in class and in D.C. is essential.

**American Government & Politics**
In this foundational course, the Constitution and federalism are viewed through the lens of contemporary politics. Students learn how the offices of the President, Congress, and the Supreme Court operate in theory and reality. This course focuses on topics of current interest and major political candidates and their respective party platforms.

**Foundations of Political Thought**
This course explores the underpinnings of Western political philosophy and exposes students to the basic tenets of modern economics and the ways in which public policy shapes and is shaped by economic conditions. The course explores the meanings of conservatism and liberalism in contemporary politics and provides comparisons with other political and economic systems where appropriate. Fulfills the PS430HO political ideologies requirement for the JFK Signature Program.

**Topics in Public Policy**
The New York Times and other national and international newspapers serve as a lens through which students analyze how different groups influence American public policy.

**IMMERSION GEOMETRY**
This intensive course covers the standard year-long geometry curriculum. At a brisk pace, students explore the fundamentals of Euclidean geometry as well as various applications of these concepts in the real world. As time permits, algebra is incorporated to help students review and strengthen their problem-solving skills. After gaining experience making conjectures and testing hypotheses, students progress to writing formal deductive proofs, using paragraphs as well as the two-column format. In order to complete this year-long course in the summer, students attend class for the full academic day and may not enroll in additional in-person courses. This course is appropriate for highly motivated students who have completed Algebra I. A graphing calculator is required. Fulfills diploma requirement in geometry. Note: Returning and matriculating students entering the fourth form who have not yet completed a geometry course may choose this course for that purpose. Students entering the third form are generally not approved to take Immersion Geometry.

**4-WEEK PROGRAMS**

**THEATER ARTS INSTITUTE**
The Theater Arts Institute offers students a total theater immersion experience. Students learn the process of theater through daily classes in acting, singing, dance, set and costume design, and playwriting. In addition, students attend nightly laboratory sessions to work together on performance and design projects and attend master classes in movement, voice and diction, improvisation, lighting design, children’s theater, and stage management. All aspects of the dramatic experience are highlighted, with opportunities to grow in many areas. Throughout the summer, students complete scene work in classical and modern drama, rehearse and perform numbers from a variety of musicals, and design set and costume pieces for different periods. Weekly field trips to professional theater and artistic performances throughout New York and New England inform our work and inspire our students. This
program is designed for young people who are serious about expanding their knowledge and willing to take risks in all areas of theater.

Acting
This course explores the choices an actor makes in preparing a role and the skills helpful in presenting a variety of characters to audiences. Theater games, improvisations, monologues, and scenes are the core of individual and class exercises.

Dance
In this course, students learn the fundamentals of dance, choreography, and techniques to project one’s voice while in motion, culminating in the performance of at least two group routines. Just like in any professional theater setting, students must memorize choreography at a rapid pace, make quick changes, and dance in unison.

Design
In this course, students are guided through the fundamentals of set design. Utilizing techniques such as faux batik, students design and execute several original pieces to be used on the set of the final Theater Arts Institute performance.

Production Studies
Production Studies encompasses all that goes into making a staged production. First students write their own script incorporating the areas of technical theater: scenery, lighting, properties, costuming, and sound. Once they have completed the script, they perform it. Students participate in all aspects of a theater production, including scene changes, costume changes if needed, props, lights, and sound.

Text & Script
In this course, students focus on reading and analyzing scripts of the live performances they attend. Students learn the language needed to determine what meanings the writer is trying to convey and how they relate to the world today and themselves. Students work as a whole and in small groups exploring all the techniques involved in deciphering a script. This work helps facilitate the writing of their own play in the Production Studies class.

Voice
In this course, students review the history of musical theater repertoire and participate in musical theater improv exercises while exploring the mechanics of singing through daily vocal exercises. In addition, students learn about musical themes in songs and ways to “tell the story” through singing, choreography, music, musical dynamics, props, and costumes.

2-WEEK PROGRAMS
Combine two-week offerings from Session I and Session II to create an individualized four-week program.

ENGLISH

Academic Writing Workshop
Sessions I & II | All Class Day
This two-week workshop explores various forms of academic, expository, and research-based writing with a focus on drafting, revising, and final polish. Students receive instruction in all stages of the planning and writing process: from seed idea, research, and analysis to making decisions about genre, structure, and voice. Students produce multiple pieces of work and write about topics that interest them, with an emphasis on understanding a writer’s purpose, tone, and audience. Students engage in analytical, expository, persuasive, and argumentative writing and fine-tune skills which will help them in any classroom setting: writing clear, balanced sentences, constructing unified paragraphs, and incorporating and citing evidence. Instruction in basic grammar and usage, specific academic conventions, and vocabulary is also included. Readings, which complement the varied writing assignments, may include journalism, short stories, essays, and poems.

Creative Writing Workshop
Sessions I & II | All Class Day
This two-week workshop explores multiple forms of creative writing and allows young writers to find their inner poet, memoirist, playwright, or storyteller. With a focus on drafting, revising, and final polish, students explore various genres through fun and creative exercises, inspiring mentor texts, and in-class activities aimed at producing and sharing work frequently. Along the way, teachers provide guidance in making decisions about genre, structure, language, and voice. Workshop sessions focus on the importance of word choice, sentence type, detail and description, and voice. Workshop sessions focus on the importance of word choice, sentence type, detail and description, plot, conflict, character, and figurative language. Students receive one-on-one guidance, work closely alongside their peers, and showcase their writing in a final reading and portfolio of their best work. Individual freedom, artistic vision, and purposeful revision are some of the pillars of this course, as students find their voice and learn how best to put pen to page to express their ideas. Readings, which complement the varied writing assignments, may include journalism, short stories, essays,
HISTORY, PHILOSOPHY, RELIGION, & SOCIAL SCIENCES

Service as Social Justice
Sessions I & II | All Class Day
What can we learn about our societies in the face of the many socio-economic and racial injustices that have been brought more sharply into focus as a result of the Coronavirus pandemic, the Black Lives Matter movement, and the global refugee and migrant crisis? How can we live our lives centered in anti-racism to bring about equity, inclusion, understanding, and healing for a more human-centered approach to service with others as acts of justice? Teaching through examples of youth-lead movements and recognizing the importance of service as part of developing one’s awareness of others and empathy, this two-week program offers an academically reflective service experience with examples of real world application. Through excursions to nearby organizations, students learn about the interconnectedness of socioeconomic inequities and the subsequent impact on communities and individuals. Fulfills community service credit hours for the academic year.

MATH, COMPUTER SCIENCE, & ROBOTICS

Concepts in Algebra II
Sessions I & II | All Class Day
This two-week workshop introduces students to some of the core topics and functions covered in a typical Algebra II course. Families of functions (linear, absolute value, quadratic, cubic, reciprocal, root, exponential, and logarithmic) are covered with a focus on domain, range, and transformations. The course also explores composition of functions as well as inverse functions, and teaches solving equations and finding roots as a means to help analyze functions and graphs. Time permitting, the course includes other topics such as systems of equations or inequalities, matrices, regression analysis, and conic sections. Prerequisite: Algebra I required.

SCIENCE

Concepts in Chemistry
Sessions I & II | All Class Day
This two-week workshop exposes students to some of the more challenging parts of the traditional chemistry curriculum so they have a greater chance for success. Classroom demonstrations as well as lab exercises provide a framework for making connections between phenomena and theory. Proper problem-solving techniques are emphasized in segments dealing with quantitative analysis. Some of the topics covered include chemical equation writing and predicting products, mole conversions, and stoichiometry. Prerequisite: Algebra I required. Note: A scientific graphing calculator is required.

COLLEGE BOUND

The following online test prep course is open to students who will have completed the U.S. equivalent of grades 8, 9, 10, 11, or 12. Test prep courses meet twice a week for 5 weeks in the early evening and have an additional fee.

SAT Test Preparation
The SAT course, offered by Pillars of Learning, provides a unique data-driven approach which has produced the most efficient score-improvement model to date. Unlike most test preparation which is built on pre-packaged strategies doled out to any student taking the course, our courses are adaptive and tailored around the unique data from each particular class. The results speak for themselves: over the past four years, our students averaged 220 points improvement, with 130 points improvement in math and 90 points improvement in reading/writing. The course itself consists of 10 classes of instructional lecture and group work along with two opportunities for practice tests taken asynchronously. While the first week of classes introduces critical information before the first practice test, the remaining classes are entirely customized around each class’s test data, identifying how students can better retain the material rather than drilling content. Parents and students receive all test results and tailored recommendations when the course concludes. Students receive all requisite test materials including practice tests and customized worksheets. Test prep classes average 60–90 minutes of homework per week.

* See SSAT Preparation on p. 18
middle school offerings:
ACADEMIC ENRICHMENT
FIVE-WEEK COURSES

ARTS

Digital Photography & Imaging
This course teaches emerging photographers the fundamentals of storytelling through photography and imaging. Students learn the principles of good composition and how to find the most effective ways to frame a shot. The subjects for projects range from the selfie and the portrait, to more abstract concepts such as light and patterns. While a dedicated digital camera may be preferred and can provide more options for control over the pictures, a camera phone is an acceptable tool for this class.

Language of Literature: Critical Reading & Critical Writing
The twin tasks of reading literature and writing critically about it are expectations of all students throughout their educational careers. Students in this course read, consider, discuss, and write about important works of literature. The course aims to impart tried and true methods for critical reading and successful techniques for effective critical essay writing.

Mythology: Foundations of Literature
Mythology serves as a reference point for countless works of art and literature and is a keystone of Western culture. In this course, students read and discuss major mythological cycles, explore the shared themes in world mythology, and begin to recognize mythological figures and their significance in contemporary culture.

Public Speaking & Debate
Oral presentation is an essential component of communication, and the ability to organize one’s thoughts and present them effectively are vital skills to navigate life within and beyond the classroom. In this course, students learn to express themselves with greater confidence in small and large groups, utilizing prepared debates and crafting extemporaneous speeches in informal and formal settings.

ENGLISH

Introduction to Academic Writing
This course introduces students to the art of academic writing. In this course, students focus on the mechanics of academic writing while expanding their skills in rhetoric and argumentation. Beyond writing, students learn how to brainstorm, organize, outline, and compose a five-paragraph essay. Students also learn to edit and revise their work, as well as to give and receive feedback through a variety of interactive partner and class work. This course prepares students for the kinds of writing that are necessary to excel in high school and beyond.

Reading & Study Skills
This course emphasizes active reading and study skills to help achieve success across disciplines. Students learn strategies for note-taking, annotating and summarizing texts, mapping concepts, and varying their reading rate. Students practice “reading for the conversation” and learn strategies to determine the primary audience and significance of a text. By the end of the course, students are prepared to navigate and interpret challenging texts with confidence. Students prepare mini-essay writing assignments to practice their new reading strategies and study skills.

HISTORY, PHILOSOPHY, RELIGION, & SOCIAL SCIENCES

Democracy in Action
First imagined in ancient Greek city-states, democracy has evolved over the centuries into one of the most important and polarizing political ideals in the history of civilization. This course explores the earliest seeds of democracy and their development into modern systems of government. Students examine the mechanics of representation in democracy and democratic approaches to political life with a special focus on ancient Athens, Rome, modern Britain, and the US. Students also practice essential skills in the study of history, including reading, researching, and writing.

Everyday Economics
Why do fruits and vegetables cost more in the winter? What market forces determine the price of gas at the pump? Economics is vital for educating students to live in our global economy. In this course, students
explore fundamental concepts of supply and demand, opportunity costs, and trade through real-world examples and demonstrations.

History: Completing the Narrative
In this course, students investigate historical narratives and examine how historians and journalists have presented different stories of past and current events, particularly those centered upon race, gender, and class. Students evaluate primary and secondary sources and build research skills to help inform their analyses of these events. As part of their studies, students read about current events and look for their antecedents in history. Students also analyze works by prominent Black writers that illuminate the time periods being studied, such as Frederick Douglass, Harriet Jacobs, and Richard Wright.

Model UN
This course introduces students to the world of international diplomacy. Beginning with a brief history of the United Nations, students explore the purpose and structure of the organization while learning how to write resolutions and conduct effective research for debating. Students develop a better understanding of the diverse perspectives of participating countries while conducting simulations on various topics of debate such as climate change, extreme poverty, gender and science, and pandemics.

LANGUAGES

Introduction to Arabic
This course introduces students to Arabic language and culture. During the five-week intensive immersion program, students learn the Arabic alphabet and sounds, build vocabulary, acquire basic grammar and sentence structures, and read and comprehend short authentic texts in Modern Standard Arabic. Students also gain a better understanding and appreciation of Arabic culture through music, poetry, movies, and culinary art. This multimedia course gives students a fun, hands-on learning experience and prepares them for the possibility of studying abroad.

Introduction to Italian
This course introduces students to Italian language and culture. During the five-week intensive course, students learn Italian pronunciation, build vocabulary, acquire basic grammar and sentence structures, and read and comprehend short authentic texts in Italian. Students also gain a better understanding and appreciation of Italian culture through music, poetry, movies, and culinary art. This multimedia course gives students a fun, hands-on learning experience and prepares them for the possibility of studying abroad.

Introduction to Latin
This course is designed for students with no prior Latin background who wish to gain an advantage in their future language studies. Latin is the fundamental root of all Romance languages (French, Spanish, Italian) as well as English. This course explores the structure of language, with students mastering parts of speech and basic syntax (the formation of phrases, clauses, and sentences) using Latin vocabulary. Students read short stories in Latin and focus on sentence structure, original Latin quotes, and etymology.

MATH, COMPUTER SCIENCE, & ROBOTICS

Games & Strategy
Through playing and discussing a variety of games, students explore the foundations of game theory, the mathematical study of competition and cooperation. Students play a mix of traditional games such as checkers, chess, Risk, and Monopoly, along with a number of math-focused games including Nim, Konane, and Hex. Students are taught throughout the course how to think strategically and ask important questions regarding different strategies: Which ones make winning most likely? How important is an initial move in this game? Why do certain strategies work in one instance and fail in another? If you can’t win, can you force a draw? The course also examines the historical context in which these mathematical concepts were developed and encourages students to see the wider world through a critical, mathematical, and strategic lens.

Introduction to Algebra I
This course is intended for students who are comfortable with pre-algebra topics but would like additional preparation before enrolling in Algebra I in the fall. Students are expected to have a basic understanding of signed numbers as well as the concept of a variable. Students review basic equation-solving techniques and explore additional topics, including systems of linear equations and inequalities, rates of change, and the graphing of linear equations. Additional topics may be included as time permits.

Note: This course is not intended to replace a full year study of Algebra I.
Introduction to Algebra II
This course provides an introduction to the concepts covered in an Algebra II class. Students are first introduced to the various families of functions and their properties, including linear, absolute value, quadratic, exponential, logarithmic, and rational functions. Emphasis is then placed on polynomial functions — specifically quadratics — and the various techniques for finding their roots. Students explore factoring techniques, the quadratic equation, and polynomial division. Time permitting, students may also examine exponential and logarithmic functions, conic sections, and systems of linear equations, as well as various applications. Prerequisite: Algebra I. Note: This course is not intended to replace a full year study of Algebra II.

Introduction to Computer Programming
This course introduces students to programming concepts such as variables, loops, events, logic, arrays, program design and control, and basic object-oriented programming. Students undertake this exploration of code in p5.js, a JavaScript framework used to teach computer programming fundamentals within a visual context. The course does not require a background in formal computer programming, but students should have had some prior computer experience. Note: A laptop is required.

Introduction to Geometry
This course provides an introduction to the concepts covered in a Geometry class. Topics include work with triangle identities, angle relationships, properties of parallel lines, polygon angles, the Pythagorean Theorem, and tessellations. Students also encounter the idea of a mathematical proof and work with various computer-based geometry tools to enhance their understanding of the concepts covered. Note: This course is not intended to replace a full year study of Geometry.

Introduction to Robotics
This course introduces students to the fundamentals of robotics using the VEX platform. Students learn to design and build robots, program autonomous behaviors, and use sensors to improve a robot's ability to interact with its environment. Robots will compete in challenges, including racing and navigating over and around a variety of obstacles. This course also serves as an introduction to some aspects of computer programming, including program design and control, looping, and Boolean logic. Prior programming experience is not necessary.

Pre-Algebra
This course is designed for students who have not yet studied any algebra and would like to gain experience with algebraic concepts prior to enrolling in an Algebra I course. Beginning with a brief review of arithmetic skills, students are introduced to early Algebra I topics, including signed numbers and variables and their use in problem solving. Students also learn basic equation-solving techniques, as well as additional algebra concepts as time permits. Note: This course is not intended to replace a full year study of Pre-Algebra.

Puzzles & Logic
Learning how to solve puzzles and win strategy games is not only fun, but it also strengthens critical thinking and reasoning skills. By exploring some of the classic riddles, problems, and strategy games of mathematics history, students develop oral and written communication skills as they are asked to defend their thinking and explain their solution strategies. Students also explore multiple ways to approach logic problems, with an emphasis on clear organization of work and given information.

SCIENCE

Introduction to Marine Biology
With marine life as a focus, students explore biological principles in order to better understand the ecosystems in our world’s oceans. This course draws on local resources such as Long Island Sound.

Phenomenal Physics
What makes a baseball curve? How do eyeglasses help you see? This hands-on course explores various properties of physics, such as force, motion, and energy, and applies them to hands-on laboratory experiences.

Science of the Brain: The Teen Brain
This interdisciplinary, multimedia course allows students to understand and explore the inner workings of the human brain. Students use research-based approaches to study brain systems and their function, such as memory and dreaming, neurological disorders, adolescent development and decision making, and the mind-gut connection. The second half of the course builds upon these methods and concepts as students delve deeper into the link between the subconscious and behavior, neuroplasticity, and the impact of certain experiences on the brain, such as trauma, mindfulness, language, music, and screen time. During the course, students conduct
and present their own research relating to a connected topic of their choice.

**MIDDLE SCHOOL SIGNATURE PROGRAMS**

In addition to Academic Enrichment courses, we offer unique and distinctive Signature Programs that allow Middle School students the opportunity to advance in a particular area of study. Signature Programs courses may not be combined with Academic Enrichment courses. However, students may combine 2, two-week Signature Programs to create an individualized four-week program.

**FIVE-WEEK PROGRAM**

**ENGLISH LANGUAGE INSTITUTE (ELI)**

The English Language Institute (ELI) attracts talented students from around the world who have studied English for at least two years and who seek to enhance their English language skills in a supportive and rigorous five-week program. Through the use of a wide variety of language learning strategies, ELI courses in reading and writing drive substantive changes in each student’s ability to read, write, speak, and understand spoken English. Course placement is determined by a diagnostic test administered on the first day of classes. Several trips and activities within New England are included in the program and enable students both to practice their language skills and to experience American culture in a variety of settings.

**ELI Expository and Creative Writing**

In this course, students improve their skills English writing skills through forms of expository writing such as descriptions, personal narratives, and compare-and-contrast essays. For creative writing, students write pieces such as poems and short stories. For each writing assignment, students learn the process of planning, writing a first draft, revising, completing a second draft, and peer review. They also write regularly in a dialogue journal and engage in class discussions to increase their fluency in the language.

**ELI Reading Skills**

Students improve their skill in reading English, initially by reading a variety of non-fiction works such as autobiography, biography, newspaper and magazine articles, as well as works on the Internet. Next, students read a variety of fiction genres such as poetry, excerpts, and a novel. Students volunteer in class discussions, read aloud, participate in small group activities, and write short critical and creative responses to the reading. They also practice a variety of organizational techniques using various graphic organizers and note-taking skills.

**FOUR-WEEK PROGRAM**

**THEATER ARTS INSTITUTE**

The Theater Arts Institute offers students a total theater immersion experience. Students learn the process of theater through daily classes in acting, singing, dance, set and costume design, and playwriting. In addition, students attend nightly laboratory sessions to work together on performance and design projects and attend master classes in movement, voice and diction, improvisation, lighting design, children’s theater, and stage management. All aspects of the dramatic experience are highlighted, with opportunities to grow in many areas. Throughout the summer, students complete scene work in classical and modern drama, rehearse and perform numbers from a variety of musicals, and design set and costume pieces for different periods. Weekly field trips to professional theater and artistic performances throughout New York and New England inform our work and inspire our students. This program is designed for young people who are serious about expanding their knowledge and willing to take risks in all areas of theater.

**Acting**

This course explores the choices an actor makes in preparing a role and the skills helpful in presenting a variety of characters to audiences. Theater games, improvisations, monologues, and scenes are the core of individual and class exercises.

**Dance**

In this course, students learn the fundamentals of dance, choreography, and techniques to project one’s voice while in motion, culminating in the performance of at least two group routines. Just like in any professional theater setting, students must memorize choreography at a rapid pace, make quick changes, and dance in unison.

**Design**

In this course, students are guided through the fundamentals of set
design. Utilizing techniques such as faux batik, students design and execute several original pieces to be used on the set of the final Theater Arts Institute performance.

Production Studies
Production Studies encompasses all that goes into making a staged production. First students write their own script incorporating the areas of technical theater: scenery, lighting, properties, costuming and sound. Once they have completed the script, they perform it. Students participate in all aspects of a theater production, including scene changes, costume changes if needed, props, lights, and sound.

Text & Script
In this course, students focus on reading and analyzing scripts of the live performances they attend. Students learn the language needed to determine what meanings the writer is trying to convey and how to relate to the world today and themselves. Students work as a whole and in small groups exploring all the techniques involved in deciphering a script. This work helps facilitate the writing of their own play in the Production Studies class.

Voice
In this course, students review the history of musical theater repertoire and participate in musical theater improv exercises while exploring the mechanics of singing through daily vocal exercises. In addition, students learn about musical themes in songs and ways to "tell the story" through singing, choreography, music, musical dynamics, props, and costumes.

TWO-WEEK PROGRAMS
Combine the two-week offerings from Session I and Session II to create an individualized four-week program.

ENGLISH

Writing Workshop
Sessions I & II | All Class Day
This two-week workshop focuses on the development of personal creativity, critical thinking, and independent analysis through the reading and writing of both fiction and nonfiction. Students try their hand at a variety of creative and academic genres, read and discuss model texts for inspiration, and form a community of supportive, working writers.

MATH, COMPUTER SCIENCE, & ROBOTICS

Introduction to Robotics Workshop
Sessions I & II | All Class Day
This robotics workshop is a two-week program that facilitates the development of STEM skills: engineering building and design, C programming, resource management, and electrical and programmable debugging. Students design, assemble, operate, and program a robot to complete complex tasks through both remote control and autonomous systems. The program utilizes VEX hardware and C++ programming language to complete several projects, including a robot balloon battle and building an autonomous ball collector. Students are put to the test and encouraged to release their creative energy by making their robot designs a reality.

Invention & Design Lab
Sessions I & II | All Class Day
This two-week workshop is a hands-on exploration of topics in designing and making. Students are introduced to design thinking, sketching, modeling, 3D printing, electronics, and basic computer programming with Arduino micro-controllers.

SCIENCE

A Biologist's World
Session I | All Class Day
This two-week workshop provides middle school students with a hands-on laboratory and field-based approach to the fundamental topics of biology, ranging from a study of cells and the molecules that make up cells to the study of organisms, populations, and ecosystems. Students learn how energy flows through ecosystems and how populations change over time due to evolution, reproduction, and genetics. Students set up and conduct experiments in the classroom and explore aquatic and terrestrial ecosystems on campus and on field trips. Choate’s USGBC LEED-Platinum certified and net-zero energy Kohler Environmental Center is home to the program during the class day. A Biologist’s World provides a solid background for future life science and environmental studies.

KEC Environmental Science Workshop
Session II | All Class Day
This two-week workshop educates and inspires middle school students who are interested in environmental science. Choate’s USGBC LEED-Platinum certified and net-zero energy Kohler Environmental Center (KEC) is
home to the program during the class day, giving students access to KEC classrooms and laboratory facilities. Study of the interrelationships between human activities and the environment concentrates on three areas: the generation and use of energy, climate change and biogeochemical cycles, and patterns of resource use. The course emphasizes the challenges of contemporary environmental issues and considers science-based solutions. Ecological principles as well as relevant concepts from biology, chemistry, and physics are integrated throughout the program. In addition to examining regional or global examples, students are guided to investigate topics within their home communities.

**PREP SCHOOL BOUND**

The following online test prep courses are open to students who will have completed the U.S. equivalent of grades 6, 7, 8, 9, 10, 11, or 12. Test prep courses meet twice a week for 5 weeks in the early evening and have an additional fee.

**SSAT Test Preparation**

The SSAT (upper level) course, offered by Pillars of Learning, provides a unique data-driven approach which has produced the most efficient score-improvement model to date. Unlike most test preparation which is built on pre-packaged strategies doled out to any student taking the course, our courses are adaptive and tailored around the unique data from each particular class. The results speak for themselves: over the past four years, our students have had a 32 percentile point increase on the quantitative section, 15 percentile point increase in reading, and 10 percentile point jump in vocabulary. The course consists of 10 classes of instructional lecture and group work, along with two opportunities for practice tests taken asynchronously. While the first week of classes introduces critical information before the first practice test, the remaining classes are entirely customized around each class’s test data, identifying how students can better retain the material, rather than drilling content. Parents and students receive all test results and tailored recommendations when the course concludes. Students receive all requisite test materials including practice tests and customized worksheets. Test prep classes average 60-90 minutes of homework per week. Morning section of SSAT available for students who are only participating in Test Prep (students who are not also enrolled in courses and programs on campus).