

The High School Curriculum

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Mission

Success Academy is redefining what's possible in public education. **Our dual mission is to:**

- Build exceptional, world-class public schools that prove children from all backgrounds can succeed in college and life, and
- Advocate to change public policies that prevent so many children from having access to opportunity.

School Design

At Success Academy, we constantly ask ourselves, **“Would our scholars choose to come to school even if they didn’t have to?”** We have set out to redesign a high school experience that will evoke a resounding “yes!” from our oldest scholars. We reject the mediocrity, boredom, and inequity that have become almost synonymous with American public high schools, and we reject the assumption that teenagers won’t and don’t have to love school. Every decision we make, every question we ask, is focused on what we believe kids deserve: What are they going to love? What is going to challenge them? What is going to serve them well in the short term and in the future?

We believe that kids are bored by ease and engaged by challenging, intriguing work, so we ask our scholars to engage critically with difficult conceptual problems; sophisticated texts; and the complex ideas, issues, and events that have shaped our world. Supported by a close-knit community of advisors, counselors, teachers, and peers, and drawing on the strong foundation they have built in K–8, our scholars thrive in this setting of joyful rigor and robust exploration, and emerge as strong, ethical young adults who know what they love and are ready to make their way in the world as thinkers, doers, and leaders.



High School Curriculum

At Success Academy, the high school experience is intellectually demanding and deeply engaging. Building on the knowledge, skills, and mind-sets developed in the K–8 program, the high school immerses scholars in a sophisticated collegiate experience in which they explore interests and passions, as they gain confidence, independence, and self-knowledge. An advanced liberal arts curriculum prioritizes student-led inquiry, advanced problem-solving, and cross-disciplinary perspectives. A wide range of electives and clubs — along with academic honors programs, internship opportunities, and robust summer experiences — cultivates scholars' curiosity, talent, and skill in navigating the world around them.

Scholars receive comprehensive college counseling and support, that guides them through the challenges of applying and gaining admission to selective colleges, and equips them with the content mastery and work habits they need to thrive there. Most importantly, our high school is warm and supportive, fostering and celebrating emotional maturity, kindness, independence, and leadership. Scholars enter young adulthood in an environment where they are known and loved and where they feel safe taking risks and tackling new challenges.

Academic Core

Our academic core offers four years of robust, inquiry-based study in English, History, Math, and Science. We consider these courses essential to a world-class high school education that will equip students to thrive in college and beyond. Each course emphasizes mastery of the fundamentals paired with high-interest contemporary applications. The academic core prepares students to become not only good thinkers, but also good people who are prepared to solve the most important questions of tomorrow.

Students who perform in the top 10% of Math and English courses are rostered for Honors courses. To account for the higher rigor of these classes, students' grades are weighted: a student's final cumulative grade in an Honors class is multiplied by 1.05 to determine the final transcript grade.

All students take several Advanced Placement (AP) courses. These are college-level courses that culminate in an external exam. Grades in AP courses are weighted: students will have their final grade in AP courses multiplied by 1.10.



Humanities

Our humanities curriculum exposes scholars to the great texts, ideas, and events that have shaped our modern world, and it prioritizes Platonic-style discourse; incisive analysis; and powerful, cogent writing. Through the comprehensive study of literature, history, economics, and government, scholars grow into accomplished thinkers, writers, researchers, and public speakers. The workload is collegiate both in volume and nature; many courses are taught at an AP level, preparing scholars for the academic demands they will encounter at selective colleges.

English

Our curriculum develops engaged and critical readers, writers, and thinkers. In Literature, scholars delve into a wide array of challenging texts, from both the Western canon and contemporary culture, to examine themselves and the world. In Writing, scholars compose argumentative, narrative, and research papers. Scholars take four years of English. External exams include the New York State Regents exam in English Language Arts, AP English Language and Composition, and AP English Literature and Composition.



Survey of Great Books

STANDARD YEAR: 9TH GRADE
PREREQUISITE: 8TH GRADE ENGLISH

The Survey of Great Books has two goals: for scholars to read extensively and strengthen their skills in written compositions. Throughout the year, scholars read and study canonized and contemporary novels in addition to poetry and nonfiction, deeply analyzing the texts through personal annotations, classroom discussion, and formal and informal writing. In addition to reading comprehension skills, the course provides scholars with foundational skills for writing various types of compositions. The basic tools of analytical and research writing are introduced: crafting a thesis statement, making an outline, paraphrasing materials, and citing sources using MLA format. Teachers also emphasize standardized test preparation, vocabulary skills, and reference skills. The course culminates in the New York State Regents exam in English, which scholars are required to pass for graduation.

COURSE TEXTS

Semester 1

The Things They Carried by Tim O'Brien

Outliers by Malcolm Gladwell

Purple Hibiscus by Chimamanda Ngozi Adichie

A collection of poetry, including:

“*The Harlem Dancer*” by Claude McKay

“*Refuge*” by Tracy K. Smith

“*Animals Are Passing From Our Lives*” by Philip Levine

“*The Colonel*” by Carolyn Forché

“*The New Colossus*” by Emma Lazarus

Semester 2

Go Tell It on the Mountain by James Baldwin

Much Ado About Nothing by William Shakespeare

The Odyssey by Homer

Song of Solomon by Toni Morrison

Summer Reading List

The Color Purple by Alice Walker

Bird by Bird by Anne Lamott

American Literature (Pre-AP English Literature)

STANDARD YEAR: 10TH GRADE
PREREQUISITE: SURVEY OF GREAT BOOKS

American Literature is an intensive, fast-paced course designed to familiarize scholars with the classic and contemporary novels, plays, essays, and poems that comprise the United States' rich literary tradition. Scholars prepare for the next year's culminating assessment, the AP English Language and Composition exam, by reading thoughtfully and participating in spirited classroom discussions. They practice crafting lengthier, more complex, and more effective analytical and argumentative essays with clarity and eloquence, learning to incorporate the most legitimate textual evidence and the soundest organizational structures to support their original ideas. Increasing their precision and fluidity of expression through the study of vocabulary and grammar, scholars develop their singular voices as thinkers, readers, and writers.

COURSE TEXTS

Reference Text

Concise Handbook of Literary and Rhetorical Terms, ed. Michael S. Mills

Semester 1

Foundational documents of American Literature and History, including (but not limited to):

The Declaration of Independence

Selections from *The Federalist Papers*

(James Madison, Alexander Hamilton, John Jay, et. al)

“*Letter from Birmingham Jail*” by Martin Luther King, Jr.

Short stories (including but not limited to):

“*The Legend of Sleepy Hollow*” and “*Rip Van Winkle*”
by Washington Irving

“*Bartleby, the Scrivener*” by Herman Melville

“*A Jury of Her Peers*” by Susan Glaspell

“*The Yellow Wallpaper*” by Charlotte Perkins Gilman

The Great Gatsby by F. Scott Fitzgerald

The Awakening by Kate Chopin

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Semester 2

The Narrative of the Life of Frederick Douglass

by Frederick Douglass

Selections from Transcendentalist writers and poets (including but not limited to):

Walt Whitman

Emily Dickinson

“*On Civil Disobedience*” and *Walden* by Henry David Thoreau

“*On Self-Reliance*” by Ralph Waldo Emerson

The Scarlet Letter by Nathaniel Hawthorne

Their Eyes Were Watching God by Zora Neale Hurston

Death of a Salesman by Arthur Miller

Fences by August Wilson

Summer Reading List

Into the Wild by Jon Krakauer

On Writing Well by William Zinsser

The Global Canon (AP English Literature and Composition)

STANDARD YEAR(S): 11TH AND 12TH GRADES
PREREQUISITE: AMERICAN LITERATURE
(AP ENGLISH LANGUAGE AND COMPOSITION)

In the Global Canon course, scholars are exposed to classic and contemporary literary works of varying genres from Europe and the post-colonial tradition in English translation. Scholars read comparatively across the texts, analyzing the historical contexts of the works, as well as significant literary techniques. This course provides scholars with opportunities to continue to develop as skilled, mature, and critical readers. Scholars practice writing as a process — planning, drafting, reviewing, redrafting, editing, and polishing — and in contained, timed settings, both of which are imperative for their success on the grade 11 culminating AP English Literature and Composition exam and in college courses. In addition, scholars continue to build upon the grammar and vocabulary foundations of their previous years’ study with targeted practice within the context of their written assignments.

REFERENCE TEXTS

Concise Handbook of Literary and Rhetorical Terms,
ed. Michael S. Mills

Barron’s AP English Literature and Composition

Semester 1

Introduction to Literary Theory: selections from (but not limited to):

Republic by Plato

“*The Death of the Author*” by Roland Barthes

“*The Death of the Reader*” by Michel Foucault

Literary Theory by Terry Eagleton

Frankenstein by Mary Shelley

Candide by Voltaire

Persepolis by Marjane Satrapi

Othello by William Shakespeare

Semester 2

Lysistrata by Aristophanes

Short stories, including but not limited to:

“*The Nose*” and “*The Overcoat*” by Nikolai Gogol

Selections from Dubliners by James Joyce

“*The Lady in the Looking Glass*” by Virginia Woolf

Love in the Time of Cholera by Gabriel Garcia Marquez

The Stranger by Albert Camus

The Metamorphosis by Franz Kafka

Summer Reading List

If On A Winter’s Night a Traveler by Italo Calvino

How to Read Literature Like A Professor by Thomas C. Foster

History

Our approach to history is set apart by an emphasis on inquiry and the examination and analysis of primary sources and authentic artifacts. Each scholar develops strengths as a reader, researcher, listener, and speaker, and especially as a writer, while building a comprehensive understanding of historical change and continuity. Success Academy high school scholars engage in a rigorous four-year history program, covering World History, Economics, and American History and Government. All scholars sit for the AP World History exam in grade 10, capping two years of world history study. In grade 11, scholars take Economics, studying classical theory alongside practical applications and current issues in finance and economics, culminating in the AP Macroeconomics exam. In grade 12, scholars revisit American history and government, and they sit for the AP U.S. Government and Politics exam.

SAMPLE TEXTS, GRADES 9–12

A Little History of the World by Ernst Gombrich
A History of the World in Six Glasses by Tom Standage
Prisoners of Geography by Tim Marshall
The Silk Roads by Peter Frankopan
The Swerve by Stephen Greenblatt
Vermeer's Hat by Timothy Brook
King Leopold's Ghost by Adam Hochschild
Freakonomics by Stephen J. Dubner and Steven Levitt
The Big Short by Michael Lewis

Pre-AP World History

STANDARD YEAR: 9TH GRADE
PREREQUISITE: 8TH GRADE US HISTORY

Upon entering the high school, scholars embark on a two-year course of study that explores the breadth and depth of world history, culminating in the AP World History exam at the end of grade 10. In the first year of this course, scholars master core historical skills, including periodization, document analysis, argumentation, and geography. Then, scholars explore the evolution of human societies, cultures, and states from the Stone Age to the Renaissance, studying the emergence of agriculture, the rise and fall of ancient empires, the growth and development of the world's great religions, and the Mongol conquests. This course exposes scholars to the ancient and pre-modern foundations of human history across all global regions, with the goal of providing an inclusive, deep look at the diversity of human cultures and societies.

COURSE TEXTS

A History of the World in Six Glasses by Tom Standage
Prisoners of Geography by Tim Marshall
The Silk Roads: A New History of the World by Peter Frankopan
Summer Reading List
A Little History of the World by Ernst Gombrich

AP World History

STANDARD YEAR: 10TH GRADE
PREREQUISITE: PRE-AP WORLD HISTORY

In AP World History, scholars continue their study of world history with a review of the Modern Era, 1450 and the present. In this College Board-endorsed AP Course, scholars move swiftly through the major themes and processes of “modernity,” including globalization, cultural diffusion, colonization and imperialism, revolution, industrialization, and global and total warfare. Scholars master the essential content of the Age of Exploration and Colonization, the Enlightenment, Global Revolutions, Industrialization and Imperialism, the World Wars, the Cold War, and the Post-Cold War Era. This course exposes scholars to the major thematic and narrative topics of modern world history, establishing a contextual understanding for the state of global affairs in the 21st century. Grade 10 scholars strengthen their historical reading, writing, thinking, and discussion skills in preparation for the AP World History exam at the end of the year.

COURSE TEXTS LISTED ON FOLLOWING PAGE



COURSE TEXTS

Vermeer's Hat by Timothy Brook

The Black Jacobins by CLR James

King Leopold's Ghost by Adam Hochschild

Summer Reading List

The Silk Roads: A New History of the World by Peter Frankopan

AP Macroeconomics

STANDARD YEAR: 11TH GRADE
PREREQUISITE: AP WORLD HISTORY

Scholars broaden their mastery of the social sciences through a study of economics, finance, and the intersection between government and capitalism. In AP Macroeconomics, scholars explore the major topics of micro- and macroeconomic theory and practice, as well as broader issues of political economy and finance. In the microeconomics component, scholars learn about the motivations and factors that shape individual economic and financial decisions. Macroeconomics lessons connect scholars' studies to issues of national and world economic and financial trends and patterns. This course centers on macroeconomic themes and issues, deepening scholar understanding of the forces and processes that shape global events. The Course culminates in the AP Macroeconomics Exam at the end of the school year.

COURSE TEXTS

Freakonomics by Stephen J. Dubner and Steven Levitt

Summer Reading List

A Little History of Economics by Niall Kishtainy

U.S. History and Government

STANDARD YEAR: 12TH GRADE
PREREQUISITE: ECONOMICS

Scholars complete their four-year history sequence with a return to American history. In this final year, scholars deepen their understanding of the major trends, themes, and issues in American history and historiography, including the concepts of freedom and liberty, the origins of race, the immigrant experience, gender and feminism, ideology and partisanship, technology, militarism, and capitalism. Scholars progress through all eras of American history, including pre-Columbian America, the Colonial Era, the early republic and the Civil War, Reconstruction and the Gilded Age, the Progressive Era, the Roaring 20s, the Great Depression and World War II, the Cold War, the Civil Rights Era, the Reagan Era and 1990s, and the 21st century. The review of American history in this course is designed to contextualize the deeper course focus on U.S. Government: scholars will learn about the mechanics and logistics of the American political system, examining the historical legacy and evolution of our three branches of government from the period before the founding all the way up to present political issues and controversies. This course culminates in the AP U.S. Government and Politics Exam at the end of the school year.

COURSE TEXTS

The Color of Law: A Forgotten History of How Our Government Segregated America by Richard Rothstein

Summer Reading List

Impeachment: An American History by Jon Meacham



STEM

At Success Academy High School, we are building the next generation of innovators in the STEM fields and beyond, this starts with a revolutionary mathematics and science program. To reach this end, our teachers are facilitators of inquiry-based learning, creating the conditions for scholars to pose and pursue rich questions, develop their own approaches to solve these problems, and constantly make sense of the ideas they are learning. Our goal is to foster a robust thinking culture across STEM classrooms, one in which all scholars are challenged to become bold, knowledgeable, flexible, and resourceful problem-solvers.



Math

Each mathematics course at the high school consists of a series of carefully sequenced tasks that allow scholars to pose and pursue rich and often socially relevant mathematical questions. Through these problems, scholars formalize and gain fluency with key math concepts, conventions, and procedures. For example, in Algebra, scholars puzzle over whether pharmaceutical companies should be incentivized to invest in the Ebola vaccine. Through studying their revenue models, scholars are introduced to the behavior of quadratic functions. They then use their mathematical findings to debate whether or not existing decision-making approaches are aligned to our social values. Applications span public policy, economics, technology, and popular culture to build a key mindset: Mathematics is a powerful tool for analysis across disciplines. The four-year core Math sequence begins with Geometry in grade 9, Algebra II in grade 10, Precalculus in grade 11, and AP-level Calculus and/or Statistics in grade 12. These courses culminate in rigorous internal exams in Geometry and Algebra II, the AP exams in Calculus AB/BC and Statistics, and the SAT II in Mathematics Level 2. Honors Math students take Advanced Algebra and Pre-Calculus in grade 10, AP-level Calculus in grade 11, and a choice of AP-level Statistics, Engineering, and/or Computer Science courses in grade 12. Accelerated grade 12 students may also apply to take math courses at Columbia University.

Geometry

STANDARD YEAR: 9TH GRADE

PREREQUISITE: ALGEBRA I

Our ninth-grade Geometry course includes a comprehensive analysis of plane, solid, and coordinate geometry as they relate to both abstract mathematical concepts and real-world situations. Topics include proofs, right triangles, transformations, parallel lines and polygons, circles, perimeter and area, volume and surface area analysis, similarity and congruence, trigonometry, and modeling with geometry. Throughout the year, scholars complete various projects including designing a new urban space that optimizes around certain criteria such as walking space and living space. They also use triangles and similarity to design artwork inspired by famous pieces in art history, and create models of futuristic buildings that contribute positively to the environment around them. Emphasis is placed on developing logical reasoning and argumentation through solving complex mathematical problems. Through strategically sequenced tasks, scholars use different tools to discover most of the mathematics they learn.

REFERENCE TEXT

Discovering Geometry by Michael Serra

Algebra II

STANDARD YEAR: 10TH GRADE

PREREQUISITE: GEOMETRY

In Algebra II, scholars continue to build on their understanding of various families of functions including quadratics, logarithms, exponentials, and trigonometric functions. They are then introduced to the complex plane, both geometrically and algebraically, to solve problems that require an alternate coordinate plane. They end the year with a thorough dive into probability and statistics. Scholars explore a variety of real-world contexts, including the growth of social media, revenue models of pharmaceutical companies, and average temperatures across cities, to study climate change. The probability and statistics unit culminates with a research project where scholars pose their own research question; design their own study; and perform data analysis using RStudio and Tableau, statistical platforms for analysis and visualization.

REFERENCE TEXT

Algebra & Trigonometry by Ron Larson



Honors Math: Advanced Algebra & Pre-Calculus

STANDARD YEAR: 10TH GRADE
PREREQUISITE: GEOMETRY

Advanced Algebra is an accelerated course that covers all foundational topics of Algebra II, including families of functions — linear, exponential, logarithmic, rational, and trigonometric — sequences and series, and complex numbers. By studying analytic trigonometry, polar coordinates and parametric equations, vectors and matrices, conic sections, and introductory limits, scholars are prepared to matriculate into Calculus the following school year. Throughout the course, scholars will deepen their understanding of the mathematics they have learned by exploring various real-world applications, such as deriving the geometric series formula through understanding home mortgages, visualizing polar coordinates through stereographic projection, and studying architecture with conic sections.

REFERENCE TEXT

Algebra & Trigonometry by Ron Larson

Pre-Calculus

STANDARD YEAR: 11TH GRADE
PREREQUISITE: ALGEBRA II

In Precalculus, scholars begin with a study of analytic trigonometry, vectors, and matrices. Subsequently, they build on their mathematical reasoning skills formed in Geometry and their knowledge of functions and trigonometry from Algebra II to explore conic sections, parametric equations, polar coordinates, and limits. The course ends in a unit of logic and proofs where scholars apply their mathematical understanding to programming and use computing to verify proofs. Throughout the course, scholars explore real-world applications of each topic and understand their value through investigations in engineering and mechanics, including machine learning, planetary orbits, and graphic design.

REFERENCE TEXT

Precalculus - Mathematics for Calculus by James Stuart

AP Calculus AB

STANDARD YEAR: 12TH GRADE
PREREQUISITE: PRE-CALCULUS OR
ADVANCED ALGEBRA & PRE-CALCULUS

AP Calculus AB builds on scholars' knowledge of precalculus, taking them into the non-constant world of change. This includes a deep dive into limits and the infinitesimally small, followed by rates of change and net changes using Riemann sums, definite integrals, and the fundamental theorem of calculus. The course teaches scholars to approach calculus concepts graphically, numerically, analytically, and verbally and to make connections among these representations. Scholars also learn how to use technology to help analyze problems, experiment, interpret results, and support conclusions. Throughout, scholars will apply the mathematics they are learning to relevant problems in economics, physics, and engineering.

REFERENCE TEXT

Calculus by James Stewart

AP Calculus BC in partnership with Columbia University

STANDARD YEAR: 12TH GRADE
PREREQUISITE: CALCULUS AB

AP Calculus BC is roughly equivalent to both first- and second-semester college calculus courses, extending the content learned in AB to different types of equations and introducing the topic of sequences and series. This course covers topics in differential and integral calculus, including concepts and skills such as limits, derivatives, definite integrals, the fundamental theorem of calculus, and series. Scholars learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally and to make connections among these representations. This course is offered in partnership with Columbia University.

REFERENCE TEXT

Calculus by James Stewart

Science

Our science program encourages scholars to think flexibly and analytically, challenging them to systematically follow lines of insightful inquiry when faced with unfamiliar and difficult problems. Ninth graders complete weekly laboratory exercises and write-ups, mastering advanced applications of the scientific method. Beginning in the junior year, students engage in college-level science content in AP courses. Scholars begin their inquiry-based science sequence with Biology in grade 9 and Chemistry in grade 10. In grades 11 and 12 they can select from AP Biology, AP Chemistry, and AP Physics C: Mechanics.

Principles of Biology

STANDARD YEAR: 9TH GRADE
PREREQUISITE: 8TH GRADE SCIENCE

Scientific discoveries and research are constantly expanding our knowledge on a day-to-day basis. Science teachers are tasked with balancing breadth of content coverage and the depth at which scholars should understand the principles of life science. This course is the framework that sets students up for higher-level life science courses. The course focuses on enduring, conceptual understandings and the content that supports them. Students start to spend less time on recall and more on inquiry-based learning of biological concepts, ultimately helping them develop the broader reasoning skills necessary for the practice of advanced science.

The course content centers on the four big topics explored in greater depth in AP Biology: Evolution, Energetics, Information Storage and Transmission, and System Interactions. Students develop fluency within the six science practices necessary for success in higher-level courses: a plan for collecting data, analyzing data, applying mathematical routines, and justifying arguments using evidence.

COURSE TEXTS

Required Reading

Survival of the Sickest by Dr. Sharon Moalem

Reference Text

Campbell Biology, 11th Edition

Principles of Chemistry

STANDARD YEAR: 10TH GRADE
PREREQUISITE: PRINCIPLES OF BIOLOGY, ALGEBRA 1,
GEOMETRY AND/OR CONCURRENT W/GEOMETRY

Chemistry is the study of matter and the changes that matter undergoes. The course focuses on four big topics including scale, proportion, and quantity; structure and properties; energy; and transformations. Chemistry takes a molecular and an atomic approach to matter in order to learn about its structure and properties. In this course students learn about the basic building blocks of matter through hands-on experimentation and in-class demonstrations. Scholars learn about the intimate connection between matter and energy and focus on the role of energy and heat in chemical reactions.

The students' foundational knowledge in chemistry allows the course to culminate in the examination of contemporary research topics including nanochemistry, environmental engineering, and photonics.

COURSE TEXTS

Required Reading

The Pleasure of Finding Things Out
by Richard Feynman

Reference Text

Chemistry: The Central Science, 14th Edition

AP Physics 1

STANDARD YEAR: 10TH GRADE
PREREQUISITE: GEOMETRY

AP Physics 1 is an algebra-based introductory college-level course in which scholars experience the true intersection of math and science for the first time. Scholars cultivate their understanding of physical phenomena through inquiry-based investigations as they explore such topics as Newtonian mechanics, including rotational motion; work, energy, and power; mechanical waves and sound; and electrostatics and simple circuits.

REFERENCE TEXT

University Physics with Modern Physics
by Hugh D. Young, 14th Edition

AP Biology

STANDARD YEAR: 11TH OR 12TH GRADE
PREREQUISITE: INTRODUCTORY BIOLOGY

AP Biology delves deeper into the foundation laid in scholars' ninth-grade Biology course. Scholars further their understanding of biology through the four big ideas. They investigate the process of evolution and its effect on the diversity and unity of life and explore biological systems that utilize free energy and molecular building blocks to grow, reproduce, and maintain dynamic homeostasis. They learn that living systems store, retrieve, transmit, and respond to information essential to life processes. Scholars will understand how biological systems interact, and how these systems and interactions possess complex properties. Scholars work to relate causes to biological effects, identify assumptions and limitations, connect technique/strategy with its purpose, identify patterns or relationships from data, and rationalize one choice over another. This one-year course is equivalent to a first-semester college course in Biology at most universities and concludes with the AP Biology exam.

COURSE TEXTS

Required Reading

Your Inner Fish by Neil Shubin

Reference Text

Campbell Biology, 13th Edition

AP Chemistry

STANDARD YEAR: 11TH OR 12TH GRADE
PREREQUISITE: PRINCIPLES OF CHEMISTRY, ALGEBRA II

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations as they explore content such as atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.

REFERENCE TEXT

Reference Text

Chemistry and Chemical Reactivity, 10th Edition

AP Physics C in partnership with Columbia University

STANDARD YEAR: 11TH OR 12TH GRADE
PREREQUISITE: AP CALCULUS AB OR CO-ENROLLED
IN AP CALCULUS AB

Semester 1 - AP Physics C: Mechanics is equivalent to a one-semester, calculus-based college-level physics course. It is especially appropriate for scholars planning to specialize or major in physical science or engineering. The course explores such topics as kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus are used throughout the course.

Semester 2 - AP Physics C: Electricity and Magnetism is a one-semester, calculus-based college-level physics course, especially appropriate for scholars planning to specialize or major in physical science or engineering. The course explores such topics as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus are used throughout the course.

This course is offered in partnership with Columbia University.



Advanced Academy

In addition to our Academic Core, we offer students the opportunity to apply and take courses within one of our two elite Advanced Academy programs. The Advanced Academy offers courses that are typically only available to students once they begin post-secondary study. These courses count as elective credits and are taken in addition to the academic core. To account for their higher rigor, a student's final cumulative grades in Advanced Academy classes are multiplied by 1.10.

In order to be successful, students must have a strong foundation in the academic core. For this reason, students must be in the top 20% of their class in order to qualify. Admission is by application. Once a student has been accepted to the Advanced Academy program, they are automatically admitted for all four years of high school. Students who do not qualify for freshman year will be given an opportunity to enroll each year, but late admittees may not have the opportunity to complete the full scope of the program, so applying in grade 8 for admission freshman year is highly recommended.

Humanities Academy

SA HSLA scholars who are particularly passionate about the humanities have the opportunity to apply for admission to the Humanities Academy. In order to be eligible, a scholar's GPA must be in the top 20% of the class. The application process requires scholars to submit a statement of purpose and garner a strong teacher recommendation. In grades 9 or 10, admitted scholars take an online poetry course with Poetry in America, a collaboration with Harvard University. Successful completion of the course earns scholars undergraduate course credit from Harvard. In grades 10 or 11, admitted scholars take a yearlong art history course, culminating in the AP Art History exam.

Poetry in America in Collaboration with Harvard University

STANDARD YEAR: 9TH OR 10TH GRADE
PREREQUISITE: N/A

Poetry in America is an education initiative created by Elisa New, in collaboration with Harvard University. Scholars take two semesters of an online course on American poetry. In the first semester, scholars take Poetry in America: From the Mayflower Through Emerson. This course covers American poetry in a cultural context from the Puritans through the year 1850. In the second semester, scholars take Poetry in America: From the Civil War Through Modernism. This course spans a critical era in American literature, beginning with antebellum and Civil War poetry, entering the 20th century, and traversing the transformative Modernist Era. During the course, scholars have the opportunity to participate in two live annotation sessions with a graduate fellow from Harvard. They submit a culminating paper each semester on a poem of their choice. Successful completion of the course earns scholars undergraduate course credit from Harvard.

AP Art History

STANDARD YEAR: 11TH OR 12TH GRADE
PREREQUISITE: MODERN WORLD HISTORY

For most of human history, the primary vehicle for cultural discourse has been not the written word, but art: cave paintings, carvings, sculptures, frescoes, paintings, and portraits. Art, in its various forms and mediums, has provided a universal language understood and spoken by human beings for thousands of years. In Art History, eligible scholars explore the history and evolution of art in all its forms from all corners of the world. Scholars master the major art movements and are able to identify, discuss, and analyze artworks and the contributions of artists within the broader context of world history. This course begins with a high-level introduction and review of art from all eras of history, then proceeds chronologically through the major art movements, focusing specifically on art created from 1400 through the present. Scholars frequently visit museums and cultural centers around New York City and learn to appreciate and discuss art both on the scale of individual paintings and pieces and more broadly within the context of art movements and trends. This course culminates in the AP Art History Exam at the end of the school year.



Environmental Engineering

STANDARD YEAR: 10TH GRADE
PREREQUISITE: INTRODUCTORY BIOLOGY AND GEOMETRY

The objective of this course is to provide students with a broad understanding of the principles of environmental engineering (EE) practice, with a specific emphasis on how professional engineers apply these principles to solve issues of water quality, climate change, and waste management. The course includes an introduction to theoretical principles with real-world case studies (local, domestic US, and international). A quarter of the course is devoted to a hands-on project that allows scholars to create a solution to the environmental issue that they feel most strongly about. The objective of the project is to create a prototype and in-person demonstration materials that describe the problem, as well as the technology that could solve it. Scholars spend four weeks in a maker space building their prototypes in groups, and take field trips to the climate museum on Governors Island and landfills to prepare for their projects.

STEM Academy

STEM Academy has been designed for scholars who are passionate about designing and building solutions using technology in the world today. Outstanding scholars can be selected into our demanding STEM Academy, which progresses through a sequence of four semester-long rotations in Environmental Engineering, Biomedical Engineering, Electrical Engineering, and Mechanical Engineering in grades 10 and 11. These introductory survey courses expose scholars to the tools and design problems unique to each engineering discipline. After taking the four survey courses, students choose one of the four engineering fields of study as their senior year concentration course.

Biomedical Engineering

STANDARD YEAR: 10TH GRADE
PREREQUISITE: INTRODUCTORY BIOLOGY AND GEOMETRY

This first engineering design course provides students with an overview of biotechnology as a science and an industry. Topics covered include basic biochemistry, protein structure and function, DNA structure and function, bioengineering techniques and applications, and bioethics. In addition to exploring compelling engineering topics and techniques, such as the use of the spectrophotometer to study protein structure, each unit confronts scholars with an ethical question related to the content, giving them the opportunity to practice and develop skills in making informed decisions when engineering and ethics intersect.

REFERENCE TEXT

Reference Text

Biotechnology - Science for the New Millennium
by Ellyn Daugherty

Mechanical Engineering

STANDARD YEAR: 11TH GRADE
PREREQUISITE: AP PHYSICS 1 AND ALGEBRA 2

The mechanical engineering rotation introduces scholars to the field of mechanical engineering and the relationships between the sciences and mathematics that inform the study, design, and manufacturing of mechanical products and systems. In this primarily project-based course, scholars begin by designing mechanical vehicles to understand foundational concepts of mechanical advantage and rotational inertia. They are introduced to materials sciences, delve into the various types of stress, and end the semester harnessing SolidWorks software to design and draft a gearshift.

Electrical Engineering

STANDARD YEAR: 11TH GRADE
PREREQUISITE: AP PHYSICS 1 AND ALGEBRA 2

The electrical engineering rotation introduces scholars to the fascinating and growing fields of electronics. The course begins with fundamentals of circuit design, control theory, and digital communications — the three pillars of modern electrical systems. In this primarily project-based course, scholars apply their knowledge of first- and second-order LTI systems to design an autonomous vehicle using Arduino software, efficient encryption algorithms for high-speed communications, and complex electronic circuits using their knowledge of boolean logic and circuit theory.

Academic Electives

Success Academy also offers a host of academic electives in Computer Science and Statistics. These rigorous courses equip students with highly marketable skills and are designed for student interest. These project-based courses offer extensions beyond the core content and are open to all students as one of their two electives.

Computer Science

Our computer science program aims to push scholars to reject being simply users of technology and instead become creators of it. Each course harnesses project-based learning, affording scholars the opportunity to use computing technology to solve problems both close to home and afar. Through culminating projects, scholars collaboratively develop software solutions. They learn not only programming languages and platforms, but also how to use these tools in meaningful ways that improve quality of life and how to create beautiful digital experiences. Computer Science electives are open to all scholars in grades 9–12.

Introduction to Computer Science

STANDARD YEAR: 9TH-12TH GRADES
PREREQUISITE: NONE

This course introduces scholars to the Javascript programming language with a focus on client-side programming (front-end development). Topics covered include basic syntax, debugging, error handling, object-oriented programming, API calls, DOM manipulation, and AJAX protocols. This class also covers basic HTML and CSS structure and syntax. The course includes live code-alongs and weekly coding exercises with assignments that assess web implementation. Midterm and final projects allow scholars to design their own projects using ideas in the course.

Introduction to Data Science

STANDARD YEAR: 10TH-12TH GRADES
PREREQUISITE: INTRODUCTION TO COMPUTER SCIENCE OR EQUIVALENT;
CO-ENROLLMENT IN STATISTICS PREFERRED BUT NOT REQUIRED

This introductory data science course introduces scholars to the foundations of machine learning. They learn Python programming and the Jupyter lab interface with a focus on creating prediction models and algorithms to make important decisions. Students examine and analyze data and construct theories through assignments that generate predictions. Topics include: Python syntax and supervised machine learning models including Linear Regression, K-Nearest Neighbors, Decision Trees, and Random Forests. This class also covers the pandas library, Sci-kit learn library, data cleaning, and basic statistics theory. Projects include predicting the 2020 elections in key districts and analyzing stock and trade information to determine if Google and Amazon are worth it or if there are emerging markets that may threaten their high value.





Back-End Web Development: Flask

STANDARD YEAR: 10TH-12TH GRADES

PREREQUISITE: INTRODUCTION TO COMPUTER SCIENCE
OR EQUIVALENT

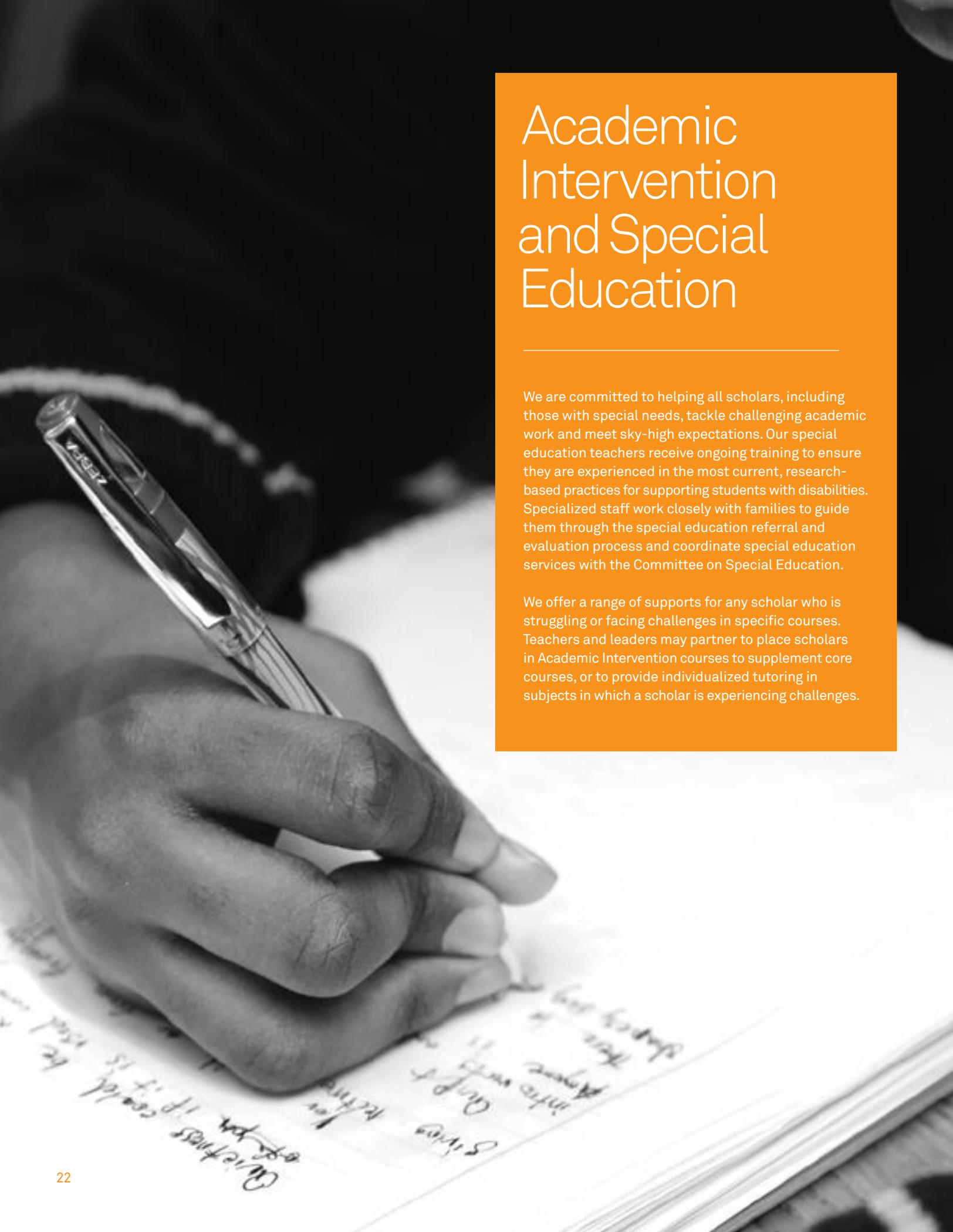
This class introduces the Python programming language with a focus on dynamic server-side programming using the micro framework, Flask. Topics covered include syntax, database storing, generating dynamic content, and app development. This class also covers the MongoDB database system, the MVC (Model View Controller) design system, and RESTful API's. Scholars participate in live code-alongs and undertake coding exercises with assignments and projects that assess application implementation.

AP Statistics

STANDARD YEAR: 11TH OR 12TH GRADES

PREREQUISITE: ALGEBRA II OR ADVANCED ALGEBRA

AP Statistics is equivalent to a one-semester, non-calculus-based introductory college-level course in statistics. The course introduces scholars to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Scholars will explore the four main themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference through a series of projects aimed at real-world understanding of statistics. Through these projects, scholars will not only master all content covered on the AP Statistics exam, but also enhance their understanding by investigating relevant questions through statistical analysis using common industry technology such as RStudio and Tableau.

A black and white photograph of a hand holding a pen, writing on a document. The document has handwritten notes in cursive. The background is dark, and the lighting is focused on the hand and the pen.

Academic Intervention and Special Education

We are committed to helping all scholars, including those with special needs, tackle challenging academic work and meet sky-high expectations. Our special education teachers receive ongoing training to ensure they are experienced in the most current, research-based practices for supporting students with disabilities. Specialized staff work closely with families to guide them through the special education referral and evaluation process and coordinate special education services with the Committee on Special Education.

We offer a range of supports for any scholar who is struggling or facing challenges in specific courses. Teachers and leaders may partner to place scholars in Academic Intervention courses to supplement core courses, or to provide individualized tutoring in subjects in which a scholar is experiencing challenges.

Scholar Talent Electives

In addition to the core required courses, scholars are required to take an additional seven semesters of electives, with the option of taking up to three electives per semester. To fulfill these requirements, we offer a range of choices, allowing scholars to explore and pursue their talents, passions, and interests at a high level. Most scholars exceed the credit requirement by taking the maximum number of electives each semester.

Courses that fulfill Electives credits include:

Visual Arts	Introduction to Photography Advanced Photography Drawing
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Theater	Foundations in Theater Advanced Acting Theater Tech Art in Theater
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Dance	Conservatory Dance Advanced Conservatory Dance Contemporary Dance Advanced Contemporary Dance
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Music	Bel Canto Choir Mixed Chorus Chamber Chorale Music Theory
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Sports	Track Competitive Track Boys Basketball
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Chess	Chess Competitive Chess
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Arts

Scholars are required to take two semesters of art and can choose from a range of electives in visual arts, music, dance, and theater. The Arts curriculum aims to further creative growth and deepen scholars' understanding of aesthetics and history. Arts requirements can also be satisfied by participating in chorus, dance, or theater groups.

Sports and Fitness

Our Sports and Fitness program consists of competitive teams and core courses, emphasizing the development of skills and sportsmanship. Scholars are required to take four semesters of fitness classes. They can also fulfill these requirements by participating in team sports.

Health

All scholars take a one-semester Health course that covers sex ed, an exploration of social issues, and strategies for making healthy life choices.



Experiential Learning

Our schools nurture the creative interests and special talents of scholars, and we regard electives, internships, clubs, and summer programs as vital to the curriculum. Whether combining creativity with engineering skills in video game design or training diligently for the nation's largest track and field event, scholars are invested in their pursuits. We support them by providing high-level elective courses, truly excellent faculty, and sophisticated enrichment activities, including Broadway plays, trips to world-class museums, and travel to events in cities across the United States.

Clubs

Clubs provide a forum for scholars to socialize, forge friendships, pursue interests, and develop leadership skills. Scholars can join one of many existing clubs or create their own.

Fine Line Art Club	Hawkeye Herald
Chess	Student Council
Gay-Straight Alliance	Root Awakening
HSLA Ambassadors	Theater Tech Crew
RockHawks	Yearbook
AfroBeats	Hawk Drumline
HSLA Cheer Team	E-Sports Club
Psychology Club	Brave New Voices
Conservatory Company	Just Dance!
Senior Committee	Humanitarian Society
A Capella	HSLA Improv Troupe

Competitive Teams

Teams compete in regional and national tournaments. Scholars who participate in competitive Success Academy teams must make a substantial time commitment, but they also gain wonderful experiences traveling across the city, state, and country to compete against top private and public schools.

Chess	Track
Choir	PSAL Girls Basketball*
Dance Team	PSAL Girls Volleyball*
Boys Basketball	

*Scholars can try out for PSAL (Public School Athletic League) teams as part of the co-located Norman Thomas campus.



Summer Experience

SA HSLA scholars have the chance to participate in competitive collegiate, artistic, and outdoor leadership opportunities through the Success Academy Summer Experience program,* which provides a depth of experience that sets up scholars for success in college. Many scholars spend at least one summer on a college campus in pre-college programs. Other summer experiences include dance workshops, cultural trips abroad, theater programs, and a wide range of academic or interest-based opportunities. Summer Experience programs are selective, and outstanding Success Academy high schoolers are chosen through a rigorous application process that provides early insight into and experience with the college application process they will undertake as seniors.

*Summer programs are subsidized by Success Academy but require families to cover travel expense.

Sample summer experiences:

Barnard College Summer in the City
Boston College Experience for High School Students
Boston University Summer Theater Institute
Brown University Pre-college Programs
Carleton College Summer Academic Programs
Cooper Union Summer Writing Program
Deer Hill Expeditions
Emory University Precollege Program
Johns Hopkins Center for Talented Youth
Loomis Chaffee School Summer Program
Massachusetts Institute of Technology
Minority Introduction to Engineering and Science (MITES)
Phillips Exeter Academy Exeter Summer
Putney School of the Arts
Putney Student Travel
Stanford University Pre-Collegiate Summer Institutes
Tufts University College Experience
Washington University in St. Louis
Summer Scholars Program



Character and College Preparation

The scholars who walk through our doors have immense potential to become exceptional leaders in their communities. We help them fulfill this potential by cultivating their confidence and personal integrity, as well as the independence and drive that will carry them forward through college and the rest of their lives. Our deans, principals, and college counselors get to know scholars on a personal level. This trusted team helps scholars identify extracurricular opportunities for growth and learning, and they support scholars through every aspect of the college admissions process.

Dedicated Deans of Scholars

Dedicated deans teach crucial life habits such as time and task management, goal setting, and self-advocacy. Deans for every grade help keep our families informed about scholars' progress and advise and support scholars throughout their high school journey.

Academic Core Seminar

Scholars participate in college prep seminars that support their academic core coursework and emphasize strong work habits. During the college application process, seniors learn about college-focused topics like financial literacy and stress management.

Comprehensive College Counseling

College access depends on both a strong academic foundation and the ability to navigate the admissions process. Our college counseling program provides comprehensive support in the complex college application process that's on par with the city's elite private schools. Counselors partner with scholars and families to help them identify the best colleges where financial support is available, complete financial aid forms, and showcase scholars' achievements in compelling

applications. Unlike most schools, which begin college advising in junior year, counselors begin working with scholars in grade 9, ensuring that scholars and their families know early on what it takes to get into top universities and helping them craft action plans to get there.

SAT and AP Test Preparation

Success Academy High School of the Liberal Arts provides free, comprehensive preparation for the PSAT, SAT, and AP exams. Building this essential prep into the schedule means that scholars don't need to seek out costly external tutoring. Scholars take the SAT in November and March of grade 11 and October of grade 12. In preparation for each exam, scholars take an eight-week course, covering foundational topics for the verbal and math sections of the exam, including three or four official practice exams. On average, scholars improve between 50 and 100 points between each exam.





SA HSLA College Acceptances

Since our first graduating class in 2018, every Success Academy senior has earned acceptances to selective colleges, in addition to significant financial aid packages.

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|----------------------------------------------|--------------------------------------------------|--------------------------------------|----------------------------------------------|
| Alfred University | Iona College | Rutgers University,
New Brunswick | University of Albany |
| Arizona State University | Ithaca College | Seton Hall University | University of Buffalo |
| Bard College | Kent State University | Siena College | University of Fredonia |
| Barnard College | Kenyon College | Skidmore College | University of Louisville |
| Beloit College | Lafayette College | Spelman College | University of Maryland,
Baltimore County |
| Boston College | Lehigh University | St. John's University | University of Pennsylvania |
| Brown University | LeMoyne College | SUNY Binghamton | University of Rochester |
| Buffalo State College | Lincoln University | SUNY Canton | University of Southern
California |
| Carnegie Mellon University | Massachusetts Institute
of Technology | SUNY Cobleskill | University of Wisconsin
(Posse) |
| CUNY City College | Morehouse College | SUNY Cortland | Ursinus College |
| CUNY John Jay College
of Criminal Justice | Mount Holyoke College | SUNY Geneseo | Virginia State University |
| CUNY Lehman College | Northeastern University | SUNY Oneonta | Wake Forest University |
| Emory University | Nova Southeastern
University | SUNY Potsdam | Wheaton College |
| Goucher College | Ohio Wesleyan University | SUNY Stony Brook University | Wittenberg University |
| Grinnell College | Olin College of Engineering | Susquehanna University | |
| Hobart and William
Smith Colleges | Oswego State University | Swarthmore College | |
| Howard University | Pitzer College | Syracuse University | |
| Hunter College | Purchase College | Tufts University | |
| | | Tulane University | |

Orange = Colleges where our students matriculated.

Essential Logistics

Graduation Requirements

Courses	Required External Exams	Optional Exams	Required Credits (2 semesters = 1 credit)
Literature	ELA Regents, AP Literature		4
History	AP World History	AP Art History, AP Macroeconomics	4
Science	Living Environment Regents, AP Biology	AP Physics 1, AP Physics C: Mechanics, AP Chemistry	4
Mathematics	SAT II Math Level 2, AP Calculus AB or BC	AP Statistics	4
Physical Education			1
Advisory and Health			0.5
Fine Arts			1
Electives			3.5



Parent Engagement

Like all college preparatory high schools, Success Academy High School of the Liberal Arts asks a lot of scholars and, therefore, of their families. Homework load is high, and the content is challenging; the payoff is that college will be easy by comparison! We ask that both scholars and their parents commit to this challenge and to the long-term goal of college completion in four years. We depend on parents to do their part — without parents' effort, oversight, and communication with teachers and leadership, we simply won't succeed. Our core expectations for parents include the following.

- 1. Responsiveness:** Read school and network communications and respond within 24 hours.
- 2. Meetings:** Be ready to meet with teachers and/or school leaders within three instructional days if the need arises.
- 3. School Culture:** Ensure that scholars are in school every day, on time, and in full uniform.
- 4. Independent Home Work:** Ensure that scholars do their nightly and weekend homework and that they study for exams.
- 5. Scholar Behavior:** Hold scholars accountable for upholding the school's Code of Conduct and Honor Code.



