The High School Curriculum

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MISSION 3

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.

K-12 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.

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. An advanced liberal arts curriculum prioritizes student-led inquiry, applied problem-solving, and cross-disciplinary perspectives. A wide range of electives and clubs — along with an honors program and STEM academy, internship opportunities, and robust summer experiences — cultivates scholars' curiosity, talent, and skill in navigating the world around them.

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. They 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 Academics

Our core sequence 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 scholars to thrive in college and beyond. Each course emphasizes mastery of the fundamentals paired with high-interest contemporary applications and all scholars take Advanced Placement (AP) courses — collegelevel courses that culminate in an external exam — as part of the sequence. The academic core prepares scholars to become not only good thinkers, but also good people who have the curiosity, confidence, and preparation to solve the most pressing problems of tomorrow.

In addition to our core sequence, we offer numerous electives, including additional AP options in math and history, computer science courses, honors courses for scholars with GPAs in the top 10% of their grade, and unique Humanities and STEM Academies focused on specialized courses that are typically only available in college.

Honors & Academy Programs

HSLA offers a range of opportunities for high-performing scholars to pursue academic extension beyond their already rigorous coursework.

Honors Courses

Many core academic courses are offered with a general and an honors track. The purpose of the honors course is two-fold. Some honors courses offer targeted instruction to a selective cohort to pursue the highest level of achievement in the course (and accompanying exam). An honors cohort for AP Art History, for example, would aim explicitly to score 4s and 5s on the exam. Other honors courses accelerate content coverage through a foundational course to enable scholars to progress to a more advanced course. Advanced Algebra and Pre-Calculus, for example, covers the full scope of two foundational courses in one year. Similarly, honors scholars can accelerate through a Principles of Chemistry course and go directly to AP Chemistry.

In each department, scholars in the top 10% of their grade are offered the option to elect into an honors course the following year. Scholars are informed of the additional workload requirements before electing to take the course. To stay enrolled in an honors course, scholars must maintain a passing grade, which teachers and advisors will monitor closely. Scholars who are consistently struggling academically may be asked to drop the honors course by their teacher or advisor. Scholars may also initiate a drop before the drop deadline if they feel the course load is too challenging.

If a scholar successfully completes an honors course, their GPA in the course will be multiplied by 1.05 to determine their final transcript grade. This accounts for the added rigor of the coursework.

Honors Diploma

Scholars with a cumulative academic core GPA in the top 10% of their class will graduate with honors. Scholars who pursue a rigorous program of coursework are most on track to earn an honors diploma.

STEM & Humanities Academies

The STEM and Humanities
Academies are selective
programs that have been
designed for scholars who
are passionate about a
specific discipline and want
to delve into specialized,
college-level study while still
in high school.

Humanities Academy

The Humanities Academy is a diploma distinction that reflects a robust suite of AP-level courses typically reserved for collegiate study. These include a study of canonical works in Global Literature, an opportunity to specialize in a specific type of history — Modern World History, Art History, US History, European History — and an opportunity to take introductory-level college courses in Macroeconomics and Microeconomics. Scholars who have successfully completed four AP-level courses in the Humanities (History and English) will be accepted into the Humanities Academy and receive the distinction on their diploma.

STEM Academy

The STEM Academy program has subprograms: Engineering and Pre-Medicine. The two-year Engineering program progresses through a sequence of four semester-long rotations in Environmental Engineering, Biomedical Engineering, Electrical Engineering, and Mechanical Engineering in grades 11 and 12. After completing the four survey courses, scholars are equipped with the foundation and knowledge to choose the Engineering discipline in college. The three-year Pre-Medicine program progresses through Pathophysiology, Microbiology, Genetics, Immunology, and Bioethics, and culminates in a senior year capstone project in which scholars conduct independent, college-level research into a topic of their choosing. Scholars who have completed Pre-Med Academy will be set up for success for the rigorous pre-med college track.

The top 20% of STEM scholars are offered the option to elect into a course in the STEM Academy the following year. Scholars are identified based on their GPA in Science and Math. Scholars are informed of the additional workload requirements before electing to take the course. Scholars enrolled in STEM Academy courses must maintain a passing

course grade, which teachers and advisors monitor closely. Scholars who are consistently struggling academically may be asked to drop the Academy course by their teacher or advisor. Scholars may also initiate a drop before the drop deadline if they feel the course load is too challenging.

If a scholar successfully completes an Academy course, their GPA in the course will be multiplied by 1.10 to determine their final transcript grade. This accounts for the added rigor of the coursework.

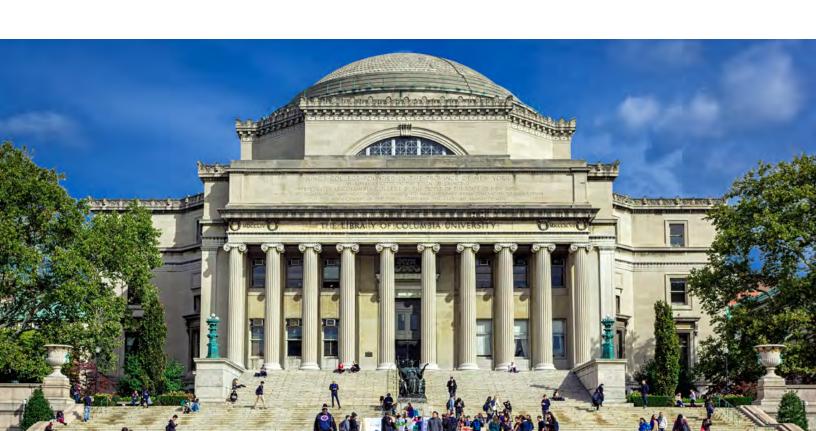
Partnership with Columbia Edge

A small number of scholars will attain the highest level of academic achievement on the full suite of course offerings at HSLA. These scholars are eligible to apply for the Columbia Edge program, with support from the College Team. If accepted, scholars take a course on campus at Columbia University, alongside undergraduate

scholars. Classes are often in the late afternoons or evenings and require a very high investment of time and study. These seats are almost exclusively reserved for accelerated scholars in STEM, given the extensive Humanities offerings available at HSLA.

Scholars enrolled at Columbia Edge must maintain a passing course grade, which teachers and advisors will monitor closely. Scholars who are consistently struggling academically may be asked to drop the course by their teacher or advisor. Scholars may also initiate a drop before the drop deadline if they feel the course load is too challenging.

HSLA reports scholar grades from Columbia Edge on a Pass/Fail basis, though scholars can submit a transcript from Columbia alongside their high school transcript as part of their college application.

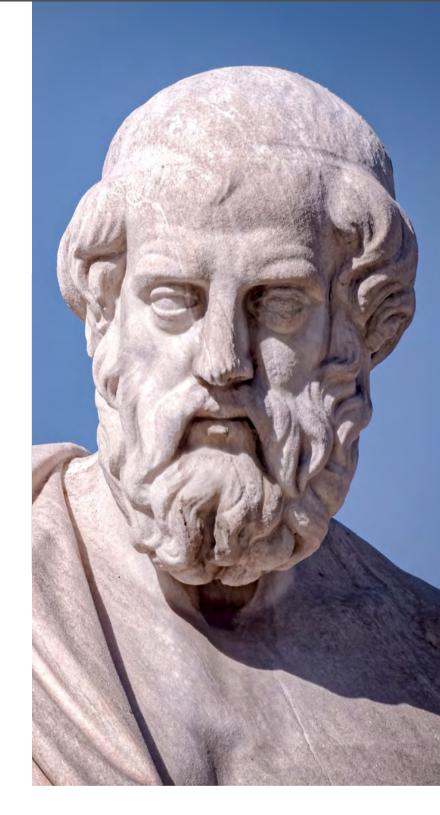


Humanities

English

Our English 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. 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.

All scholars take four years of English. Scholars who have successfully completed four AP-level courses in the Humanities (History and English) will be accepted into the Humanities Academy and receive the distinction on their diploma.



Course Title	Dept.	Credits	Year Required
Freshman Reading and Composition	English	1.0	9th
Canonical Works of American Literature	English	1.0	10th
AP Literature: Canonical Works of Global Literature	English	1.0	11th
Critical Perspectives in Literature	English	0.5	12th
Old, Middle, and Early Modern English Literature	English	0.5	-
Creative Writing Workshop	English	0.5	-



Freshman Reading and Composition

STANDARD YEAR: 9TH GRADE COURSE TYPE: REQUIRED PREREQUISITE: NONE

EXTERNAL EXAM: NYS ELA REGENTS EXAM (JANUARY)

SEE COURSE TEXTS, PAGE 20 →

The Freshman English course has two goals: for scholars to read extensively and to strengthen their skills in written composition. Throughout the year, scholars read and study canonized and contemporary novels in addition to poetry and nonfiction, analyzing the texts through personal annotations, classroom discussion, and formal and informal writing. In addition to helping scholars build 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 also prepares scholars for the New York State Regents exam in English, which scholars are required to pass in January for graduation.

Canonical Works of American Literature

STANDARD YEAR: 10TH GRADE COURSE TYPE: REQUIRED

PREREQUISITE: FRESHMEN READING & COMPOSITION

EXTERNAL EXAM: NONE SEE COURSETEXTS, PAGE 20 →

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 Literature 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.

AP Literature: Canonical Works of Global Literature

STANDARD YEAR(S): 11TH GRADE

COURSE TYPE: REQUIRED

PREREQUISITE: AMERICAN LITERATURE EXTERNAL EXAM: AP ENGLISH LITERATURE

AND COMPOSITION EXAM (MAY) **SEE COURSE TEXTS, PAGE 20** →

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 for 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.

English Electives & Senior Seminars

In their senior year, scholars have the opportunity to select from a number of semester-long collegiate seminars focused on a specific area of study.

Critical Perspectives in Literature

STANDARD YEAR(S): 12TH GRADE

COURSE TYPE: REQUIRED (SENIOR SEMINAR)

PREREQUISITE: THE GLOBAL CANON

EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 20 →

This course is a survey of the main trends in twentieth century literary theory and criticism. As scholars engage with prominent theorists, texts, and schools of thought (pyschoanalytic criticism, Marxist criticism, and feminist criticism, among others), they will apply these lenses to various readings and texts to broaden and deepen their meanings. Coursework will culminate in a senior project: Scholars will select a literary theory and use it to analyze a high school text of their choosing in a 10-page (approximately) term paper. Ultimately, scholars will emerge from this course with a deeper appreciation, understanding, and curiosity about the big questions they have touched on throughout their high school careers: What is literature? What factors influence its production? How can it be understood? And, finally, what is its purpose?



Old, Middle, and Early Modern English Literature

STANDARD YEAR(S): 12TH GRADE

COURSE TYPE: ELECTIVE (SENIOR SEMINAR) **PREREQUISITE:** THE GLOBAL CANON

EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 20 →

This course explores the origins and development of English literature, from its Anglo-Saxon roots through the Renaissance. Scholars will have the opportunity to hone reading, writing, and discussion skills as they engage critically with a number of momentous texts from the Old, Middle, and Early Modern English eras. Through careful examination of original texts, scholars will analyze how literature embodies and accentuates language and culture, and how a text is affected when it undergoes translation. Specifically, scholars will trace the shifting notion of heroes and how those figures reflect the values of the culture that produced them.

Creative Writing Workshop

STANDARD YEAR(S): 12TH GRADE COURSE TYPE: ELECTIVE PREREQUISITE: N/A EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 21 →

This introductory course is designed to encourage scholars' creativity by addressing two critical components of writing: craft and creation. Scholars will spend half the semester reading and writing fiction and the other half reading and writing poetry. Each week, one day will be devoted to analyzing assigned readings, while the other will be devoted to discussing scholar work in an intimate workshop setting; two days will be devoted to in-class writing exercises. On craft days, scholars will be expected to submit reading responses and conduct in-depth discussions on assigned work. On workshop days, scholars will be required to offer constructive, critical support that sparks growth and fosters a community of writers. Ultimately, scholars will submit a portfolio containing two short stories and four poems that they write over the course of the semester. They will also submit a revision of one short story and two poems to emphasize the importance of editing and highlight writing as a process.

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, including two years of World History and two years of an elective history course of their choosing.

All scholars take four years of History. Scholars who have successfully completed four AP level courses in the Humanities (History and English) will be accepted into the Humanities Academy and receive the distinction on their diploma.



Course Title	Dept.	Credits	Year Required
Pre-Modern World History	History	1.0	9th
AP Modern World History	History	1.0	10th
AP European History	History	1.0	-
AP Art History	History	1.0	-
U.S. History and Government	History	1.0	-
AP U.S. History	History	1.0	-
AP Macroeconomics	History	1.0	-
AP Microeconomics and Macroeconomics	History	1.0	-



Pre-Modern World History

STANDARD YEAR: 9TH GRADE COURSE TYPE: REQUIRED PREREQUISITE: N/A EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 21 →

Upon entering 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 look at the diversity of human cultures and societies.

AP Modern World History

STANDARD YEAR: 10TH GRADE COURSE TYPE: REQUIRED

PREREQUISITE: PRE-AP WORLD HISTORY EXTERNAL EXAM: AP WORLD HISTORY EXAM

SEE COURSE TEXTS, PAGE 16 →

In AP World History, scholars continue their study of world history with a review of the Modern Era, from 1450 to the present. 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 will 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. Scholars strengthen their historical reading, writing, thinking, and discussion skills in preparation for the AP World History exam at the end of the year.

AP Art History

STANDARD YEAR: 9TH-12TH GRADE

COURSE TYPE: ELECTIVE PREREQUISITE: N/A

EXTERNAL EXAM: AP ART HISTORY EXAM

SEE COURSE TEXTS, PAGE 21 →

For most of human history, the primary vehicle for cultural discourse has not been the written word, but instead has been 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, 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 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. This course culminates in the AP Art History Exam at the end of the school year.

AP European History

STANDARD YEAR: 10TH-12TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: PRE-AP WORLD HISTORY EXTERNAL EXAM: AP EUROPEAN HISTORY EXAM

SEE COURSETEXTS, PAGE 21 →

In AP European History, scholars explore the depth and breadth of European history from the Renaissance to the present. This year-long survey course exposes scholars to all of the major historical events, individuals, developments, and themes essential for mastering European history. Scholars will learn about the Renaissance, Reformation, Scientific Revolution, Enlightenment, Age of Revolutions, Industrial Revolution, World Wars, Cold War, and the founding of the European Union. Importantly, scholars have either learned or will be in the process of learning about these topics from World History. This means that class can focus on major ideas, important debates, and exciting conversations, allowing scholars to access a high degree of understanding and expertise. This course also focuses on European cultural history, and scholars will be studying artwork, literature, and philosophy from European history.





AP Macroeconomics

STANDARD YEAR: 11TH-12TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: AP WORLD HISTORY

EXTERNAL EXAM: AP MACROECONOMICS EXAM

SEE COURSE TEXTS, PAGE 21 →

Scholars broaden their mastery of the social sciences through a study of economics, finance, and the intersection between government and capitalism. In Economics, scholars explore the major topics of microeconomic 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, while the macroeconomics lessons connect their 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. Economics culminates in the AP Macroeconomics Exam at the end of the school year.

AP Microeconomics and Macroeconomics

STANDARD YEAR: 11TH-12TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: AP WORLD HISTORY

EXTERNAL EXAM: AP MICROECONOMICS EXAM

AND AP MACROECONOMICS EXAM **SEE COURSE TEXTS, PAGE 21 →**

In this advanced history elective, scholars broaden their mastery of the social sciences through a study of economics. This course, which teaches the full course load for both AP Microeconomics and AP Macroeconomics in one year, exposes scholars to all the major topics and themes of economic theory. The Microeconomics portion focuses on the choices made by individual consumers and firms, and how those choices fit into larger economic trends and developments. In Macroeconomics, scholars learn about the major processes that drive national and international economics, focusing specifically on the role of government. This course culminates in both the AP Microeconomics and AP Macroeconomics exams, and is designed for scholars who want to learn college-level economics in a rigorous, fast-paced environment.

U.S. History and Government

STANDARD YEAR: 11TH-12TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: AP WORLD HISTORY

EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 22 →

In this course, scholars learn about the structures and systems that compose the United States government, studying the Constitution, the three branches of government, the relationship between the federal government and the states, the notion of partisanship, and the mechanics of our politics and media. Critically, scholars will learn about these topics within their proper historical context, studying critical episodes in American history, such as the Enlightenment, the Gilded Age, World War II, and the 21st Century. Scholars dive deep into illustrative cases studies about American government from our history — for example, scholars study the internment of Japanese-Americans during World War II to explore the concepts of civil rights and liberties. This course also builds scholar collegiate research and writing skills: throughout the course, scholars research a topic of their choice, culminating in a major research paper due at the end of the year.

AP U.S. History

STANDARD YEAR: 11TH-12TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: AP WORLD HISTORY
EXTERNAL EXAM: AP US HISTORY EXAM

SEE COURSETEXTS, PAGE 22 →

In AP US History, scholars study the history of the United States in depth from its Pre-Columbian Origins to the present. This year-long survey course exposes scholars to all of the major historical events, individuals, developments, and themes essential for mastering American history. Important concepts and topics include: American ideals and ideologies; race, slavery, and equity; American capitalism; war, peace, and in between; the American presidency; and culture and counterculture. Scholars should enroll in this elective course if they are deeply interested in American history and want to build their existing historical thinking, speaking, reading, and writing skills. This course culminates in the AP US History exam.

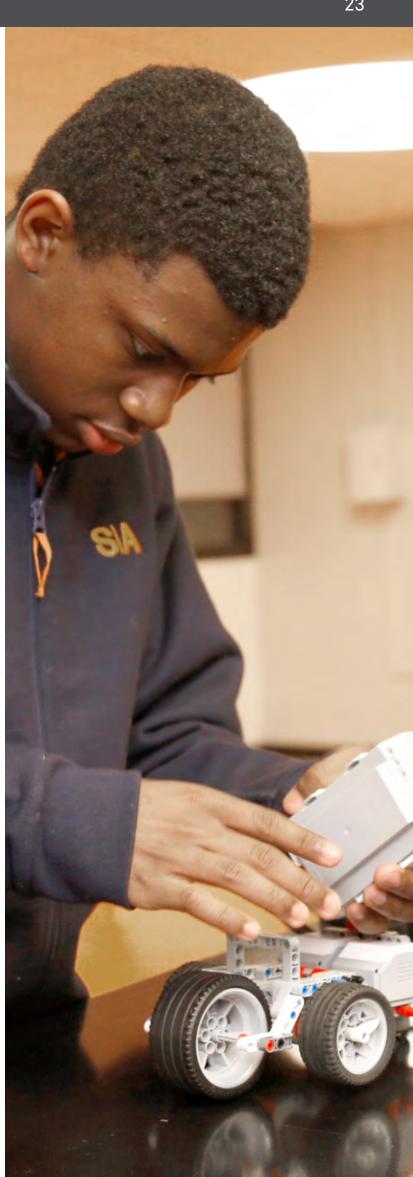


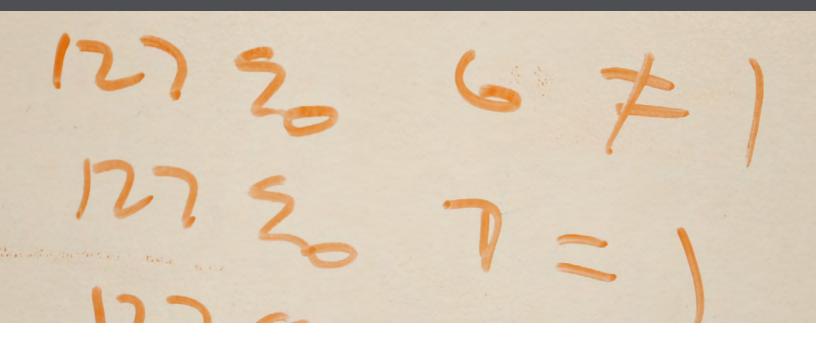
COURSE	SAMPLE COURSE TEXTS
Freshman Reading and Composition COURSE DESCRIPTION, PAGE 12 →	The Things They Carried by Tim O'Brien Go Tell It on the Mountain by James Baldwin Much Ado About Nothing by William Shakespeare The Odyssey by Homer Song of Solomon by Toni Morrison
Canonical Works of American Literature COURSE DESCRIPTION, PAGE 12 →	Selections from The Federalist Papers (James Madison, Alexander Hamilton, John Jay, et. al) "Letter from Birmingham Jail" by Martin Luther King, Jr. The Great Gatsby by F. Scott Fitzgerald The Narrative of the Life of Frederick Douglass by Frederick Douglass The Scarlet Letter by Nathaniel Hawthorne Their Eyes Were Watching God by Zora Neale Hurston
AP Literature: Canonical Works of Global Literature COURSE DESCRIPTION, PAGE 13 →	Frankenstein by Mary Shelley Candide by Voltaire Persepolis by Marjane Satrapi Othello by Shakespeare Love in the Time of Cholera by Gabriel García Márquez The Stranger by Albert Camus The Metamorphosis by Franz Kafka
Critical Perspectives in Literature COURSE DESCRIPTION, PAGE 13 →	A Vindication of the Rights of Woman by Mary Wollstonecraft Marxism and Literary Criticism by Terry Eagleton Renaissance Self-Fashioning by Stephen Greenblatt Orientalism by Edward Said Death of the Author by Roland Barthes The Ego and the Id by Sigmund Freud
Old, Middle, and Early Modern English Literature COURSE DESCRIPTION, PAGE 14→	Beowulf translated by Seamus Heaney Canterbury Tales by Geoffrey Chaucer Paradise Lost by John Milton Hamlet by William Shakespeare

COURSE	SAMPLE COURSE TEXTS
Creative Writing Workshop COURSE DESCRIPTION, PAGE 14 →	Fiction: Hills Like While Elephants by Ernest Hemingway The School by Donald Barthelme Interpreter of Maladies by Jhumpa Lahiri A Good Man is Hard to Find by Flannery O'Connor
	Poetry by: William Shakespeare William Carlos Williams Pablo Neruda Marianne Moore Frank O'Hara
Pre-Modern World History COURSE DESCRIPTION, PAGE 16 →	Little History of the World by E.H. Combrich A History of the World in 6 Glasses by Tom Standage Sapiens: A New History of the World by Noah Yuval Harari The Secret History of the Mongol Queens by Jack Weatherford
AP Modern World History COURSE DESCRIPTION, PAGE 16 →	When China Ruled the Seas by Louise Levathes 1493 for Young People by Charles C. Mann and Rebecca Stefoff King Leopold's Ghost by Adam Hochschild The Origins of the Modern World by Robert Marks
AP Art History COURSE DESCRIPTION, PAGE 17 →	The Story of Art by E.H. Gombrich Vermeer's Hat by Timothy Brook Culture and Imperialism by Edward Said
AP European History COURSE DESCRIPTION, PAGE 17 →	Four Princes by John Julius Norwich When the King Took Flight by Timothy Tackett Everyday Stalinism by Sheila Fitzpatrick
AP Macroeconomics COURSE DESCRIPTION, PAGE 18 →	Economics Through Everyday Life by Anthony Clark Naked Economics by Charles Wheelan The Big Short: Inside the Doomsday Machine by Michael Lewis
AP Microeconomics and Macroeconomics COURSE DESCRIPTION, PAGE 18 →	Naked Economics by Charles Wheelan

COURSE	SAMPLE COURSE TEXTS
U.S. History and Government COURSE DESCRIPTION, PAGE 19 →	A Very Short Introduction to American Political History by Donald T. Critchlow The New Jim Crow by Michelle Alexander
AP U.S. History COURSE DESCRIPTION, PAGE 19 →	American Nations by Colin Woodard Errand into the Wilderness by Perry Miller The Secret History of Wonder Woman by Jill Lepore

At Success Academy High School of the Liberal Arts, we are building the next generation of innovators in the STEM fields and beyond, which starts with a revolutionary mathematics and science program. To reach this end, our teachers are facilitators of inquirybased 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.





Mathematics

Empowering scholars as STEM innovators starts with a revolutionary mathematics program. 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. 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. Applications span public policy, economics, technology, and popular culture to build a key mindset: Mathematics is a powerful tool for analysis across disciplines.

All scholars take four years of Mathematics.

Course Title	Dept.	Credits	Year Required
Geometry	Math	1.0	9th
Algebra II	Math	1.0	10th
Advanced Algebra and Pre-Calculus	Math	1.0	-
Pre-Calculus	Math	1.0	11th
AP Calculus AB	Math	1.0	12th
AP Statistics	Math	1.0	12th

Geometry

STANDARD YEAR: 9TH GRADE COURSE TYPE: REQUIRED PREREQUISITE: N/A EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 28 →

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.

Algebra II

STANDARD YEAR: 10TH GRADE COURSE TYPE: REQUIRED PREREQUISITE: GEOMETRY EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 28 →

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 to answer their question.

Advanced Algebra and Pre-Calculus

STANDARD YEAR: 10TH GRADE

COURSE TYPE: ELECTIVE FOR SELECT SCHOLARS

IN THE TOP 10% OF THEIR MATH CLASS

PREREQUISITE: GEOMETRY

EXTERNAL EXAM: SAT II MATH LEVEL II EXAM

SEE COURSE TEXTS, PAGE 28 →

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, vectors and matrices, conic sections, and introductory limits, scholars prepare to matriculate into Calculus the following school year. Throughout the course, scholars deepen their understanding of the mathematics they have learned by exploring various real-world applications, such as modeling tsunamis with periodic functions, tracking the path of a satellite with conic sections, and using matrices to understand why local newspapers are running out of business.

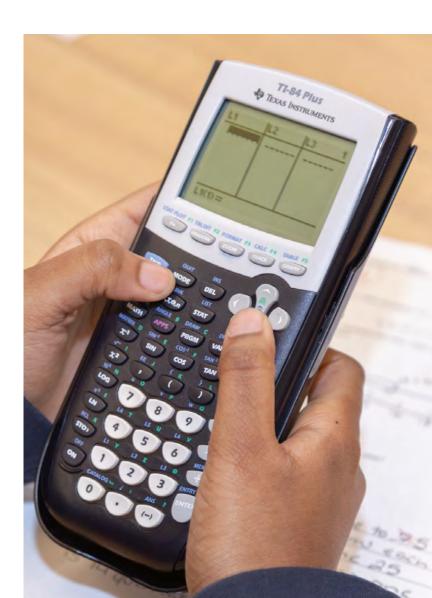
Pre-Calculus

STANDARD YEAR: 11TH GRADE COURSE TYPE: REQUIRED PREREQUISITE: ALGEBRA II

EXTERNAL EXAM: SAT II MATH LEVEL II EXAM

SEE COURSETEXTS, PAGE 28 →

In Pre-Calculus, 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. Throughout the course, scholars explore real-world applications of each topic and understand their value through investigations in engineering and mechanics, including encryption, planetary orbits, and graphic design.



AP Calculus AB

STANDARD YEAR: 12TH GRADE COURSE TYPE: REQUIRED

PREREQUISITE: PRE-CALCULUS OR ADVANCED

ALGEBRA & PRE-CALCULUS

EXTERNAL EXAM: AP CALCULUS AB EXAM

SEE COURSE TEXTS, PAGE 28 →

AP Calculus AB builds on scholars' knowledge of precalculus concepts by taking them into the world of change and dynamic processes. This begins by taking a deep dive into the essential topics of limits, infinity, the infinitesimally small, and the very nature of continuity. Once that groundwork has been covered, scholars learn about instantaneous rates of change and how to use derivatives to model and reason with dynamic processes found in economics, biology, physics, and engineering. Scholars then begin their exploration of integral calculus and learn that integrals can, in effect, undo differentiation by way of the fundamental theorem of calculus. Finally, scholars will learn about differential equations and their essential role in modeling virtually every mathematical formula for real-world phenomena.

AP Statistics

STANDARD YEAR: 11TH-12TH GRADE

COURSE TYPE: ELECTIVE PREREQUISITE: ALGEBRA II OR

ADVANCED ALGEBRA

EXTERNAL EXAM: AP STATISTICS EXAM

AP Statistics is equivalent to a onesemester, 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 explore four main themes in the AP Statistics course: data, sampling and experimentation, anticipating patterns, and making statistical inference through tasks and projects aimed at real-world applications. In these explorations, scholars will utilize common industry technology, such as RStudio and Tableau.

COURSE	REFERENCE TEXT
Geometry COURSE DESCRIPTION, PAGE 25 →	Discovering Geometry by Michael Serra
Algebra II course description, page 25 →	Algebra & Trigonometry by Ron Larson
Advanced Algebra and Pre-Calculus COURSE DESCRIPTION, PAGE 26 →	Algebra & Trigonometry by Ron Larson
Pre-Calculus COURSE DESCRIPTION, PAGE 26 →	Precalculus - Mathematics for Calculus by James Stuart
AP Calculus AB COURSE DESCRIPTION, PAGE 27 →	Calculus by James Stewart

Science

Our core 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 sophomore year, scholars engage in college-level science content in AP courses. All scholars take four years of Science.



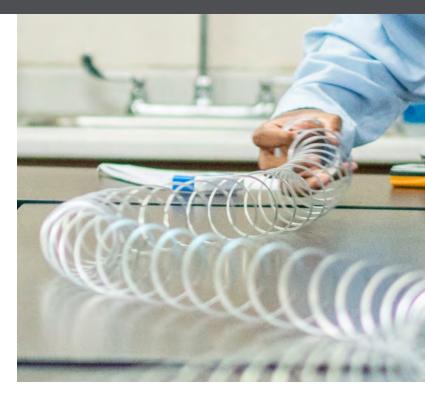
Course Title	Dept.	Credits	Year Required
Principles of Biology	Science	1.0	9th
Principles of Physics	Science	1.0	10th
Principles of Chemistry	Science	1.0	11th
AP Biology	Science	1.0	-
AP Chemistry	Science	1.0	-
AP Physics C (at Columbia University)	Science	1.0	-

Principles of Biology

STANDARD YEAR: 9TH GRADE COURSE TYPE: REQUIRED PREREQUISITE: N/A EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 33 →

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 will be the framework that sets scholars up for higher-level life science courses. The course focuses on enduring, conceptual understandings and the content that supports them. Scholars 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. Scholars will develop fluency within the science practices necessary for success in higher-level courses: a plan for collecting data, analyzing data, applying mathematical routines, and justifying arguments using evidence.



Principles of Physics

STANDARD YEAR: 10TH GRADE COURSE TYPE: REQUIRED PREREQUISITE: GEOMETRY AND/OR CONCURRENT W/GEOMETRY

EXTERNAL EXAM: NONE

Physics is the study of the basic laws of our universe, from the vibration of atoms to the orbits of planets, from everyday motion to the current in electric circuits. The goal of this course is to provide an understanding of the various ways in which physics phenomena are modeled. In doing so, scholars come to appreciate how knowledge of physics is necessary for safe and practical engineering applications. The scope of this course covers Newtonian Mechanics and the start of Electricity and Circuits. The course will culminate in a rigorous end-of-year internal assessment, which will not count toward graduation exam requirements. This course is intended to serve as a foundation for further study in AP Physics 1 or AP Physics C.

Principles of Chemistry

STANDARD YEAR: 11TH GRADE COURSE TYPE: REQUIRED

PREREQUISITE: PRINCIPLES OF BIOLOGY,

GEOMETRY AND/OR CONCURRENT W/GEOMETRY

EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 33 →

Chemistry is the study of matter and the changes that matter undergoes. This course focuses on key 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. Scholars will learn about the basic building blocks of matter through hands-on experimentation and in-class demonstrations, exploring the intimate connection between matter and energy and the role of energy and heat in chemical reactions.

The course culminates in an examination of contemporary research topics, including nanochemistry, environmental engineering, and photonics.

AP Biology

STANDARD YEAR: 10TH-12TH GRADE

COURSE TYPE: ELECTIVE

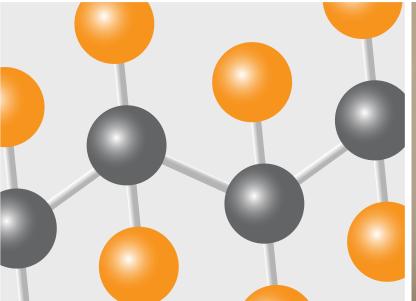
PREREQUISITE: PRINCIPLES OF BIOLOGY, PRINCIPLES OF CHEMISTRY (OR CONCURRENT

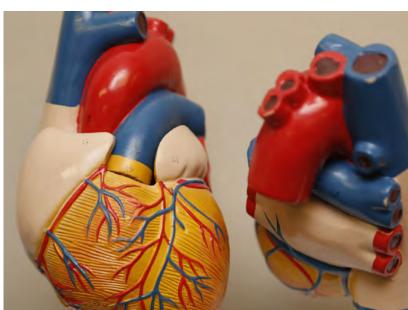
ENROLLMENT)

EXTERNAL EXAM: AP BIOLOGY EXAM

SEE COURSE TEXTS, PAGE 33 →

AP Biology delves deeper into the foundation laid in scholars' ninthgrade 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 learn 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 and strategy with their 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.







AP Chemistry

STANDARD YEAR: 10TH-12TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: PRINCIPLES OF CHEMISTRY, ALGEBRA II

EXTERNAL EXAM: AP CHEMISTRY EXAM

SEE COURSE TEXTS, PAGE 33 →

The AP Chemistry course provides scholars with a college-level foundation to support future advanced coursework in chemistry. Scholars 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.

AP Physics C in partnership with Columbia University

SP11HAC

STANDARD YEAR: 11TH OR 12TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: AP CALCULUS AB OR CO-ENROLLED IN AP CALCULUS AB

EXTERNAL EXAM: NONE

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.

COURSE	COURSE TEXTS
Principles of Biology	Required Reading:
COURSE DESCRIPTION, PAGE 30 →	Survival of the Sickest by Dr. Sharon Moalem
	Reference Text:
	Campbell Biology, 11th Edition
Principles of Chemistry	Required Reading:
COURSE DESCRIPTION, PAGE 31 →	The Pleasure of Finding Things Out by Richard Feynman
	Salt Sugar Fat: How the Food Giants Hooked Us
	by Michael Moss Reference Text:
	Chemistry: The Central Science, 14th Edition
AP Biology	Required Reading: Scholar Choice
COURSE DESCRIPTION, PAGE 31 →	Brain on Fire: My Month of Madness by Susannah Cahalan
	The Sixth Extinction by Elizabeth Kolbert
	The Tangled Tree: A Radical New History of Life by David Quammen
	The Hot Zone: The Terrifying True Story of the Origins of the Ebola Virus by Richard Preston
	The Immortal Life of Henrietta Lacks by Rebecca Skloot
	The Emperor of All Maladies: A Biography of Cancer by Sodhartha Mukherjee
	Spillover: Animal Infections and the Next Human Pandemic by Dacid Quammen
	Bad Blood: Secrets and Lies in a Silicon Valley Startup by John Carreyrou
	Lab Girl by Hope Jahren
	Your Inner Fish: A Journey into the 3.5-Billion-Year History of the Human Body by Neil Shubin
	Reference Text:
	Campbell Biology, 13th Edition
AP Chemistry	Required Reading:
COURSE DESCRIPTION, PAGE 32 →	Culinary Reactions: The Everyday Chemistry of Cooking by Simon Quellen
	Field Reference Text:
	Chemistry and Chemical Reactivity, 10th Edition

STEM Academy Curriculum

The STEM Academies are selective programs that have been designed for scholars who are passionate about STEM and want to delve into specialized, college-level study while still in high school. The Engineering Academy is a two-year program, progressing through a sequence of four semester-long rotations in Environmental Engineering, Biomedical Engineering, Electrical Engineering, and Mechanical Engineering in grades 11 and 12. After completing the four survey courses, scholars are equipped with the foundation and knowledge to choose the engineering discipline in college. The Pre-Med Academy is a three-year program that progresses through Pathophysiology, Microbiology, Genetics, Immunology, and Bioethics, and culminates in a senior-year capstone project in which scholars conduct independent, college-level research into a topic of their choosing. Scholars who have

completed Pre-Med Academy will be set up for success for the rigorous pre-med college track.

Select scholars may apply to take Engineering and Pre-Medicine courses within the STEM Academy. To graduate within the STEM Academy, scholars must complete two or more Engineering and Pre-Medicine courses. Select scholars are also eligible to apply and take advanced undergraduate courses at Columbia University.

Course Title	Dept.	Credits	Year Required
Mechanical and Electrical Engineering	Science	1.0	-
Biomedical and Environmental Engineering	Science	1.0	-
Pathophysiology and Medical Microbiology	Science	1.0	-
Genetics/Immunology/ Modern Medicine/Bioethics	Science	1.0	-
STEM Academy Senior Capstone	Science	1.0	-



Mechanical Engineering and Electrical Engineering

STANDARD YEAR: 11TH GRADE COURSE TYPE: ELECTIVE PREREQUISITE: ALGEBRA 2 & PRINCIPLES OF PHYSICS EXTERNAL EXAM: NONE

Semester 1 - The Electrical Engineering course seeks to provide scholars with an understanding of the engineering principles and abstractions on which the design of electronic systems is based. The course will introduce scholars to basic electrical concepts and practices, as well as the fundamentals of computational problem solving. Digital electronic systems based on these concepts are introduced to equip scholars with the intuitive, mathematical, and practical skills needed to design, build, and test electronic devices. Scholars also learn how to use microcontrollers to control, modify, and analyze circuits using basic computer programs, exercised with hands-on applications and project experiences in a wide range of areas. They will learn the engineering principles and decisionmaking strategies necessary for the design and implementation of electronic devices that meet real world challenges. Through this course, scholars will appreciate that the fabric of the digital age is shaped by innovations in electronics.

Semester 2 - The Mechanical Engineering course will build on scholar understanding of fundamental concepts from physics to provide a study of how mechanical devices (i.e. tools, engines, machines) work and how they are conceived, developed, and utilized. Scholars will realize how the principles and skills of mechanical engineering one of the broadest and most versatile of engineering fields are involved at various stages during the conception, design, and construction of every human-made object with moving parts. Scholars will learn from the hands-on experiences of taking things apart mentally and physically, drawing (sketching, 3D CAD) what they envision and observe. They will work with 3D printers and CAD software for engineering design, analysis, and modeling of mechanical concepts and devices, with an emphasis on problem-solving as opposed to programming or algorithmic development. Scholars will gain an appreciation for the role played by mechanical engineering in various cutting-edge technologies, from robotics and self-driving cars to renewable and efficient energy sources. The course will culminate in a robotics design challenge that simulates the way mechanical engineers address the diverse and rapidly changing technological challenges that society faces.

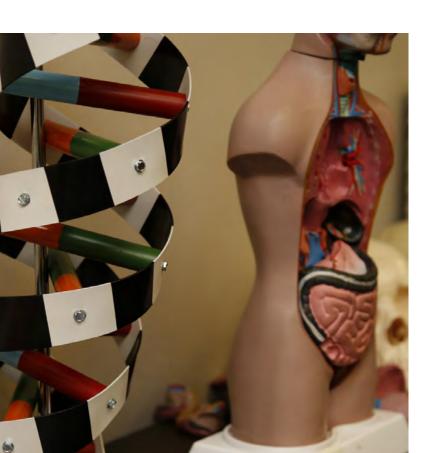
Pathophysiology and Medical Microbiology

STANDARD YEAR: 10TH GRADE COURSE TYPE: ELECTIVE

PREREQUISITE: PRINCIPLES OF BIOLOGY

EXTERNAL EXAM: NONE SEE COURSE TEXTS, PAGE 38 →

The first half of this course is an in-depth study of the structure and function of the human body and the integration of the human body systems through pathophysiology. Scholars should be interested in a science career path, and are expected to learn an abundance of scientific terminology and complete a rigorous laboratory program that includes dissections. The second half of the year will take an in-depth look at diseases, how they are diagnosed, and how scientists manipulate genes to help them. Scholars will learn college-level lab techniques involving growing and identifying bacteria and viruses, designing their own labs, and learning about current research in this field.



Genetics/Immunology/Modern Medicine/Bioethics (Not offered in SY 2020/21)

STANDARD YEAR: 11TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: PATHOPHYSIOLOGY &

MEDICAL MICROBIOLOGY EXTERNAL EXAM: NONE

The first half of this course covers foundational concepts in immunology and genetics. Scholars gain the basis for understanding a broad range of medical conditions and focus on principles important for understanding immunological responses. They explore the rapidly evolving field of genomics and genomic technologies that are changing the way many diseases are diagnosed and treated. The second half of the course focuses on the foundations of bioethics: the theories, experiences, science, social science, law, and communities that have influenced this field of inquiry. A deep dive into these philosophical approaches leads with an exploration of the nature and meaning of moral inquiry as it relates to the life sciences and continues by connecting these introductory understandings to emerging advances in biology and medicine.

STEM Academy Senior Capstone (Not offered in SY 2020/21)

STANDARD YEAR: 12TH GRADE COURSE TYPE: ELECTIVE

PREREQUISITE: SUCCESSFUL COMPLETION

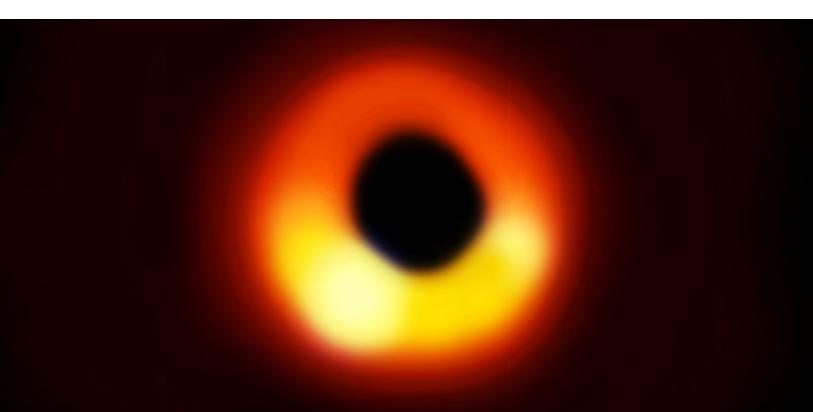
OF 2 STEM ACADEMY COURSES.

EXTERNAL EXAM: NONE

Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." Physical, mathematical, and conceptual models describe this vast body of changing and increasing knowledge. Scholars should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable. Scholars dive deep into self-chosen projects in advanced sciences to complete a rigorous self-driven project. Scholars implement concepts from biology, chemistry, and physics, chosen from over 21 categories of study that they are interested in. They design their own experiments, collect data, and analyze this data to present their findings. These projects are showcased, presented, and ultimately entered into competitions against other projects at the local, state, and national level. Scholars should have an interest in upper level lab work and should be problem solvers, detail oriented, and self-disciplined.

Courses within the STEM Academy do not fulfill the four core science courses required for graduation.

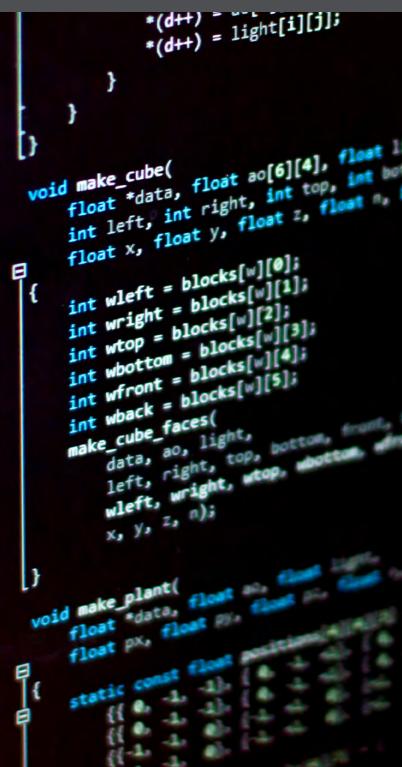
BELOWFirst ever image of black hole. M87 Galaxy, Event Horizon Telescope, 2019



COURSE	COURSETEXTS
Pathophysiology and Medical Microbiology COURSE DESCRIPTION, PAGE 36 →	Required Reading: Scholar Choice Microbe Hunters by Paul De Kruif Brain on Fire: My Month of Madness by Susannah Cahalan The Hot Zone: The Terrifying True Story of the Origins of the Ebola Virus by Richard Person The Immortal Life of Henrietta Lacks by Rebecca Skloot The Emperor of All Maladies: A Biography of Cancer by Siddhartha Mukherjee Spillover: Animal Infections and the Next Human Pandemic by Dacid Quammen Bad Blood: Secrets and Lies in a Silicon Valley Startup by John Carreyrou
	Human Errors: A Panorama of Our Glitches, From Pointless Bones to Broke Genes by Nathan Lents

Computer Science

Our computer science program pushes scholars to reject being simply users of technology and to 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 not only learn programming languages and platforms, but also how to use these tools in meaningful ways that improve quality of life while creating beautiful digital experiences. Computer Science electives are open to all scholars in grades 9–12.



Course Title	Dept.	Credits	Year Required
Introduction to Computer Science	Computer Science	1.0	-
Introduction to Data Science	Computer Science	1.0	-
Back-end Web Development: Flask	Computer Science	1.0	-
Machine Learning and Advanced Al	Computer Science	1.0	-

Introduction to Computer Science

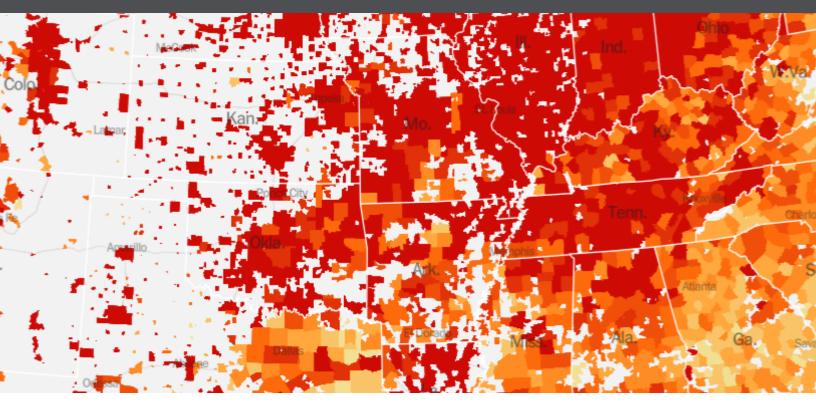
STANDARD YEAR: 9TH-12TH GRADES

COURSE TYPE: ELECTIVE PREREQUISITE: NONE EXTERNAL EXAM: NONE

This course introduces scholars to the fundamentals of programming and serves as their entry point into modern web development. In the first half of the course, scholars gain a basic understanding of the world wide web — how it operates and how information is shared and transferred over the internet. Scholars then move on to HTML and CSS, and create and design their own webpages. The first half of the course ends with an introduction to JavaScript, the programming language of the web. Scholars learn key programming concepts such as variables, arrays, loops, and functions.

In the second half of the course, scholars are introduced to more advanced programming and front-end development concepts such as API calls, DOM manipulation, and object-oriented programming. This allows scholars to add interactivity to their webpages. Finally, scholars are introduced to React.js, one of the most popular front-end frameworks. Scholars learn React fundamentals such as components, props, and state and event handlers, which will give them the foundations to pursue more advanced front-end development in the future. The course includes live code-alongs and weekly coding exercises with assignments that assess a scholar's programming skills. Midterm and final projects allow scholars to design their own interactive websites using the knowledge they've gained from the course.





Introduction to Data Science

STANDARD YEAR: 10TH-12TH GRADES

COURSE TYPE: ELECTIVE

PREREQUISITE: INTRODUCTION TO COMPUTER SCIENCE OR EQUIVALENT; CO-ENROLLMENT IN STATISTICS PREFERRED BUT NOT REQUIRED

EXTERNAL EXAM: NONE

The second year in computer science builds on the programming topics covered in Introduction to Computer Science and serves as the basis for scholar's introduction to Python. The first half of the course is a refresher of programming concepts learned in the introductory course, as well an introduction to the fundamentals of Python programming. In addition, scholars learn more advanced programming tools and techniques such as reading and writing data to a file, implementing multidimensional arrays, and lambda functions. This serves as the foundation for the second half of the course, which introduces scholars to data science.

In the second semester of the course, scholars are introduced to core data

science concepts such as data analysis, collection, and filtering. The second half also introduces scholars to the foundations of machine learning with an emphasis placed on predictive algorithms. Scholars will learn to create predictive models to make important decisions and to evaluate the accuracy of these models. Topics include: Linear Regression, K-Nearest Neighbors, Decision Trees, Random Forests, and some basic theory in statistics. Daily tasks include live code-alongs and weekly coding exercises to assess the scholar's skills. Midterm and final projects will have scholars analyze real world datasets and implement their own machine learning models. By the end of this course, scholars should leave with a deep appreciation of the role that big data plays in our daily lives.

Back-end Web Development: Flask

STANDARD YEAR: 10TH-12TH GRADES

COURSE TYPE: ELECTIVE

PREREQUISITE: INTRODUCTION TO COMPUTER

SCIENCE OR EQUIVALENT EXTERNAL EXAM: NONE

In Introduction to Computer Science, scholars learned front-end development, which focuses on the user-facing aspect of web development. This yearlong course will directly complement that knowledge and give scholars the tools needed to make a robust backend for their web sites. Scholars will gain an understanding of what goes on "under the hood" of modern websites, i.e. how and where data is stored, how user information is authenticated, and how to prevent third parties from hacking a website and acquiring sensitive information. Scholars will focus on dynamic server-side programming using the micro framework Flask. Topics covered include databases, authentication, encryption, dynamic content generation, and app development. Scholars also learn about the Model View Controller (MVC) design pattern for making modern web pages. By the end of this course, scholars will be more well-rounded developers with knowledge in all facets of modern web development. Daily tasks include live code-alongs and coding exercises with assignments and projects that assess a scholar's knowledge of the course.

Machine Learning and Advanced Al

STANDARD YEAR: 11TH-12TH GRADE

COURSE TYPE: ELECTIVE

PREREQUISITE: INTRODUCTION TO

DATA SCIENCE

EXTERNAL EXAM: NONE

This course builds on the topics scholars covered in Introduction to Data Science and covers in more depth machine learning concepts such as supervised and unsupervised learning as well as neural nets, and the ethical issues surrounding them. Scholars go deeper into the math behind clustering algorithms such as K Means and predictive models such as Decision Trees and SVC. The course includes code-alongs in every class and weekly coding labs. Midterm and final projects allow scholars to make their own predictive models by writing their own algorithms or modifying existing ones.

The Arts

The Success Academy High School Arts department is committed to cultivating the creative talents that our scholars possess. Our teachers are content experts who challenge scholars to be expressive, confident pioneers. Ultimately, scholars learn to question, interpret, and appreciate works of visual,

musical, and dramatic art by studying selected masterpieces and/or producing original pieces. Scholars can choose to hone these skills by exploring the expansive list of disciplines within the Arts department.

Visual Arts

Course Title	Dept.	Credits	Year Required
Visual Arts 100: Studio Arts	Arts	1.0	-
Visual Arts 200: Art in Theater	Arts	1.0	-
Visual Arts 401: Artist Apprenticeship	Arts	1.0	-
Filmmaking 100: Film Theory and Production	Arts	1.0	-
Photography 100: Digital Photography	Arts	1.0	-
Photography 101: Contemporary Photojournalism	Arts	1.0	-
Photography 200: Digital Imaging	Arts	1.0	-
Photography 400: Conceptual Imaging	Arts	1.0	-

Visual Arts 100: Studio Arts

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

Scholars learn the basics of 2D art in this introductory course by exploring drawing, printmaking, painting, and collage. They gain an understanding of the elements of art and principles of design in the process. Most projects are independent in nature with one to two group projects per year. Work from this course is featured in a Winter and Spring Art Exhibition.

Visual Arts 200: Art in Theater

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: VISUAL ARTS 100

This intermediate course is for scholars who love the theater and art. Scholars in this course will create props, costume accessories, and set elements for all of the high school's mainstage productions. Scholars learn how to transform the face and body using special fx makeup techniques, design and hand/machine sew costumes, and use faux finishing techniques to transform the stage set. Scholars work as a team for each major event including the fall play, spring musical and various stage productions throughout the school year.

Visual Arts 401: Artist Apprenticeship

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: VISUAL ARTS 200 OR

TEACHER PERMISSION

This is an independent, advanced art course for the serious artist interested in pursuing a future degree in visual arts. Interested scholars must demonstrate independent work habits by working during and after school hours and collaborating with the instructor on a weekly or daily basis for critiques and conferences. Over the year, scholars will complete 12 high-quality pieces for their portfolio. Scholars must also complete 12 outside art hours per year by attending art workshops and/or art related programs at local galleries and museums.



Filmmaking 100: Film Theory and Production

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

In this introductory course, scholars learn the basic components of film production as a foundation for developing an understanding of film theory. Scholars learn basic story structure and character development, as well as basic camera functions, shot types, composition, and framing. Scholars experience the hands-on skills that coincide with each film element they analyze in class. At the end of the year, scholars produce their own documentary on a topic of their choosing.



COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

This is an introductory course where scholars learn the basics of digital photography. Scholars learn compositional elements, fundamental manual camera functions, and basic lighting techniques, and participate in two photography exhibitions. Essential concepts of photography — including frame, focus, depth-of-field, vantage point, lighting, and gaze — are presented as tools that can be used to make photographs with a high degree of control and self expression. Scholars learn the foundations of digital editing and develop a basic vocabulary for discussing photographs during seminars and critiques. Scholars develop this introductory visual and analytical language through readings, research, demonstrations, and exercises.



Photography 101: Contemporary Photojournalism

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

In this introductory course, scholars learn the basics of digital photography with a special emphasis on storytelling. Using images to communicate the news, photojournalism has shaped the way we view and interpret the world since the mid-19th century. While photojournalism has largely shifted from print to digital, photojournalists are adapting, using innovative technology and outlets to continue telling the important stories of contemporary society. Scholars learn compositional elements, fundamental manual camera functions, and basic lighting techniques, and participate in two photography exhibitions. Essential concepts of photography including frame, focus, depth-of-field, vantage point, lighting, and gaze will be presented as tools that can be

used to make photographs with a high degree of control and communicative power. Scholars learn the foundations of digital editing and develop a basic vocabulary for discussing photographs during seminars and critiques.

Photography 200: Digital Imaging

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: PHOTOGRAPHY 100 OR 101

In this intermediate course, scholars expand on the basics of photography. Scholars review compositional elements and fundamental manual camera functions while learning complex lighting techniques. Scholars learn intricate digital editing methods and fine-tune their vocabulary for discussing photographs during seminars and critiques. Scholars develop this intermediate visual and analytical language through readings, research, demonstrations, and exercises. Scholars more deeply consider what they want to express through their photographs. The course also requires participation in two photography exhibitions.

Photography 400: Conceptual Imaging

COURSE TYPE: ELECTIVE OR ART **PREREQUISITE:** PHOTOGRAPHY 200

In this advanced course, scholars expand upon the skills acquired in Digital Imaging. Scholars learn in-depth lighting techniques with professional studio equipment. Scholars learn more complex digital editing methods and fine-tune their vocabulary for discussing photographs during seminars and critiques. Scholars more deeply consider what they want to express through their photographs. As this is an advanced photography course, engaged and in-depth dialogue investigating course topics in relation to individual scholarly work and studio practice is expected. There will be regular readings, demonstrations, and exercises intended to benefit the progression of varied and singular bodies of work, and scholars may approach course assignments using any photo-making method of their choice. The course also requires participation in two photography exhibitions.



Chess

Course Title	Dept.	Credits	Year Required
Chess 100: Essentials of Play	Arts	1.0	-
Chess 200: Advanced Opening Theory	Arts	1.0	-
Chess 400: Aspiring Grandmasters	Arts	1.0	-

Chess 100: Essentials of Play

COURSE TYPE: ELECTIVE PREREQUISITE: NONE

In this course for non-competitive chess players, scholars learn basic tools and principles for all parts of the game. Scholars explore basic endgame, opening, and middlegame techniques and have many opportunities for hands-on practice during matches and tournaments with their peers.

Chess 200: Advanced Opening Theory

COURSE TYPE: ELECTIVE

PREREQUISITE: CHESS 100, TEACHER PERMISSION,

OR USCF RATING OVER 500

This course is focused on the study of openings. A strong opening knowledge is essential to being confident in every game of chess. Scholars will discuss many variations and lines and will have hands-on opportunities to practice their new weapons. Scholars delve into openings for both colors, and will leave the course with a complete opening repertoire and renewed excitement for beginning a game of chess.

Chess 400: Aspiring Grandmasters

COURSE TYPE: ELECTIVE

PREREQUISITE: CHESS 200, TEACHER PERMISSION,

OR USCF RATING OVER 1000

In this advanced course for competitive players, scholars learn to retrain how they think on given positions. Inquiry-based analysis of high-level games and concepts will deepen the scholar's understanding of the game. Topics such as gambits, compensation, the art of attacking, and endgame theory are addressed. Scholars participate in regular tournament-style competitions as well.



Music

Course Title	Dept.	Credits	Year Required
Choir 100: Mixed Chorus	Arts	1.0	-
Choir 101: Treble Choir	Arts	1.0	-
Choir 300: Bel Canto	Arts	1.0	-
Choir 400: Chamber Chorale	Arts	1.0	-
Music 100: Concert Band	Arts	1.0	-
Music 101: Pep Band	Arts	1.0	-
Music 200: Symphonic Winds	Arts	1.0	-
Music 400: Jazz Band	Arts	1.0	-

Choir 100: Mixed Chorus

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: NONE

Beginner-level performance courses are open to all scholars who wish to learn how to use and develop their singing voices. Skills taught include reading notated music, developing aural skills, creating and composing music for voice, utilizing proper tone quality, and maintaining breath management, among other aspects of vocal technique. Participation in two concerts plus other special programs is required. If a scholar is interested in continuing on the choir track for their high school career, they may advance to Bel Canto or Chorale after completion

of this course.

Choir 101: Treble Choir

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

Beginner-level performance courses are open to all scholars who wish to learn how to use and develop their singing voices. Skills taught include reading notated music, developing aural skills, creating and composing music for voice, utilizing proper tone quality, and maintaining breath management, among other aspects of vocal technique. Participation in two concerts plus other special programs is required. If a scholar is interested in continuing on the choir track for their high school career, they may advance to Bel Canto or Chorale after completion of this course.

Choir 300: Bel Canto

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: CHOIR 100 OR TEACHER PERMISSION

This audition-based, intermediate-level performance course is open to scholars who have completed Mixed Chorus or Treble Choir, or have adequate previous ensemble experience. Advanced levels of sight-reading, pitch memory, basic music notation, proper tone quality, breath management, and interval recognition are continued from previous chorus courses. Participation in two concerts plus other special programs is required. This course may be repeated for additional credits.



Choir 400: Chamber Chorale

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: CHOIR 300 OR TEACHER PERMISSION

This audition-based, intermediate-level performance course is open to scholars who have completed Mixed Chorus or Treble Choir, or have adequate previous ensemble experience. Advanced levels of sight-reading, pitch memory, basic music notation, proper tone quality, breath management, and interval recognition are continued from previous chorus courses. Participation in two concerts plus other special programs is required. This course may be repeated for additional credits.

Music 100: Concert Band

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

Open to all scholars. The course covers the foundations of music theory, history, and analysis of music since 1900, including a performance requirement on an instrument of your choice. Scholars survey the basics of keyboard, guitar, bass, wind, or percussion instrument of their choice. Fluency in reading music is expected by the end of the course. This course may be repeated for additional elective or arts credit.

Music 101: Pep Band

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

Open to all scholars interested in playing a wind or percussion instrument. Ability to read music is suggested, but no prior experience reading music or playing an instrument is required. Pep Band members study music through the performance of band music arrangements of popular music. Members are expected to perform at school and community events. This course may be repeated for additional elective or arts credit.

Music 200: Symphonic Winds

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: MUSIC 100, 101, 200 OR TEACHER PERMISSION

Open to select scholars who have previous experience playing a wind or percussion instrument in a concert band setting. Scholars must be comfortable reading musical notation on their instrument. The Success Symphonic Winds study music of the wind band medium through performance of staple pieces in the genre as well as new compositions by living composers. Members develop advanced aural skills and enrich their understanding of music theory and history through performance. This course may be repeated for additional elective or arts credit, and does not need to be taken in sequence.

Music 400: Jazz Band

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: MUSIC 300 OR

TEACHER PERMISSION

Open to select scholars who have previous experience playing instruments, including but not limited to saxophone, trumpet, trombone, drums, guitar, piano, bass, or vocals. The ability to read music fluently is essential. A survey of jazz history and theory will be included in the course, in addition to multiple performance requirements throughout the year.





Theater

Course Title	Dept.	Credits	Year Required
Theater 100: Foundations in Theater	Arts	1.0	-
Theater 200: Techniques and Performance	Arts	1.0	-
Theater 300: Classical and Contemporary Styles	Arts	1.0	-
Theater 400: Scene Study and Auditions	Arts	1.0	-
Theater Technology 100: Introduction to Equipment	Arts	1.0	-
Theater Technology 200: Theater Systems	Arts	1.0	-
Theater Technology 400: Mainstage Productions	Arts	1.0	-

Theater 100: Foundations in Theater

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

In this introductory level course, scholars learn to unleash their imagination and build confidence through a series of improvisational, physical, and vocal acting exercises. Scholars will improve their stage presence, performance, communication, and collaboration skills through improvisation, devised theatre, ensemble work, scene study, and playwriting. This course will break the new actor out of their comfort zone and into a world of confidence.

Theater 200: Techniques and Performance

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: THEATER 100

This course is designed for scholars who are interested in taking exploration and development of their acting technique to the next level. Through the study of theatre history, scene study, character development, Stanislavski technique, and performance/critique, scholars will achieve knowledge of the theater world, be able to assess their own performance and that of their peers, and find their voice.



Theater 300: Classical and Contemporary Styles

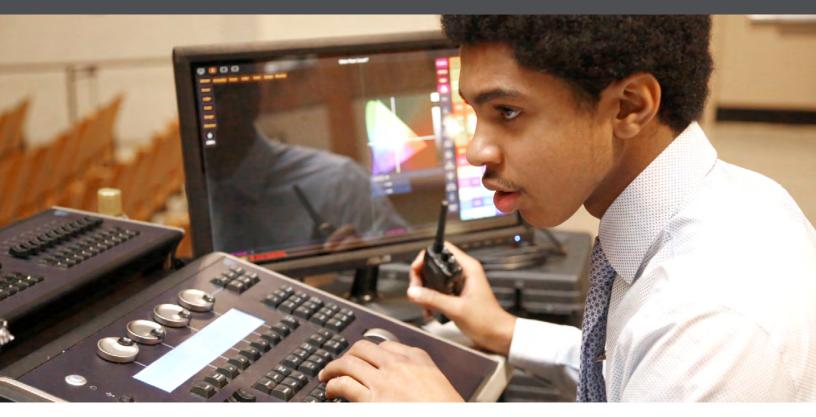
COURSE TYPE: ELECTIVE OR ART PREREQUISITE: THEATER 200

This course deepens the experience for the scholar actor by exploring the next steps of character development, advanced scene study through analyzing text and given circumstances, and sense memory. Stanislavski technique is continued throughout this course and is further developed in the scholar's independent practice. Introduction to Meisner technique is also applied in this course, as are performance critique and introduction to Shakespeare.

Theater 400: Scene Study and Auditions

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: THEATER 300

This advanced course is for the experienced actor who wants to pursue complex scene work and character development. Although not a requirement, this course is suitable for the actor who wishes to take their acting career to the college and/or professional level. In this course, scholars work on classical and contemporary work in a "workshop" setting while critiquing their performance and the performance of their peers. They receive critical feedback at a college level and implement it in their performance. Additionally, this course prepares the scholar actor for the audition world, covering audition technique and materials. Acting scholars also lend their point of view and creativity to staging and directing scenes from classic, modern, and developing plays culminating in an end of year showcase.



Theater Technology 100: Introduction to Equipment

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

Theater Tech 100 courses explore the world behind the stage: lighting, set, and more. This introductory course teaches scholars basic technical skills, different aspects of lighting, rigging, and fly system training. Scholars learn the components of the pre, post, and running phases of theatrical productions. Scholars also learn safety protocols for tools and equipment.

Theater Technology 200: Theater Systems

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: THEATER TECHNOLOGY 100

In this intermediate-level course, scholars delve deeper into lighting design and further develop their production skills. Scholars explore scenic design and build various set designs, including two-story buildings, and multi-level and rotating platforms. Scholars continue to build their technical skills from Theater Tech 100, and begin lighting plot design and audio board operation.

Theater Technology 400: Mainstage Productions

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: THEATER TECHNOLOGY 200 OR TEACHER PERMISSION

Advanced Theater Tech scholars design and build all school productions, including but not limited to the fall play, spring musical, music and dance productions, as well as special events. Scholars enrolled in the course are members of the Tech Crew and are expected to staff the school productions they have designed throughout the year.

Athletics

Course Title	Dept.	Credits	Year Required
Foundations in Fitness and Conditioning	Athletics	1.0	-
Yoga 100: Hatha Yoga	Athletics	1.0	-
Track 200: Sprints and Hurdles	Athletics	1.0	-
Track 300: Emerging Elite Track Team	Athletics	1.0	-
Track 400: Elite Track Team	Athletics	1.0	-
Basketball 100: Trusted Training	Athletics	1.0	-
Basketball 200: Skill Acquisition	Athletics	1.0	-
Basketball 400: Offensive and Defensive Schemes	Athletics	1.0	-

Foundations in Fitness and Conditioning

COURSE TYPE: ELECTIVE PREREQUISITE: NONE

This course is designed for scholars with limited or no previous fitness experience looking to get into better physical shape. Scholars focus on building body strength and muscle, while learning the different components of general fitness throughout the body. Exercises include running, weightlifting, high-intensity training, and flexibility building.

Yoga 100: Hatha Yoga

COURSE TYPE: ELECTIVE PREREQUISITE: NONE

This course focuses on postures that are practiced to align, strengthen, and promote flexibility in the body. This course is modeled after hatha yoga, which uses breathing techniques and meditation. Full-body relaxation and balance are the goals, as we make a full circuit of the body's range of motion with standing postures, twists, backbends, forward folds, and hip openers.

Track 200: Sprints and Hurdles

COURSE TYPE: ELECTIVE

PREREQUISITE: FOUNDATIONS IN

FITNESS & CONDITIONING OR TRACK 100

This course is designed for advanced athletes looking to improve their athletic ability and running across all sports. This course focuses mainly on hurdling to improve scholars' agility and athleticism.

Track 300: Emerging Elite Track Team

COURSE TYPE: ELECTIVE PREREQUISITE: TRACK 200 OR TEACHER PERMISSION

This course is designed for athletes who want to compete on the track team, but are unable to make an after-school commitment. Athletes train during the school day and are invited to compete at track meets on the weekend. This course is perfect for athletes who want to be on the team, but have other after-school obligations.

Track 400: Elite Track Team

COURSE TYPE: ELECTIVE PREREQUISITE: TRYOUTS OR TEACHER PERMISSION

This is a highly competitive course for athletes on the track team. Scholars enrolled in this course are members of the track team, and must be able to maintain the time commitment. This course meets daily during the last period of the day and extends into after-school programming. Scholars train off campus every Tuesday and Thursday, and attend frequent track meets on the weekends. Eligible scholars travel overnight to track meets around the country.





Basketball 100: Trusted Training

COURSE TYPE: ELECTIVE PREREQUISITE: NONE

In this introductory level course, scholars learn the fundamentals of ball handling, dribbling, basic shooting mechanics, and defensive tactics. Some units consist of conditioning, strength building, and body maintenance.

Basketball 200: Skill Acquisition

COURSE TYPE: ELECTIVE

PREREQUISITE: BASKETBALL 100

This course provides instruction and an opportunity to develop skills and knowledge through implementation of set plays, drills, and game play. Some units consist of conditioning, strength building, and body maintenance.

Basketball 400: Offensive and Defensive Schemes

COURSE TYPE: ELECTIVE

PREREQUISITE: BASKETBALL 200

This course provides instruction and an opportunity to develop advanced basketball skills and knowledge. Some units consist of conditioning, strength building, and body maintenance.

Dance

Course Title	Dept.	Credits	Year Required
Conservatory Dance 100: Theories of Dance	Athletics	1.0	-
Conservatory Dance 200: The American Tapestry	Athletics	1.0	-
Conservatory Dance 300: Performance Techniques	Athletics	1.0	-
Conservatory Dance 400: Advanced Composition	Athletics	1.0	-
Commercial Dance 100: Global Perspectives in Dance	Athletics	1.0	-
Commercial Dance 200: The African Diaspora	Athletics	1.0	-
Commercial Dance 300: Performance Techniques	Athletics	1.0	-
Commercial Dance 400: Advanced Composition	Athletics	1.0	-

Conservatory Dance 100: Theories of Dance

COURSE TYPE: ELECTIVE OR ART PREREQUISITE: NONE

This course explores the unique intersections and diversions among classical dance genres like Ballet, Modern, and Contemporary. Dancers learn fundamental barre and center work, proper body alignment, and classical terminology. By the end of the year scholars acquire grace, technique, discipline, flexibility, stamina, and endurance.

Conservatory Dance 200: The American Tapestry

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: CONSERVATORY DANCE 100

For the more experienced dancer who wishes to advance his/her ballet and modern technique. Scholars focus primarily on the choreographers that have created the backbone of American dance. Dancers focus on advancing their turns, jumps, choreography, and dance history, which will be showcased in two to three performances throughout the year. Emphasis is placed on flawless rehearsal etiquette and professional work ethic.









Conservatory Dance 300: Performance Techniques

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: CONSERVATORY DANCE 200

For the pre-professional dancer who plans to pursue professional training and performance opportunities. Rigorous high-level ballet training emphasizing strength, flexibility, technique, dance etiquette, and dance history, showcased in three to four performances throughout the year.

Conservatory Dance 400: Advanced Composition

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: CONSERVATORY DANCE 300

For the pre-professional dancer eager to utilize previous training to create and design their own choreographic work. Dancers pair composition exercises with rigorous technique courses to develop their own artistic voice. This course culminates in a senior capstone project that showcases scholar's skills and competencies acquired throughout their time in the HSLA Dance Program.

Commercial Dance 100: Global Perspectives in Dance

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: NONE

This course is designed for aspiring dancers with passion, creativity, and a desire to be challenged.

Courses include upper and lower body conditioning, rigorous warm-up, across the floor phrases, dynamic choreography, and studio performance. Scholars study a variety of genres from across the globe that use dance to celebrate culture and build athleticism, discipline, and artistry.

Commercial Dance 200: The African Diaspora

COURSE TYPE: ELECTIVE OR ART

PREREQUISITE: COMMERCIAL DANCE 100

This is an intermediate level course that dives deeper into the rigorous practice of dance forms derived from the African Diaspora. Dancers drill jumps, turns, and floorwork to increase their dance mastery. Scholars are expected to learn choreography at a faster pace, welcome teamwork, and quickly implement feedback for at least two culminating performances throughout the year.

Commercial Dance 300: Performance Techniques

COURSE TYPE: ELECTIVE OR ART **PREREQUISITE:** COMMERCIAL DANCE 200

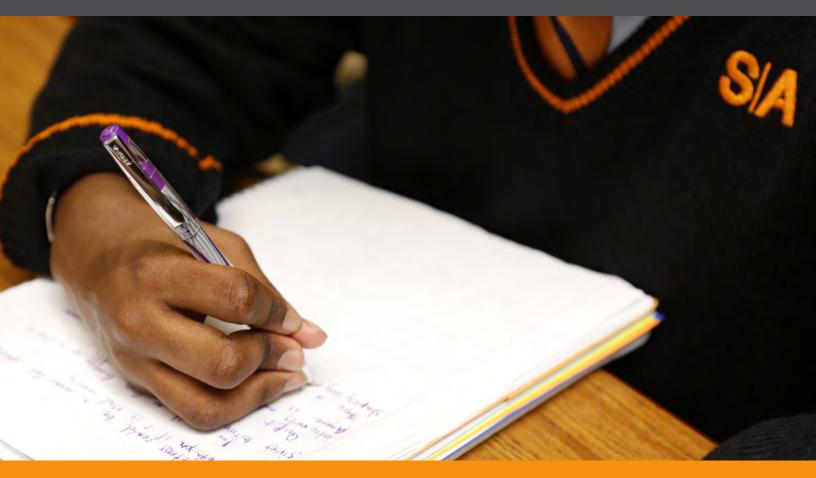
This is a pre-professional level course for dancers who are interested in auditioning and working professionally. Dancers use skills and techniques they have acquired throughout our dance program to access complex choreography and perform more confidently. This course builds on previous levels to master strength, flexibility, dance etiquette, and dance history, showcased in two to three performances throughout the year.

Commercial Dance 400: Advanced Composition

COURSE TYPE: ELECTIVE OR ART
PREREQUISITE: CONSERVATORY DANCE 300

For the pre-professional dancer eager to utilize previous training to create and design their own choreographic work. Dancers pair composition exercises with rigorous technique courses to develop their own artistic voice. This course culminates in a senior capstone project that showcases scholars' skills and competencies acquired throughout their time in the HSLA Dance Program.





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, researchbased 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.

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.

Afrobeats Dance Chess and Strategy Games Council on Scholar Affairs (COSA) Echo A Cappella Choir Film Appreciation Club Fine Line Art Club Finance Gaming & Design Gay-Straight Alliance Hawk Drumline **HSLA** Ambassadors **HSLA Mentors** Improv Troupe International Thespian Society Musical Theater National Arts Honor Society Naturally Me Oh Snap! Photography Club Ping Pong Club Playwriting Pre-Med Psychology RockHawks (Modern Pop Band) SA-NAN (No Adults Needed) Student Tutoring Sketch Comedy Crew Studio Squad Elite Photography Theater **Theater Tech Crew**

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.

Basketball
Chess
Conservatory Dance Company
Debate
OT3 Hip Hop Dance Team
Track & Field
PSAL Girls Basketball*
PSAL Girls Volleyball*

*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 scholars up 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 interestbased 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 expenses.



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

College Access & Persistence

HSLA puts a premium on college persistence and lifelong learning. To that end, we offer two key non-credit bearing courses focused on leadership development and SAT preparation, as well as a range of college counseling services.

Leadership Seminar

We know that intellectual preparation is not limited to mastery of advanced core subjects. In order to compete with their peers at selective colleges, our scholars must also graduate from high school with demonstrated mastery of the persistence skills needed to succeed in college and in their future professions. These persistence skills include, but are not limited to:

- Strategic mindset to make wellinformed decisions and to act intentionally to build "personal brand"
- Professional communication skills to self-advocate and speak persuasively

- Introspection and open-mindedness to constructively assess self and others
- Problem-solving abilities to find solutions in unstructured situations and to identify key resources
- •Strong leadership skills to work collaboratively on diverse teams

To intentionally develop these skills from the beginning of a scholar's high school education, we have developed a Leadership Seminar. All HSLA freshmen complete this course as preparation for the rest of their high school career.

SAT Preparation

In service of our college access and persistence goals, we are extremely proud to offer a suite of completely free SAT preparatory services including three seasons of SAT course work focused on maximizing each scholar's superscore. Additionally, we provide specialized SAT coaches focused on each scholar's growth areas. Scholars enroll in these courses as juniors and complete them at the end of their fall semester as seniors.



College Counseling Services

The College Access & Persistence
Team (the CAP team) at HSLA will work
closely with each scholar to find and
attend a college where they can
persist to graduation in four years.
Our goal is to match each scholar
to colleges and universities that have
high four-year graduation rates, meet
their family's financial needs, and offer
the intellectual environment that will
launch them successfully toward their
careers and independent adult lives.

This is an incredible resource that we are very proud to offer, especially in an inequitable higher education system where fewer than 10% of colleges have four-year graduation rates of 50% or higher. Though the average college counselor to scholar ratio nationwide is nearly 500 scholars to one counselor, at HSLA, we are fortunate to maintain a ratio of 60 scholars to one counselor, which is critical to our excellent outcomes.

Our college counseling services rival, and often surpass, the counseling offered at elite independent schools. We will:

- Prescriptively advise on the best list of colleges where scholars can apply to maximize their successful graduation and financial outcomes;
- •Support comprehensively through financial aid applications;
- Provide extensive edits on all college application writing, including scholarships;
- Coach scholars through college interviews;

- •Ensure that faculty and counselor recommendation letters are high quality, reflecting our scholars' performance in and out of our school community;
- Advocate on our scholars' behalf with admissions and financial aid officers:
- •Reach out to alumni in college to keep in touch and provide periodic guidance.

The vast majority of scholars who work with us take complete ownership over their college process by meeting their deadlines, proactively reaching out to their college counselors, and communicating professionally and graciously. These scholars will receive the full level of service outlined above. Scholars will formally begin the counseling process during 11th grade, but are encouraged to meet with the College team at any time.

If a scholar fails to meet a deadline, repeatedly misses scheduled meetings, or otherwise demonstrates a lack of investment in their college process, they will be placed on College Counseling Hold. Scholars on College Counseling Hold are not eligible for CAP support until an in-person meeting between the scholar, parent, and the Dean of Students is held. This policy exists to protect the scholars who have shown high commitment to their college process by prioritizing the College team's time and resources.

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.

Orange =

Colleges where our students matriculated.

Bard College Barnard College Boston College

Brown University
Carnegie Mellon University
Colgate University
Cornell University
CUNY City College
CUNY Lehman College

Emory University Goucher College Grinnell College

Hobart and William Smith Colleges Hunter College Howard University

Iona College Ithaca College Kenyon College

Lafayette College

Lehigh University
LeMoyne College
Massachusetts Institute
of Technology

Middlebury College Morehouse College Mount Holyoke College

Northeastern University
Northwestern University
Oberlin College
Olin College of Engineering
Oswego State University
Pitzer College

Purchase College Rutgers University, New Brunswick Seton Hall University Siena College Skidmore College Spelman College St. John's University SUNY Binghamton

SUNY Canton SUNY Cobleskill SUNY Cortland

SUNY Geneseo SUNY Oneonta SUNY Potsdam SUNY Stony Brook

University
Susquehanna University

Swarthmore College Syracuse University Tufts University Tulane University University of Albany University of Buffalo Buffalo State College
University of Chicago
University of Fredonia
University of Pennsylvania
University of Rochester
University of Southern
California
University of Wisconsin
(Posse)
Ursinus College

Virginia State University
Wake Forest University
Wheaton College
Yale University



Essential Logistics

Graduation Requirements

To graduate from HSLA, a scholar must fulfill course credit and exam credit requirements. Scholars must earn a passing grade of 70% in 23 academic core courses as well as Arts and Athletics courses. English, History, Math and Science are considered core courses. Of these, freshmen, sophomores, and juniors usually take four core courses per semester and seniors are strongly recommended to take four core courses; any departure

must be approved by the high school principal. To graduate from HSLA, a scholar must also pass five external exams. Arts and elective credits can be satisfied by participating in a team or after-school club that has been pre-approved for credit. New teams may petition to be included. Specific departmental course credits and external exam requirements must be distributed as follows on page 68.



	23 Credits			5 External Exams		
	Credits	Semesters	Timeframe	Required Exams	Exam Options (Not Comprehensive)	
English	4	8	4 years	1	ELA Regents AP English Literature	
History	4	8	4 years	1	Global History Regents US History Regents AP World History AP US History AP Macroeconomics AP Microeconomics	
Math	4	8	4 years	1	Algebra I Regents Algebra II Regents Geometry Regents SAT II Math Exams AP Calculus AB AP Statistics	
Science	4 + 20 Hours of lab experience per credit	8	4 years	1	Living Environment Regents Chemistry Regents Physics Regents AP Biology AP Chemistry AP Physics 1, 2, or C SAT II Biology SAT II Chemistry SAT II Physics	
				1	Any of the above	
Arts	1	2	1 year		Any of the above	
Electives	6	12	3 years (2 per year)		Any of the above	

The High School Program

	Freshman Year	Sophomore Year	Junior Year	Senior Year	
	7 courses requir	ed	6 courses required (can elect 7 courses)		
College Persistence	Leadership Seminar	-	Academic Core Seminar: SAT (Fall & Spring)	Academic Core Seminar: SAT (Fall Only)	
English	Freshman Reading and Composition	Canonical Works of American Literature	AP Literature: Canonical Works of Global Literature	A fall English elective course is required. Spring English course is Critical Perspectives	
History	Pre-Modern World History	AP Modern World History	Choose from the department course catalog. Scholars who complete four AP humanities courses graduate from within the HUM Academy.		
Math	Geometry	Algebra II or Advanced Algebra & Pre- Calculus (Honors)	Pre-Calculus	AP Calculus AB AP Statistics	
Science	Principles of Biology	Principles of Physics	Principles of Che Science, option t take two science	to concurrently	
Arts & Athletics	Choose from the	departmental co	urse catalog.		
Electives	Choose from the departmental course catalog. Academic electives include two CS courses in web development	Choose from the departmental course catalog. Academic electives include two CS courses in web development, and two CS courses in data science Select scholars are eligible for Pre-Medicine (beginning G10) and Engineering (beginning G11) courses within the STEM Academy.			

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:

- 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 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.



PHOTO CREDITS 71

Photo Credits

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S | U | C | C | E | S | S | A | C | A | D | E | M | Y | C | H | A | R | T | E | R | S | C | H | O | O | L | S |