

Course Catalog



CURRICULUM OVERVIEW

The Phelps School's curriculum is designed to help boys succeed academically, personally, and socially in a positive and caring environment. Each student's course plan is tailored to his own educational needs, goals, and interests. Small classes, a disciplined atmosphere, and regular tutorial sessions provide consistent structure and support.

Beyond the classroom, social-emotional education is pre-eminent. School-wide assemblies, grade-level meetings, and special presentations focus on character and leadership development. Faculty advisors provide personal counseling, encouragement, and help with organizational skills and study habits. Through it all, Phelps boys learn how to learn, how to live lives of purpose and meaning, and how to become better men.

Our curriculum is complemented outside of class time with tutorials (similar to office hours) and evening study hall in the dorms. Homework, a proven pedagogical tool for the reinforcement and retention of topics studied in class, is assigned for all academic courses. For students that benefit from a more structured environment in which to complete homework assignments, we also offer Evening Proctored Study Hall with a faculty member four days a week.



GRADUATION REQUIREMENTS

Students must earn at least 24 credits beginning in 9th grade. Students must also complete four credits each of Language Arts and Mathematics and three each of Science and Social Studies. Students are also expected to take two years of a language and one of fine arts. Students are also required to take at least one course in U.S. History.

Students must participate in after school Health and Physical Education each year that they are enrolled at Phelps. Two of the three trimesters must include a physical sport. Physical Education for Middle School students and Lion's Training in the Upper School are available to complement these afternoon activities.

GRADING SCALE

The following "grade scale" is generally used to convert 100-point scores into letter grades. Honors and Dual Credit courses receive a 0.3 enhancement to their semester grade. For example, a student earning a B in an Honors-designated course would have 3.3 rather than 3.0 for GPA calculation purposes.

The Student-Parent Handbook outlines policies and procedures for students who require additional support in achieving strong grades. These tools include a schedule of afternoon tutorials, Evening Proctored Study Hall, Student Support Team Meetings, and referrals to our Academic Support Program. Please see the Handbook for more information.

Department	Credits
Electives	7
Language Arts or ESL	4
Mathematics	4
Science	3
Social Studies	3
World Languages	2
Fine Arts	1

Letter	Numerical	GPA
А	93-100	4.0
A-	90-92	3.7
B+	87-89	3.3
В	83-86	3.0
В-	80-82	2.7
C+	77-79	2.3
С	73-76	2.0
C-	70-72	1.7
D+	67-69	1.3
D	63-66	1.0
D-	60-62	0.7
F	59 & below	0.0

TYPICAL COURSE PROGRESSION

Department	Grade 6 -7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Language Arts and English as a Second	Lit and Comp 1	Lit and Comp 2	Introduction to Genre 1	Introduction to Genre 2	American Literature	British Literature
Language			ESL	ESL	ESL	College Composition (DC)
Social Studies	Geography		World Cultures	Civics	US History	Psychology
	Ancient World History				Honors US History	Sociology
						Honors Comparative Government and Politics
						International Relations (DC)
						Economics
						American Politics (DC)
World			Spanish 1	Spanish 2	Spanish 3	Spanish 4
Languages						Spanish 5
Mathematics	Pre-Algebra	Algebra 1	Geometry	Algebra 2	Pre-Calculus	Statistics (DC)
						Calculus (DC)
						Advanced Calculus (DC)
Computer Science			Introduction to Co	omputer Science		Advanced Computer Science
Science	General Science	Life Science	Physical Science	Biology	Chemistry	Physics
					Honors	Environmental Science
					Chemistry	Forensics
						Anatomy and Physiology
Fine Arts	Studio Art 1			Studio Art 2		Independent Study in Studio Art
Health and Physical Education	Strength and Conditioning					

Please note that grade levels here and throughout this document are meant only as a guide. Students may be placed in courses above or below their grade level as needed. DC next to a course denotes a Dual-Credit eligible course.

TRIMESTER COURSES

Most courses are year-long and require students to remain in that class for the entire year to receive full credit. However, there are a number of courses, marked in the description as "*Trimester Only*" that are open for juniors and seniors.

In the Spring, seniors must take the Speech Writing Capstone course and juniors must take the College Essay Writing course. Juniors and seniors may choose between the other electives for the fall and the winter trimesters. With the exception of postgraduate students, all students must be enrolled in a course for all six periods each trimester. Each trimester course is worth $\frac{1}{3}$ of a credit.

Fall Trimester	Winter Trimester	Spring Trimester
Ethics and Leadership	Personal Finance	Speech Writing Senior Capstone (all seniors)
Computer Architecture	CyberSecurity and Artificial Intelligence	College Explorations (all juniors)
Writing Workshop	Painting and Drawing	
3D Art	Yearbook and Journalism	
Tech Study Skills		

DUAL CREDIT AND HONORS DESIGNATED COURSES

The Dual Credit Program includes all courses that have the potential for college credit through a dual credit agreement with one of our partner institutions. These classes are offered to students that have exceeded the core curriculum requirements and want to take on the challenge of a college-level course. Dual credit courses are designed to have the same rigor and expectations as an introductory-level undergraduate course at a major college or university, although the pacing of these courses is adjusted. Questions should be emailed to the Head of School.

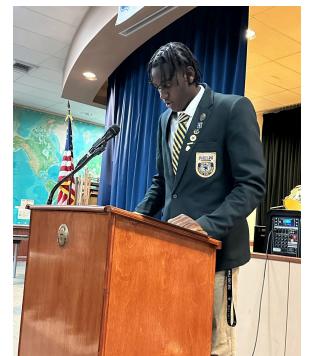
Students should expect:

- To have approximately 30-45 minutes of homework per night.
- To have final exams and/or essays that will count for a significant portion of their grade.
- To actively participate in class discussions in a seminar-style format.
- To do a substantial amount of reading and writing.
- To be graded in accordance with the standards established by the partner institution.

All Dual Credit Program courses require an additional fee (approximately \$225 - \$375) per course to complete dual enrollment. The additional fee is charged directly by our university partners and is paid through their registration system, though Phelps teachers and administrators support students through the registration process.

- College Composition I (Immaculata University)
- International Relations (University of Pittsburgh)
- American Politics (University of Pittsburgh)
- Statistics and Data Analysis (University of Pittsburgh)
- Calculus (Immaculata University)
- Advanced Calculus (Immaculata University)

Students must be approved to enroll in Honors or Dual Credit courses. These courses move at a faster pace than other Phelps courses and students can expect to have more homework. Students who are enrolled in the Honors courses may choose to do some extra work, with the assistance of their teacher, in preparation of taking the appropriate Advanced Placement exam in May. A student should speak with their teacher early in the fall trimester if they plan on taking an AP exam, but taking the AP exam is not required for an Honors course. If a student takes an AP exam, no AP designation will appear on their transcript, although AP scores can be sent to any colleges of the student's choosing.



LANGUAGE ARTS

In our Language Arts courses (English Literature and Composition as well as English as a Second Language) our aim is to cultivate confident communicators. Our curriculum is thoughtfully crafted to empower students in various aspects of effective expression.

Through a blend of grammar lessons, vocabulary studies, research papers, creative writing, and oral presentations, students are equipped with the tools to articulate their thoughts and ideas with clarity and precision. Moreover, our emphasis on reading strategies goes beyond mere comprehension; it fosters a deeper understanding of texts and encourages critical thinking. By engaging with a diverse range of literature, students are invited to participate in the essential conversations that shape our world.

Our Language Arts courses are more than just academic pursuits; they are comprehensive journeys that empower students to navigate the complexities of language and communication with confidence and proficiency.

MIDDLE SCHOOL LITERATURE AND COMPOSITION 1 AND 2

Middle School

This foundational course focuses on students' reading comprehension, critical thinking, analytical skills, and writing. As they read short stories, novels, poetry, and non-fiction, students learn grammar, literary terminology, and vocabulary in context. Writing assignments introduce them to different rhetorical modes, and they receive feedback and encouragement through each stage of the writing process.

INTRODUCTION TO GENRE 1

9th Grade

This course develops language skills and introduces new concepts, strategies, and expectations in an overview of literary genres. Students examine works of fiction, non-fiction, poetry, and drama while developing their



knowledge of grammatical and literary terms. Essay composition emphasizes diction, creative thought, and grammar. Students begin developing their own unique voices by giving oral presentations and participating in class discussions.

INTRODUCTION TO GENRE 2

10th Grade

As they continue studying fiction, non-fiction, poetry, and drama, students seek a deeper understanding of each work's structure and meaning. Writing ability improves as students learn about and attempt different rhetorical modes. They continue building vocabulary and college-level study skills.

AMERICAN LITERATURE

11th Grade

This course further develops reading and writing skills, prepares for college-level research and critical thinking, and provides an overview of literary movements and periods: Native American Writing, Puritanism, Rationalism, American Romanticism, Realism, Regionalism and Naturalism, the Harlem Renaissance, Modernism, and Contemporary Literature. Study of important works in various genres is linked to historical events and concepts in each literary age. Students analyze texts and think critically to develop arguments and craft essays or create projects based on these works.

BRITISH LITERATURE

12th Grade

This overview of genres covers six essential literary periods: Medieval, Renaissance, 17th & 18th Centuries, Romantic, Victorian, and The Modern Era. Emphasis is on essay writing, beginning with the college essay and moving through various rhetorical modes, as well as continued vocabulary building, note taking, and development of more sophisticated composition style.

COLLEGE COMPOSITION

12th Grade, Dual Credit Eligible This course covers the essential topics of rhetoric: close analysis, argument, and synthesis. Readings, largely non-fiction, spark discussion and written commentary. Students develop richer vocabulary and learn to use precise grammar, clear diction, appropriate syntax, variety of sentence structure, logical organization, consistent voice and tone, and balance of generalization and specific illustrative detail.

WRITING WORKSHOP

10th-12th Grades, Trimester-Only

Students receive small-group, intensive writing support. This course is designed to augment the rest of the English curriculum and should be taken concurrently with either American or British Literature. Students will discuss the basics of grammar and concentrate on improving their writing skills and practices.

ENGLISH AS A SECOND LANGUAGE

Students are placed in ESL classes based on their TOEFL Jr., ITEP, or Duolingo tests and an assessment conducted by the Director of ESL. Students can eventually transfer into mainstream English classes upon meeting the ESL Program's exit requirements: demonstrating a well-balanced skillset and a composite score of 80 or more on a TOEFL taken on one test date or as a MyBest Score combination. After leaving the ESL program, students are encouraged but not required to study another foreign language, such as Spanish. After placement, students are expected to move up one level each year. Students in the first two levels have two courses in the schedule. The third year of ESL is a single course and is repeatable until the ESL program graduation requirements are met.

Level 1:	English Language: Starting /
Foundations	Emerging
	Literature and Composition: Starting / Emerging
Level 2:	English Language:
Intermediate	Developing
	Literature and Composition: Developing
Level 3:	Advanced English as a
Transition	Second Language

Please note that courses in English as a Second Language can only be taken as part of our English as a Second Language program. Enrollment in this program is subject to an additional fee. Please contact Admissions at <u>admis@thephelpsschool.org</u> for more information.

ENGLISH LANGUAGE: STARTING AND EMERGING

At this early stage, focus is on basic vocabulary, grammatical structures, and reading comprehension to build a strong foundation as international students advance through the ESL program. The Oxford Q: Skills for Success series includes eight units with relevant contemporary themes. Workbooks and online components provide reading and writing practice. Students learn to write sentences and paragraphs of increasing complexity and create theme-based projects to demonstrate mastery.

ENGLISH LITERATURE AND COMPOSITION: STARTING AND EMERGING

This course emphasizes reading comprehension and academic writing and analysis. Students begin their transition from textbook-based coursework to direct engagement with literary works, progressing from short stories to plays and novels. Explorations into literature encourage students to "think big" about the world and themselves. They build their vocabulary and they work on writing creatively and analytically, attempting various genres and creating theme-based projects to demonstrate mastery. Class discussions and reading aloud reinforce speaking and listening skills.

ENGLISH LANGUAGE: DEVELOPING

Students develop their English-speaking skills by answering questions, listening and responding to classmates, and making oral presentations. Emphasis is on spoken delivery, including pronunciation, eye contact, and body language. Students improve their auditory processing skills and their English comprehension by listening to lectures, conversations, music, and videos. The Oxford Q: Skills for Success text series provides speaking and listening practice, with text and online components.

LITERATURE AND COMPOSITION: DEVELOPING

Students read novels, plays, and poetry of increasing length and complexity, using comprehension strategies presented at the start of the course. Literature studies continue to improve students' English vocabulary as they broaden their perspectives and understanding. Class discussions and reading aloud continue to improve speaking and listening skills.

ADVANCED ESL

Students develop skills in extemporaneous speaking and in presenting logical, coherent arguments. They practice basic public-speaking strategies for various situations and purposes; craft position papers to develop skills in research, writing, and citation; and learn to avoid logical fallacies and other weak argumentation. In various debate formats, they present prepared statements and extemporaneous rebuttals. Exploring contemporary issues and long-standing philosophical questions helps them better understand themselves and their world. This course focuses on students improving their comprehension of English. They will read primary sources, learn to compare and contrast interpretations, recognize bias, question, analyze, interpret, and evaluate.



SOCIAL STUDIES

In our Social Studies courses, students embark on a journey of inquiry into the rich tapestry of history and the complexities of human nature. Our curriculum is carefully designed to foster the development of analytical and critical thinking skills while nurturing multicultural perspectives. With an overarching goal of cultivating engaged and informed citizens in a democratic society, our courses delve into various aspects of historical literacy, including world events, traditions, patterns, and changes. Our Social Studies courses are more than academic endeavors; they are transformative experiences that empower students to navigate the complexities of our world with empathy, understanding, and a commitment to positive change.

WORLD GEOGRAPHY

Middle School

This course examines the physical aspects of various continents and regions as well as human culture, government, politics, economics, and conflicts around the world. Students explore physical and climate characteristics, demographics, historical changes, economic activity, and land use. Students learn to question, read, analyze, interpret, and evaluate different forms of information.

ANCIENT HISTORY

Middle School

This course examines ancient civilizations from 2000 BCE to 1500 CE, their impact on one another, the reasons for their rises and falls, and the traces of their history and traditions that continue today as seen through discussion of selected current events. Higher order thinking is developed and assessed in various formats: tests, quizzes, essays, oral presentations, notebook checks, research projects, and reaction papers.

WORLD CULTURES

9th Grade

This course examines diverse cultures and the conditions that gave rise to them. Students use a variety of resources to develop their understanding of civilizations throughout history, leading to present-day family life and structure, social and community organizations, approach on education, religious beliefs and institutions, political movements, economic trends, and the intellectual and artistic achievements of people within their cultures.

CIVICS AND ECONOMICS

10th Grade

This course explores the growth of American democracy, federalism, the Bill of rights, separation of powers, and checks and balances. Students discuss current events, government's impact on everyday life, the Constitution, the Presidency, the Supreme Court, Congress, the making of domestic and foreign policy, state and local government, and federal branches. This course also includes a basic introduction to economics, including supply and demand, taxation, and individual utility. Coursework develops students' ability to read, question, analyze, synthesize, interpret, and evaluate information.

U.S. HISTORY

11th Grade

This course begins with a comprehensive view of America from colonization through the Civil War. Focus begins on relationships between colonies and how life, society, and culture evolved in different regions. It then turns to how the colonies compromised and overcame their stark differences, gained their collective independence, formed a sovereign nation, and quickly impacted the world. Next, it examines the nation's cultural and political evolution and its development as a world leader from the Civil War through the present. Assignments and projects entail significant research, analysis, and writing that develop higher-order thinking skills.

HONORS U.S. HISTORY

11th Grade

Relying on primary and secondary sources, students analyze differing views of history from 1492 to the present. They develop critical-thinking skills by questioning and analyzing information and arguments about American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society. *Students enrolled in the course may select to take the AP U.S. History Exam.*

HONORS COMPARATIVE GOVERNMENT AND POLITICS

11th-12th Grade

This course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues. *Students enrolled in the course may select to take the AP Comparative Government and Politics Exam.*

INTERNATIONAL RELATIONS

11th-12th Grade, Dual Credit Eligible International Relations is the study of how countries interact with one another. Many of its subfields include the study of war, international political economy, institutions and organizations, foreign aid, and terrorism. This class considers the theories that have been developed by major scholars and applies them to real world cases from the last 150 years of world politics. We augment the textbook with readings from International Relations scholars that showcase important and recent research in the field. Students will be challenged with problem sets that introduce game theory, quantitative and qualitative research methods, and persuasive essay writing.



PSYCHOLOGY

11th-12th Grade, Offered in Alternating Years with Sociology, Next Offered in 2025-2026 This course introduces students to the history, major principles, and various types of psychology: clinical, abnormal, adolescent, developmental, environmental, experimental, forensic, community, counseling, and organizational. Topics include human development, abnormal behavior, research and development, perception, consciousness, cognition, motivation, and emotion.

SOCIOLOGY

11th-12th Grade, Offered in Alternating Years with Sociology, Next Offered in 2024-2025 This course introduces students to the discipline of sociology, readings, projects, and assignments reveal how societal groups interact and impact each other and influence everyday life. Students develop the capacity to view and understand their world from a sociological perspective.

AMERICAN POLITICS

11th-12th Grade, Dual Credit Eligible American Politics is a college-level course that seeks to provide students with the political knowledge and reasoning processes to participate meaningfully and thoughtfully in discussions and debates that are currently shaping American politics and society. Students will examine the interconnectedness of the different parts of the American political system as well as the behaviors and attitudes that shape this system and are the byproduct of this system. By the end of the course, students will be able to analyze current and historical political events and develop factually accurate, well-reasoned, thoughtful arguments and opinions that acknowledge and grapple with alternative political perspectives.

ECONOMICS

11th-12th Grade

Beyond bear and bull markets, gross national products, and fiscal policy, economics addresses basic societal issues: root causes of unemployment; rising healthcare, tuition, and housing prices. This course's flipped-classroom approach facilitates discussion and collaborative projects such as film skits demonstrating economic concepts. Assessments focus on 21st century skills, teamwork, collaboration, creative projects, and classroom discourse.

ETHICS AND LEADERSHIP

12th Grade, Trimester Only

Students read traditional fables, discuss current events, and conduct historical research to consider universal ideas and timeless ethical questions. Assessment is based on class participation, research, vocabulary, and thoughtful attention to questions presented in classroom discussions.

PERSONAL FINANCE

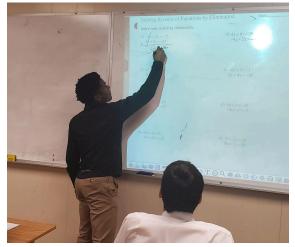
12th Grade, Trimester Only

Students learn important financial life-skills and begin to build good habits around money, budgeting, and investing using real-world scenarios. Although not a full course on economics, this course will introduce topics such as interest rates, banking, double-entry bookkeeping, and taxes.

SPEECH WRITING

12th Grade, Trimester Only

This course covers the fundamentals of effective communication, including audience analysis, speech organization, vocal delivery, and non-verbal cues. Through practical exercises, students will learn to craft persuasive arguments, tell engaging stories, and deliver informative talks. The course ends with students writing and delivering a senior speech to their parents and the rest of the Phelps community.



MATHEMATICS

The math department at Phelps believes in the power of self-discovery for optimal learning. Our instruction is carefully crafted to foster both independent and collaborative work. With scaffolded lessons and assessments tailored to individual learning needs, students receive personalized support. Hands-on projects provide real-world relevance, while technology and online resources enhance the learning experience. In embracing a dynamic approach to mathematics education, our goal is to empower students to become confident problem solvers equipped with the skills they need for success in an ever-evolving world.

PRE-ALGEBRA

Middle School

Students will learn the basics of modeling sentences with algebraic expressions. Students will also be able to manipulate simple equations and inequalities, solving for a single variable. Basic number theory will be covered, distinguishing between integers, rational, and real numbers. Students will study basic geometric concepts, including plane figures and solid calculations. Finally, students will study ratios, percentages, and probability.

ALGEBRA 1

8th-9th Grade

Students learn to represent linear functions graphically, algebraically, and numerically. Other topics include linear inequalities, systems of linear equations, exponential functions, polynomials, factoring, and probability.

GEOMETRY

9th-10th Grade

Students learn to apply inductive and deductive reasoning to a variety of mathematical applications, including informal and formal proofs. Other topics include properties of triangles, including basic trigonometry, angle relationships, segment lengths in circles involving tangents and chords, perimeter, circumference, area, and similarity in a variety of plane figures leading into surface area, volume, and similarity for three-dimensional solids. Algebraic concepts are included in all geometric applications.

ALGEBRA 2

10th-11th Grade

Algebra 2 focuses on the concepts of functions and relations with emphasis on linear, quadratic, exponential, logarithmic, radical, and rational functions. Students apply algebraic concepts to a variety of real-world situations that can be modeled mathematically. All topics are approached through an exploration of numerical, algebraic, and graphical methods using a TI-84 graphing calculator.

STATISTICS AND DATA ANALYSIS

11th-12th Grade, Dual Credit Eligible Major topics include experiments and observational studies, descriptive statistics, probability, hypothesis testing for binary, categorical, and numeric data, linear regressions, and nonlinear models. The course introduces students to the R statistical programming language, which is used in academia and jobs related to data analysis and data science. This course is eligible for dual credit from the University of Pittsburgh.

PRE-CALCULUS

11ht-12th Grade

The course focuses on mastery of critical skills and exposure to new skills necessary for success in subsequent math courses. Topics include fundamental concepts of algebra, functions and graphs, polynomials and rational functions, exponential and logarithmic functions, trigonometric functions, analytic trigonometry, systems of equations and inequalities, matrices and determinants, conic sections and parametric equations, polar coordinates, sequences and series, and an introduction to limits.

CALCULUS

12th Grade, Dual Credit Eligible

Major topics include limits and continuity, derivatives, integrals, and functions (logarithmic, exponential, logistic, trigonometric, and inverse trigonometric). Applications of derivatives include optimization, related rates, movement (position, velocity, acceleration). Applications of integration include slope fields, volume (cross sectional area, disk, washer) and accumulated rate of change. Students explore numerical, algebraic, and graphical methods. *Students enrolled in the course may select to take the AP Calculus AB Exam.*

ADVANCED CALCULUS AND OTHER TOPICS

12th Grade, Dual Credit Eligible This course is designed for students that have completed our Calculus course or its equivalent and are looking to expand their understanding of mathematics. The course will be paced to the students in it and explore advanced topics from Calculus 2 and potentially Linear Algebra curriculums. Students enrolled in the course may select to take an AP Calculus Exam.

INDEPENDENT STUDY IN MATHEMATICS

Special Permission Required

Students that have exhausted our mathematics curriculum may be eligible to incorporate an independent study in their schedule. The student must have a faculty sponsor, an identified curriculum, textbook, or online program, and the permission of the Head of School.

COMPUTER SCIENCE

INTRODUCTION TO CODING WITH PYTHON 9th-12th Grade

Students examine the foundations of computer science and basic programming with an emphasis on logical thinking and problem solving. Topics include data types, loops, functions, user interfaces, graphical design, internet architecture, and string manipulation.

COMPUTER SCIENCE AND CODING IN JAVA

10th-12th Grade, Offered in Alternating Years Designed for students with some previous experience in computer programming, this course is a rigorous introduction to the Java coding language. The course incorporates data types, algorithms, class architecture, loops, inheritance, and recursion. *Students enrolled in the course may select to take the AP Computer Science A Exam.*

COMPUTER ARCHITECTURE

11th-12th Grade, Trimester Only

Students in this class will break open computers to understand hardware. They will be invited to work as a class to build their own desktop computer by researching and ordering parts online. Students also learn about basic bit representations and logic gates, utilizing online systems to build their own basic computer processor.

ARTIFICIAL INTELLIGENCE AND CYBERSECURITY

11th-121th Grade, Trimester Only Students learn how basic artificial intelligence functions and engage in political and philosophical questions about AI-related policy, fair compensation for knowledge creation, and what constitutes consciousness. Students then build a comprehensive knowledge of online and computer safety before learning about information encryption, internet protocols, and system architecture.

TECH STUDY SKILLS

10th-12th Grade, Trimester Only

The tech study skills trimester provides students with ways to responsibly incorporate technology into their existing study habits. Students are introduced to basic computer commands and programs, including the Google Documents, Sheets, and Presentations. Students learn about responsible web browsing and how to properly utilize online resources.

INDEPENDENT STUDY IN ADVANCED COMPUTER SCIENCE

Special Permission Required by Registrar Students that have completed all other computer science courses are invited to inquire about an independent study.

SCIENCE

Courses explore scientific principles, concepts, and methodologies that explain the natural world. Students learn to conduct experiments, collect and analyze data, make calculations, interpret information, hypothesize and test predictions, and draw well-reasoned conclusions. Teachers scaffold lessons based on each student's needs, abilities, and interests. Projects address real-world scientific issues and challenge students to find possible solutions and assess relative risks. Courses incorporate laboratory work and inquiry-based field investigations to develop such 21st-century skills as collaboration, innovation, and critical thinking.

EARTH SCIENCE

Middle School

This survey course introduces younger students to the disciplines of earth and space science, as well as basic aspects of physics and chemistry. The course prioritizes individual inquiry and hands-on activities to develop skills for laboratory investigations. Offered in alternating years with Life Science.

LIFE SCIENCE

Middle School

This survey course introduces topics in biology: cells, genetics, plant and animal diversity, and human systems. The course prioritizes individual inquiry and hands-on activities to develop skills for laboratory investigations. *Offered in alternating years with Earth Science.*

PHYSICAL SCIENCE

9th Grade

This introductory course integrates physics and chemistry into the study of the hydrosphere, exosphere, geosphere, and

atmosphere. Students investigate how each of these "spheres" interact with each other and how the laws of physics and the intricacies of chemistry help us understand our planet and its systems. Coursework includes hands-on lab activities, discussion of current events in fields of science, research, and written responses, all of which help develop organizational skills.

BIOLOGY

10th Grade

This required course prepares students for higher-level life science courses by considering a number of themes: science as a way of knowing, continuity and change, how advances in technology impact influence our world and understanding of the biosphere, the diversity and interdependence of living things, and the organization of living things. Significant laboratory work develops students' practical skills and their knowledge base.

CHEMISTRY

11th Grade

In this required course (for students who have completed Algebra I), students learn about the classification and properties of matter, mixtures and pure substances, the scientific method, and fundamental concepts of energy, mass, mathematics of counting, and the "mole." Students learn about the periodic table; how elements are classified and named; the structure of the atom; and chemical equations, reaction rates, and chemical equilibrium. Significant laboratory work includes formal lab reports and inquiry-based assessments.

PHYSICS

11th-12th Grade

In this elective course (for students who have completed Algebra 2), students begin by studying mathematical definitions and applications of position, velocity, acceleration, force, energy, work, and momentum to describe linear and rotational motion. They learn about wave mechanics and electromagnetism.



ENVIRONMENTAL SCIENCE

11th-12th Grade, Offered Based on Interest In this elective course, students learn to identify and analyze environmental problems both natural and man-made. Environmental science is interdisciplinary, embracing a wide variety of topics from different areas of study. The curriculum draws upon biology, earth science, and physical science.

FORENSICS

11th-12th Grade, Offered Based on Interest Forensic Science is a laboratory-based science class designed for students who are interested in forensic science. The purpose of this course is for students to gain experience in the major investigative techniques currently used by forensic scientists and crime scene investigators, and to develop an understanding of the scientific concepts which serve as the basis for these techniques. Topics include collecting evidence, fingerprinting, blood typing, ballistics, trace evidence, anthropology, and DNA.

ANATOMY AND PHYSIOLOGY

11th-12th Grade, Offered Based on Interest Anatomy and Physiology is a study of the structure and function of the human body. This course is preparation for advanced biological studies, biomedical nursing, and other science-based careers. It is designed for those students who have taken biology and who wish to further their study of biology. Students learn about the major body systems; how the body systems work together to provide homeostasis; body functions in the healthy and diseased states; blood typing; muscle action; cranial nerve functioning; and bioethics.

WORLD LANGUAGES

Students are advised to start Spanish by their 10th Grade year

Students learn the basics of the Spanish language and the cultures of Spanish-speaking countries. Through interactive activities focused on listening, speaking, reading, and writing, students will develop foundational vocabulary and grammar skills, enabling them to communicate in everyday situations and appreciate diverse cultural perspectives.

SPANISH 2

Students continue building their linguistic skills and vocabulary, learning advanced tenses, syntactic constructions, and idioms. They write short paragraphs and essays to develop their presentation skills while applying Spanish-specific concepts. Spanish 2 emphasizes and requires more translation and aural/oral practice in class.

SPANISH 3

Development of vocabulary and grammar continues. Students engage in higher level analytical work in Spanish. Varied texts, media, and native sources provide real-life application. Emphasis is on students' speaking and thinking in Spanish, in and out of class. Students conduct research in Spanish to prepare for the rigors of the college classroom.

SPANISH 4

This rigorous course is taught almost exclusively in Spanish. Students are also encouraged to engage in conversation with native Spanish speakers outside of class. Modes of communication include interpersonal, interpretive, and presentational. Studies include literary and non-literary texts as well as Spanish newscasts, podcasts, movies, and music.

SPANISH 5

This rigorous course is available for students who have completed the Spanish 4 course. The course is designed around the needs of the student(s) enrolled in the course and is repeatable for multiple years.



FINE ARTS STUDIO ART 1 AND 2

All Grades

Students experience a diverse genre of creative art, working in a variety of media such as clay, paint, collage, and colored pencils. They explore the fundamentals of artwork by designing projects that emphasize self-expression, including some elements of Graphic Design, using programs such as Photoshop, Indesign, and Illustrator to edit photographs, produce magazines, design logos, and create their own marketing brand identity. Studio Art 2 further develops artistic skills and techniques that were learned in Studio Art 1, challenging students to create a portfolio of work that demonstrates competency in various art forms.

3D ART

11th-12th Grade, Trimester Only

Students will explore the principles and techniques of creating three-dimensional art forms using various media such as clay, wire, paper, and found objects. Emphasizing creativity and craftsmanship, the course will guide students through projects that develop their skills in sculpture, modeling, and spatial design, culminating in unique, tangible artworks.

PAINTING AND DRAWING

11th-12th Grade, Trimester Only Students will master fundamental techniques in various media, including pencil, charcoal, ink, watercolor, and acrylics. Focusing on both representational and abstract styles, the course will encourage individual expression and creative exploration through guided projects and open studio work.

YEARBOOK AND JOURNALISM

11th-12th Grade, Trimester Only Students will develop skills in writing, photography, design, and layout as they collaboratively produce the school's yearbook. Emphasizing journalistic principles and creative storytelling, the course will provide hands-on experience in capturing the essence of the school year through compelling narratives and visually engaging pages.

INDEPENDENT STUDY IN STUDIO ART

Special Permission Required by Registrar This course is designed for advanced art students who wish to develop a portfolio in the visual arts.

HEALTH AND PHYSICAL EDUCATION

PHYSICAL EDUCATION

Middle School

Students learn the basics of living a healthy lifestyle, how to construct their own workout, gym safety, and the rules of a variety of different sports.

LION'S TRAINING

Placement By Athletic Director. Both Full-Year and Trimester. Students learn about and engage in physical conditioning, plyometrics, basic weight and circuit training, and cardiovascular and overall body fitness. This course is designed for students in year-round athletic academies.

ACADEMIC SUPPORT PROGRAM (ASP)

ASP helps students face learning challenges by providing more than modifications and accommodations suggested by IEPs or 504 Plans. The academic learning support specialist provides instruction and learning activities in light of each learner's unique needs. ASP helps students develop practices in time management, organization, concentration, and active listening. Students work with the learning specialist in effort to become a more successful, confident learner who better understands their own learning strengths and needs.

ASP is added to a student's schedule as a regular class period, taking the place of one of their academic courses. The class is pass/fail and repeatable for multiple years.

Please note that the Academic Support Program is subject to an additional fee. Please contact Admissions at <u>admis@thephelpsschool.org</u> for more information.

COLLEGE COUNSELING

The College Counseling office's main goal is to prepare and educate students on college readiness, career exploration, college applications, and financial aid throughout their secondary education at The Phelps School. By the end of 11th Grade, students have a better understanding of their individual skills, talents, and career pathways along with an acute knowledge of different college programs and the application process to set them up for a successful application season during their senior year.

EXPLORING COLLEGE OPTIONS IN THE JUNIOR YEAR

Students and their families are encouraged to meet with the College Counselor as early as they would like to begin thinking about the college search process.

In the third trimester, juniors are expected to take the College Explorations trimester long course. Through personal college exploration, students start to define a specific plan before the application process begins. Some examples of questions we want to clarify before application season are:

- o What type of degree do I want to obtain?
- o What area of study do I want to major/minor in?
- o Do I want a big university or smaller liberal arts college?
- o Do I want to live in an urban, rural, or suburban setting?
- o Does the college have the extracurriculars that I want?
- o How can I pay for college?

Students are expected to visit a few colleges before they complete their junior year and will have an opportunity as part of this class to draft their college essay.

THE SENIOR YEAR EXPERIENCE: TRANSITIONS TO COLLEGE

The senior class meets weekly with the College Counselor as part of the Transitions to College experience. Students explore a variety of topics related to the transition from high school to college, such as time management, goal setting, study habits, and relaxation. Students also meet individually with the counselor to discuss their college search plan and work on their applications and essays.

Students will also get a general understanding of the financial aid process and spend time filling out applications like FAFSA if relevant. Students are given a detailed explanation of each financial aid application, how to apply, and what types of financial aid can be rewarded. They eventually work with the College Counselor to analyze the packages they received closer to the end of the year. Our hope is that students will gain the ability to advocate for themselves, gain a greater understanding of finances in regard to higher education, and get to pursue post-secondary education that is affordable.

All seniors end their Phelps experience in the spring with a course in Speech Writing Capstone that culminates with the writing of their senior speech.

