

350 PARK STREET
ELGIN, ILLINOIS 60120
847.695.0300

February 2023
Dear Upper School Students and Parents,
At Elgin Academy, we are proud of our traditional liberal arts curriculum through which students demonstrate proficiency in English, Mathematics, Science, Social Studies, World Languages, Fine Arts, Computer Science, and Athletics. The EA faculty and administration review the curriculum and course offerings each year to ensure that they support our mission of "inspiring students to become our creative, courageous, and compassionate future." Our Program Guide provides departmental philosophies along with descriptive course offerings. This information, combined with support from a faculty advisor, will help you make choices that take full advantage of an EA education.

In the coming weeks, you will be engaged in the course selection process for the 2023-2024 school year. Prior to and at your Learning Plan Conferences, your advisors will guide you in creating a selection of courses that will help you explore your interests while building strengths in multiple academic and artistic areas. Of special note, we are offering one new social studies elective course available to seniors only this coming year: 640 Macroeconomics (AP Prep). Additionally, another one of our courses, 550 Honors Precalculus, will now offer the "AP Prep" designation given that the College Board is offering a new AP Precalculus exam for the first time in May 2024. I encourage you to read course descriptions for all of our courses, include these new and updated ones, on the following pages. I also encourage you to visit the last two sections of this catalog - the College Counseling Timeline and Co-Curricular Opportunities - to familiarize yourself with two programs that are key to the Upper School experience.

Students, keep in mind the overall structure of the course load that you create. In the 2023-2024 school year, your schedule will consist of six year-long classes. Any decisions you make about academic, athletic, and co-curricular offerings affect your time commitment and ability to be successful, so we encourage you to partake in a variety of offerings without overloading yourself. Please consult with your advisor, teachers, Dean, coaches, parents, and me if you want advice on how to create a challenging yet reasonable course and co-curricular schedule. We are all committed to helping you make choices that provide you value both in the short- and long-term.

I am grateful that you are a part of the EA community, and look forward to sharing in a successful 2023-2024 school year with you.

Sincerely,
Doug Sept
Assistant Head of School for Academic Affairs

## Table of Contents

Mission Statement \& Portrait of a Hilltopper ..... p. 3
Elgin Academy Graduation Requirements p. 4
January Term ..... p. 5
The Hilltop: A Senior Capstone Experience p. 6
Advisory ..... p. 8
Advanced Placement Courses p. 9
English ..... p. 10
Mathematics ..... p. 13
Science ..... p. 16
Social Studies ..... p. 19
World Languages ..... p. 22
Fine Arts ..... p. 27
Computer Science ..... p. 32
Physical Education / EA Athletic Program ..... p. 33
College Counseling Timeline ..... p. 34
Co-Curricular Opportunities ..... p. 39

## Elgin Academy's Mission Statement

## Inspiring students to become our creative, courageous, and compassionate future.

## Portrait of a Hilltopper

When students graduate from Elgin Academy, they go forth as productive, conscientious, and mindful young people who continue to hone their understanding of world and self--a lifelong process that stands as the abiding gift of their Elgin Academy education.

Whether our students start their Academy journey in Preschool or Upper School or somewhere in between, they are guided to be prepared for what lies ahead.

## Hilltoppers are:

- secure in themselves
- disciplined in their thinking
- creative in their collaboration
- compassionate toward others
- dedicated in their efforts

Upper School students develop the qualities of a Hilltopper under the guidance of dedicated faculty and administrators. As students of all divisions become comfortable contributing as thinkers and doers in school and community, the key characteristics of Hilltoppers emerge.

## Elgin Academy Graduation Requirements

The Academy's Upper School curriculum has been designed to provide students with those experiences most necessary for success in college and for personal development. Ninth- and Tenth-grade students are required to take the equivalent of six courses each semester; eleventhand twelfth-grade students are strongly encouraged to take six. The Assistant Head of School for Academic Affairs must approve requests for exceptions to these requirements. A 1.0 credit course represents one year of learning. Course requirements are as follows:

| Department | Credits | Courses |
| :--- | :--- | :--- |
| English | 4.0 | All four grade-level English classes |
| Mathematics | 4.0 | Any courses offered through the EA US Math Department <br> Science |
| Social Science | 3.0 | Biology, Chemistry, and Physics <br> World Cultures I and II, U.S. History (AP European History <br> and AP United States History also fulfill these requirements) |
| World Languages | 3.0 | Three Upper School years in one language: French, Latin, or <br> Spanish |
| Fine Arts | 2.0 | Introduction to Fine Arts plus one additional credit <br> Computer Science or any courses beyond the above credit <br> requirements; The Hilltop is also an elective credit |
| Electives | 3.5 | Six sports seasons with at least two each in 9th and 10th grade <br> and one each in 11th and 12th grade. |
| Physical Education | 2.0 | 0.5 per year |

## Minimum graduation requirement: 26.5 credits earned

All juniors are required to pass a United States Constitution Test.
The PSAT, pre-ACT, SAT and/or ACT examinations are required of all students during the appropriate years. See the College Counseling Timeline for more details about these exams.

## January Term

January Term is a three-week program that takes place in January between semesters one and two.

During January Term, students will choose one area of study from approximately five to ten different offerings. Under the guidance of a small team of teachers, they will immerse themselves in that one topic with peers from multiple grade levels. January Term course offerings will be announced prior to the end of the current school year. At that time, students work with their advisors and families to choose their January Term course for 2024.

January Term consists of courses that are interdisciplinary, active, experiential, and memorable. For each class, the focus will be on making connections beyond the EA campus to the local community and Chicago area or even the nation and world.

A few January Term courses, such as those with extensive experiences or travel fees, will carry an additional cost to families. Those costs will be made known when students register. However, the majority of the January Term offerings will require no additional expenses.

So that students can be fully immersed in their January Term classes, the majority of regular Upper School classes do not meet during those three weeks. Instead, January Term classes are full-day experiences that allow for in-depth explorations. The exceptions are that teachers may choose to meet with students who are taking Advanced Placement courses several times during the January Term to keep the momentum of their studies moving toward the AP exams in May.

January Term is a required component of an Upper School education. Students earn 0.5 required graduation credits at the completion of their January Term course each year. Faculty assess student progress and work, and students earn a transcript grade for their January Term course using our traditional A-F grading scale, although January Term grades are not calculated in student cumulative grade-point averages. A new set of January Term classes will be offered each year, although popular courses may repeat to allow more students to experience them.

## The Hilltop

## Elgin Academy Senior Year Capstone Experience

The Hilltop is an optional program for seniors that is intentionally not departmental-specific. Students will have the opportunity to design a program that combines one or more subjects, authentically blending multiple academic areas.

The Hilltop is designed to empower students to take control of their own learning by allowing them to develop their essential question, to determine the mentors and resources necessary to explore and address that query, and to present their conclusions to the community using methods of their choosing. All students in this program will regularly interact with a faculty member who is designated as The Hilltop Coordinator.

An essential question does not have a simple, factual-based answer. It is an open-ended question that provokes critical thinking and requires a mix of in-depth research, collaborative discussions, and individual contemplation. During The Hilltop, a student will create their essential question through considering their academic background, their strengths and challenges, their experiences, their motivations, and most importantly, their passions.

Students will then develop a collection of resources designed to help them address their essential question. First and foremost, students will identify and acquire one or more mentors whose background and experiences align with their query. The mentor could be someone local, such as an EA faculty or staff member, an EA alum or parent (not their own), or a member of the greater Chicago community. Alternately, the mentor could be someone beyond the Chicago area with whom the student can interface remotely. All resources and mentors will be discussed and approved by the Hilltop Coordinator who will also have regular contact with all mentors.

Beyond the mentor, students develop a bibliography of resources that could include, but is not limited to: books, articles, online courses or resources, films, videos, and personal interviews. Additionally, the student identifies experiences that help them address their essential question. For example, local day trips, internships, and interactions with experts should be planned and implemented where appropriate. While some resources need to be identified before a student's senior year, it is anticipated that others will be discovered, utilized, and documented throughout this process.

## The Hilltop

Elgin Academy Senior Year Capstone Experience
Toward the end of senior year, students engaged in The Hilltop are required to present their conclusions to The Hilltop Coordinator, the Upper School Director, their mentors (when possible) and a small panel of faculty members. This presentation may include a research paper, an oral presentation, necessary visuals, videos, or any other forms of communication that will help the student relay their essential question, their conclusion, and most importantly, their process. Additionally, students should be prepared to address questions from the panel.

Finally, every student involved in The Hilltop makes a public presentation of their work at an evening event in April.

Members of the Class of 2024 who wish to engage in The Hilltop will have two options:

1) The Hilltop as a sixth class in their schedule.

Students who choose this path are expected to devise a study that is so in-depth that it requires significant time to complete the project. That time is expected to be equivalent to the time that they would spend completing one traditional class. In this case, one period of their schedule beyond the regular open period is kept open so that they can engage in The Hilltop on a daily basis. The Hilltop Coordinator determines the final decision about whether a student's proposal rises to this level in coordination with a team of faculty members. Students who take The Hilltop as a sixth class in their schedule will be granted 1.0 elective graduation credit upon successful completion of the program.
2) The Hilltop as a supplement to a six-course schedule.

Students who choose this path will devise a study that is duly substantive yet still can be completed in conjunction with a full six-course load. In this case, students are not provided with time during the school day beyond their regular open period; instead, they are expected to complete this project using their personal time. The Hilltop Coordinator determines the final decision about whether a student's proposal meets this criterion in coordination with a team of faculty members. Students who take The Hilltop as a supplement to a six-course schedule will not be granted graduation credit, although their accomplishment will still be designated on their transcript in the "Other Academic Work" section.

Students who choose to participate in The Hilltop program will designate their preference to do so on their course selection form. Program preparation commences in the second semester of junior year.

## Advisory

Through one-on-one and group experiences, Elgin Academy's Upper School advisory program helps students to know and understand themselves and others better through social and emotional learning, inspires them to challenge themselves and grow both academically and personally, and fosters an environment where students create a lifelong love of learning and a fulfilling life beyond EA. The advisory program forms confident, compassionate, and disciplined young people who guide themselves and others into a bright future.

Upper School teachers serve as Advisors, with each Advisory group having a mix of students in Grades 9-12. Regular Advisory meetings help to guide students in: adjustment to the life and expectations of the Upper School; academic growth; personal growth; and character development. The Advisor also plays a critical role in each student's Learning Plan.

The Learning Plan is at the heart of the Academy's educational philosophy. It helps to personalize the Upper School's college preparatory curriculum by identifying the student's areas of talent and interest, and by addressing the varying developmental needs of adolescents. Required conferences among the student, parents, and Advisor take place in October and February. During these conferences, the student plays a major role discussing strengths and weaknesses, setting goals, and planning a course of study for both the following year and the entire four-year experience. Student goals are set to reflect the spirit of the Upper School's Academic and Personal/Social Goals.

Advisory also serves as the structure through which Upper School students engage in the RULER program, which was designed by the Yale Center for Emotional Intelligence. RULER is an acronym that represents:

- Recognizing emotions in oneself and others
- Understanding the causes and consequences of emotions
- Labeling emotions with a nuanced vocabulary
- Expressing emotions in accordance with cultural norms and social context
- Regulating emotions with helpful strategies

Advisors and students engage in RULER conversations and activities during the year toward the goal of positive social-emotional growth.

## Advanced Placement Courses

The Academy affords students two different types of courses that can culminate in the possibility of earning college credits: Advanced Placement (AP) courses, and AP-prep courses. The amount of credit earned is dependent on exam performance; note that this credit varies among colleges. Some colleges provide no credit for AP exams regardless of performance.

The following courses sport an official AP designation:

- 560: Advanced Placement Calculus AB
- 751: Advanced Placement Biology
- 761: Advanced Placement Chemistry
- 612: Advanced Placement United States History
- 620: Advanced Placement European History
- 630: Advanced Placement Psychology
- 066: Advanced Placement 2-D Art and Design

Each of these courses follows a curriculum that adheres closely to the Advanced Placement program as set forth by the College Board. Students who register for these classes should expect a quicker curricular pace as well as an increased amount of homework. All students enrolled in these courses will be required to take the subsequent AP exam in May. For the 2022-2023 school year, College Board AP fees are $\$ 97$ per exam. Exams in 2023-2024 may have an increased cost as determined by the College Board.

The following courses will sport the "AP Prep" transcript designation only if a student registers for and takes the Advanced Placement exam associated with that course:

- 203 American Literature (Gr. 11, AP English Language and Composition exam)
- 204 The Story of English (Gr. 12, AP English Literature and Composition exam)
- 542 Statistics (AP Statistics exam)
- 550 Honors Precalculus (AP Precalculus exam, new for 23-24)
- 561 Calculus II (AP Calculus BC exam)
- 741 Mathematical Physics (AP Physics 1 or AP Physics C: Mechanics exams)
- 770 Environmental Science (AP Environmental Science exam)
- 640 Macroeconomics (AP Macroeconomics exam)
- 305 Latin V (AP Latin exam)
- 405 French V (AP French Language and Culture exam)
- 415 Spanish V (AP Spanish Language and Culture exam)
- 576 Programming in Java (AP Computer Science A exam)

Each of these courses has a curriculum that parallels but may not be exactly the same as the Advanced Placement program. AP Exams are optional for students enrolled in these courses. However, students who enroll in these courses and plan to take the exams may need to do additional preparation outside of the class to maximize their exam performance. Students who wish to register for these exams will need to do so by November 2023 under the timeline set forth by the College Board. Students who take AP exams in these courses will have their transcripts updated with an "AP Prep" designation attached to relevant courses. Elgin Academy's grade-point average system is unweighted. Students who take AP or AP-prep courses do not earn additional grade points by being in these courses.

# Course Offerings 

## English Department

The English Department aspires to teach knowledge, skills, and perhaps most importantly, attitudes. Students acquire knowledge of our world and our language through the study of classical and contemporary literature; they acquire skills through the frequent practice and evaluation of writing, reading, speaking, listening, and thinking. Finally, we hope that they develop a lifelong love of reading and an appreciation for language and confidence in the use of it.

Students of English are expected to read actively, studying literature with pen in hand, rereading when necessary. Teachers assign about 30 minutes of reading for most class periods. Students write two to three formal papers each semester. Teachers stress that writing is a process that includes brainstorming, outlining, drafting, revising, and editing for correctness and style. Weekly instruction in vocabulary and the mechanics of grammar and punctuation also enforce good reading and writing skills.

Students are encouraged to participate daily in full-class discussions and small-group tasks, to read their work aloud, to give speeches, and to memorize and recite lines from drama and poetry. As listeners, they learn to respect the ideas of others through discussion. Finally, critical and creative thinking underlie all of these processes, and we have designed our curriculum to stimulate vigorous thinking every day.

## 201 Odysseys of Change (Grade 9)

In "Odysseys of Change," Freshmen will continue to work on understanding essential matters of plot, character, setting, and diction. The course will also introduce how to identify the more intriguing parts of a text, to raise questions about such parts, to create answers to these questions by interpreting the details of the passages, and to pull together the interpretations into larger arguments about the meanings of the text. Students will write 4+ page argumentative essays where they will create and present the results of their inquiries.

As students become more invested in their thinking and more comfortable with writing, we will work on correcting grammar and punctuation errors and on using increasingly sophisticated and accurate word choices. To accomplish these goals, we will read challenging but highly engaging texts organized around the theme of journeys. Books may include The Lord of the Flies, the Odyssey, Black Boy, Jane Eyre, Their Eyes Were Watching God, Black Swan Green, Romeo and Juliet, and The Catcher in the Rye. In preparation for reading the Odyssey, students will study the myths of Ancient Greece. For our unit on Shakespeare, we hope to attend a performance at the Chicago Shakespeare Theater. Most weeks, students will learn about twenty-five vocabulary words using the site vocabulary.com. They will also have frequent grammar lessons and online exercises through NoRedInk.com.
1 year: 1 credit

## English Department

## 202 Literary Genre and Real World Meaning (Grade 10)

Sophomore English expands the techniques of reading, writing, and language awareness introduced in the previous year. Compositions increase in length and complexity, with special emphasis on exposition, narration, and description. Students are expected to move beyond the improvement of their writing on the level of grammar and punctuation to become more engaged in stylistic and structural improvements.

The class takes up a variety of texts for discussion and analysis: Macbeth, Franny and Zooey, Sophocles' Theban Plays, as well as short stories and poems. A creative writing unit accompanies the study of poetry.

The texts studied and skills developed have, as their goal, an examination of the overarching continuity of literary classics and a consideration of how their forms or genres influence our understanding of it. How something is said is as important as what is said: this course helps students become more aware of literary genre and how it shapes the text's meaning.

These examinations foster critical awareness of language's role in defining our reality as well as influencing our thoughts.
1 year: 1 credit

## 203 American Literature (AP Prep) (Grade 11)

Continuing to build on the techniques of reading, writing, and language awareness introduced in the two previous English classes, this course explores American Literature from the 17th to the 20th centuries, with frequent references to historical and cultural contexts. Writing instruction stresses the importance of structure, focus, coherence, and style, while class discussions help build the student's complexity of thought and interpretation. Students are assigned nightly reading from texts such as Hawthorne's The Scarlet Letter, short stories by Poe, Twain's Huckleberry Finn, Cather's My Antonia, Hemingway's A Farewell to Arms, Fitzgerald's The Great Gatsby, Tennessee Williams' A Streetcar Named Desire, Vonnegut's Slaughterhouse 5, and Toni Morrison's Beloved, We also study poetry by Puritans, Whitman, Dickinson, and contemporary poets.

Students will learn vocabulary words (taken from the assigned reading) using the site vocabulary.com. They will also have weekly grammar lessons and online exercises through NoRedInk.com. Students have the option of taking the Advanced Placement English Language and Composition Exam with additional preparation.
1 year: 1 credit

## English Department

204 The Story of English: From Tribal Language to Lingua Franca (AP Prep) (Grade 12)
Senior year English examines British literature from a chronological perspective as well as one or more classics of World literature. A study of the English language as a cultural, as well as a linguistic, product parallels the literary selections.

English originated in continental Europe as the language of several loosely related Danish tribes; today, English is one of the most commonly spoken languages in the world. Anglophone literature has an important status among the major literary traditions of the world. Over the year, students gain an appreciation of the trajectory of English language and literature from its ancient origins to its modern richness.

## First Semester: Monsters, Pilgrims, and a Danish Prince

The first semester focuses on the evolution of the English language from its Anglo-Saxon roots to Shakespeare's time. This chronological approach acknowledges both the consistency and the variety of English as seen in its origins and historical development.

Writing assignments continue to increase in complexity, asking students to think critically about the implications of the text. Additionally, components of independent research and oral presentations are incorporated to prepare students for college work.

## Second Semester: From Shakespeare to World Literature

In the Second Semester, students begin with a brief survey of Shakespeare and then proceed to study authors, both canonical and not, to understand the evolution of English language literature and its place in world literature.

Selections from the canon of world literature will serve as a capstone for students' Upper School literature study as well as provide supplementary resources for those who choose to prepare for the Advanced Placement Exam. Student writing ranges from personal to more formal writing. This formal writing will generally be limited to three-to-five-page essays. Students complete a final project that may have a creative focus, a critical focus, or a combination of the two. Students have the option of taking the Advanced Placement English Literature and Composition Exam with additional preparation.
1 year: 1 credit

## Mathematics Department

The Mathematics program is designed to provide a solid foundation of college preparatory material while exposing students to a wide variety of applications. Students will develop the skills and attitudes necessary to succeed as independent problem solvers. It is central to the philosophy of the department that the proper use of calculators and technology is an integral part of the courses. Emphasis is placed on the four dimensions of understanding mathematical processes: skill in carrying out various algorithms, developing and using mathematical properties and relationships, applying mathematics in realistic situations, and representing mathematical concepts in myriad ways (numerically, graphically, and algebraically).

## 510 Algebra I

This course is designed to increase students' understanding of basic concepts and to develop their use of mathematics to communicate ideas. Specific topics include: simplifying expressions; solving linear equations, inequalities, and proportions; graphing relations and functions; solving systems of linear equations; applying algebraic skills to real-world problems; using laws of exponents; factoring polynomials; and an introduction to probability and statistics.
1 year: 1 credit

## 521 Geometry

Geometry introduces students to the branch of mathematics created to build knowledge about sets of points, rather than sets of numbers. This course is also an introduction to the processes of deductive reasoning, which is a basis for all of mathematics. Students will make connections between the verbal, symbolic, visual, and real-world representations of the various figures in Geometry. Relationships between the figures will be analyzed through the writing of proofs. Students will also build their knowledge of algebra by solving problems involving length, area, and volume.
1 year: 1 credit
Prerequisite: Algebra 1

## 522 Honors Geometry

Honors Geometry introduces students to the branch of mathematics created to build knowledge about sets of points, rather than sets of numbers. This course is also an introduction to the processes of deductive reasoning, which is a basis for all of mathematics. Writing proofs is the primary method for acquiring knowledge about lines, segments, angles, and polygons in this course. The proofs incorporate verbal, symbolic, and visual representations of the figures. Students reinforce their algebraic skills by solving problems involving length, area, and volume. Students will also develop the skills necessary to learn mathematics independently through reading, posing problems, and reaching conclusions.
1 year: 1 credit
Prerequisite: Algebra 1 and a departmental recommendation.

## Mathematics Department

## 531 Algebra II

This course seeks to help students reinforce prior math skills and build new skills, become more confident in problem solving, and prepare for future math-related courses. Topics include linear, polynomial, rational, exponential, and logarithmic functions; systems of equations.
1 year: 1 credit
Prerequisite: Geometry

## 532 Honors Algebra II

The emphasis of this course is placed on independent learning and building higher-level thinking and problem solving skills. Topics include variation and proportion; right triangle trigonometry; linear functions; systems of equations and matrices; exponents and radicals; quadratic functions; exponential and logarithmic functions.
1 year: 1 credit
Prerequisite: Honors Geometry and a departmental recommendation.

## 540 College Algebra

This course builds upon concepts taught in Algebra II/Honors Algebra II with emphasis on new applications in the real world. Both algebraic and calculator/computer methods are used. Specific topics emphasized include functions, matrix applications in decision making, and introductory statistics. An end-of-year project focuses on business applications.
1 year: 1 credit
Prerequisite: Algebra II or Honors Algebra II

## 542 Statistics (AP Prep)

This course introduces students to a branch of mathematics that has many applications in a variety of disciplines beyond mathematics. Topics include an introduction to statistics, descriptive statistics, probability, discrete probability distributions, normal probability distributions, confidence intervals, hypothesis testing, correlation, and regression. Students will have the option of taking the AP Statistics Exam with additional preparation.
1 year: 1 credit
Prerequisite: Algebra II or Honors Algebra II

## 550 Honors Precalculus (AP Prep)

This honors course offers students a chance to integrate and expand upon earlier studies of mathematics through careful analysis of functions. Students will study the numerical, algebraic, graphical, and verbal representations of linear, quadratic, polynomial, exponential, logarithmic and trigonometric functions. Students will have the option of taking the AP Precalculus Exam, a new offering from the College Board in 2023-2024, with additional preparation.
1 year: 1 credit
Prerequisite: Honors Algebra II or College Algebra and a departmental recommendation.

## Mathematics Department

## 560 Advanced Placement Calculus AB

This is a rigorous course designed to prepare students for the advanced mathematics they will take in college as pre-medical, science, engineering, or computer science majors. Topics include: limits and continuity; derivatives and their applications; integration techniques and applications; differential equation solution by separation of variables and slope fields; and the relationship between position, velocity, and acceleration. Students are required to take the AP Calculus AB Exam in May.
1 year: 1 credit
Prerequisite: Honors Precalculus and a departmental recommendation.

## 561 Calculus II (AP Prep)

This second-year calculus course extends the concepts covered in the Advanced Placement Calculus AB course to additional applications while introducing new topics. Units of study include include mastering integration; studying infinite series; and applying calculus concepts to polar, parametric, and vector equations. Students will have the option of taking the AP Calculus BC exam with additional preparation. 1 year: 1 credit Prerequisite: Advanced Placement Calculus AB and departmental recommendation.

## Science Department

The Science Department has designed a program to involve students in active encounters with the world around them. An understanding of science can only come about through students' participation in activities exploring the diverse areas and aspects of science. As students develop, the complexity and abstraction of the area of study increases, but understanding remains rooted in problem solving, experimentation, and active involvement.

Throughout the discipline, emphasis is placed on clarity of thought and expression. The unifying aspects of experimentation in the physical and biological sciences include critical examination of procedures and results. Curiosity is fundamentally important and is fostered by laboratory work, investigations, and field observations. Investigations involving the effects of society and its technological choices on the environment are part of the design of every course in the department. The course offerings provide flexibility in meeting students' needs through honors and Advanced Placement sections of classes. While only three credits are required for graduation, students with an interest in science are urged to pursue a fourth year of study.

## 701 Biology

This course introduces students to the nature of life on earth using molecular, microscopic, physiological, and ecological perspectives. Fundamental concepts and principles from all of the major disciplines of biology are studied. Basic objectives are: to learn about principles that define and constrain the existence of life; to discover relationships among structure, function, and change in living things; to become aware of the impact that activities of humans have on major ecosystems; and to develop skills in logical thought and scientific inquiry. Lab work is an important part of the course. 1 year: 1 credit

## 711 Chemistry

This course is a first-year introduction to chemistry intended for students not planning an extensive study of science in college. The course centers on practical and conceptual aspects of chemistry, while mathematical and theoretical applications are de-emphasized. The course begins with chemistry on a subatomic scale and works up to issues of a global scale. Studies begin with individual atoms and flow to the study of molecules, interaction of molecules, and reactions. The course includes surveys of environmental and nuclear chemistry. Extensive lab work is an integral part of this course.
1 year: 1 credit
Prerequisite: Algebra I and Biology

## Science Department

## 721 Honors Chemistry

This course is a first-year introduction to chemistry intended for students with a serious interest in science. Topics covered include atomic theory, nomenclature, writing chemical reactions, aqueous solutions, stoichiometry, chemical bonding, gasses, and acids and bases. This course contains analytical, theoretical, and mathematical approaches to chemistry. Extensive lab work is an integral part of this course.
1 year: 1 credit
Prerequisite: Biology and Algebra I and a departmental recommendation.

## 731 Conceptual Physics

This course focuses on the conceptual understanding of physics with less rigorous mathematical emphasis than in Mathematical Physics. Topics covered may include mechanics, laws of motion, momentum, energy, gravitation and satellite motion, electrostatics, electric circuits, heat transfer, thermal expansion, and thermodynamics. Lab techniques are introduced and utilized.
1 year: 1 credit
Prerequisite: Biology and Chemistry

## 741 Honors Mathematical Physics (AP Prep)

Honors Mathematical Physics is an algebra-based course intended for students who will take physics in college as pre-medical, science, engineering, or computer science majors. Course content includes: mechanics, laws of motion, circular motion, gravitation, energy, momentum, rotational dynamics, and simple harmonic motion. Students have the option of taking the Advanced Placement Physics 1 Exam or the Advancd Placement Physics C: Mechanics Exam with additional preparation.
1 year: 1 credit
Prerequisite: Biology, Honors Chemistry, Honors Algebra-II, and a departmental recommendation.

## 751 Advanced Placement Biology

AP Biology is an intensive course in general biology at a depth a college biology major would experience. The course is equally divided between cellular and molecular biology and organismal and population biology. In order to introduce all the major ideas and concepts in biology, a rapid and intense pace is maintained. Topics studied include biochemistry; molecular and cellular biology; genetics; botany and zoology; evolution; physiology; behavior; and ecology. Lab work is an integral part of the course. Students are required to take the AP Biology Exam in May.
1 year: 1 credit
Prerequisite: Biology and Honors Chemistry and a departmental recommendation.

## Science Department

## 761 Advanced Placement Chemistry

AP Chemistry is a second-year chemistry course taught at the level of an introductory college chemistry course. This course investigates selected topics from the Honors Chemistry course in greater detail as well as others, including thermodynamics, equilibrium, bonding, kinetics, and stoichiometry. Also included is extensive practice with sample AP tests and problems. The focus is on preparing students for further study of chemistry at the college level and for the AP Chemistry exam. Practical and conceptual aspects of chemistry are included, but mathematical and analytical applications are emphasized. Extensive lab work is an integral part of this course. Students are required to take the AP Chemistry AB Exam in May.
1 year: 1 credit
Prerequisite: Biology, Honors Chemistry, Honors Algebra II, and a departmental recommendation.

## 770 Environmental Science (AP Prep)

Environmental Science includes many aspects of the environment. Attention is given to humans and nature, scientific principles and concepts, the human population, global problems, resources and resource management, pollution, genetic engineering and its consequences, and environment and society. Students have the option of taking the Advanced Placement Environmental Science exam with additional preparation.
1 year: 1 credit
Prerequisite: Biology and Chemistry

## Social Studies Department

Upper School courses in the Social Studies department rest on a foundation strong in the disciplines of history, political science, economics, sociology, psychology, and geography. Our focus concentrates on the past, present, and future interactions of humans with each other in their multiple communities (from local to global). The instructional process encourages students to examine and analyze historical and cultural experiences in order to make well-reasoned decisions that are adaptable to our changing circumstances while remaining grounded in the enduring values common to all humanity. We believe that human knowledge is a reservoir of data, ideas, concepts, generalizations, and theories which, when combined with reflection, decision-making, and participation, allows students to participate rationally and humanely in society.

The Social Studies department requires that World Cultures I, World Cultures II (or Advanced Placement European History for recommended students), and United States History (or Advanced Placement United States History), all with a heavy integration of geography, be completed by students before their graduation. Beyond the three-year requirement, the department offers elective courses in the social sciences designed to reach the varied interests of our student body, as well as to meet the admission requirements of most colleges.

## 601 World Cultures I

World Cultures I is the first half of a two-year course which studies the development of a variety of societies throughout the world. We approach history as a subject that encompasses socialization, politics, economics, religion, the arts, science, technology, and geography. Our study concentrates on Early Societies both Eastern and Western, Ancient Empires across the globe, Regional Societies through the Middle Ages and a connection between these past societies and their 21st century iterations. There is a major focus on argumentative and analytical writing skills, geography, study, research, and critical thinking skills, as well as an introduction to cultural literacy concepts. Select pieces of literature related to various time periods and cultures will be assigned. 1 year: 1 credit

## 602 World Cultures II

World Cultures II is a continuation of our regional study of the world. This course traces the developments in world civilizations in a thematic, chronological fashion. Starting with the Renaissance, we trace events through the Cold War, with a focus on increasing globalization in the modern era. Emphasis is placed on connecting the past with today's challenges. The course will focus on more analytical writing and thinking skills, group discussions, geography, and study and research skills.
1 year: 1 credit
Prerequisite: World Cultures I

## Social Studies Department

## 611 United States History

The United States History course studies the period from Pre-Columbian America through the late twentieth century. Economic, political, social, and diplomatic histories are all studied. This material is taught through the use of lectures, teacher/student dialogue, role-playing, research papers, supplemental readings, and videos. Constitutional issues are taught and discussed, and a state-required examination is given. This course (or AP United States History) is required for graduation.
1 year: 1 credit
Prerequisite: World Cultures I and II

## 612 Advanced Placement United States History

The AP United States History course studies American history chronologically and thematically. It covers the period from Pre-Columbian America through the late twentieth century. Economic, political, social, and diplomatic histories are all studied. The class format varies: lectures, discussion, role-playing, debates, research, and simulations are among the different techniques used. The Federal Constitution is taught, and a state-required examination is given. Extensive time is also spent preparing for the required Advanced Placement United States History exam in May by studying different question types and learning to use documents effectively in historical writing. Students are required to take the AP Unite States History Exam in May.
1 year: 1 credit
Prerequisite: World Cultures I, World Cultures II or AP European History, and a departmental recommendation.

## 620 Advanced Placement European History

This one-year course studies the history of Europe from the Renaissance to the present day. Emphasis is given to intellectual, cultural, social, and diplomatic developments. There is a heavy importance on written expression, interpretation of primary sources, and the ability to use historical data to draw logical conclusions. Students are required to take the Advanced Placement European History exam in May. 1 year: 1 credit
Prerequisite: 10th-grade students with a departmental recommendation; open enrollment for seniors.

## 630 Advanced Placement Psychology

AP Psychology is a full-year course designed to introduce students to the discipline of psychology by emphasizing the history of psychology as a science, the different theoretical approaches that underlie explanations of behavior, and the various fields within psychology. Topics covered in the course include research methods, biology, human development, learning, thinking, motivation, emotion, personality, disorders, and society. Students design and conduct original research. Students are required to take the Advanced Placement Psychology exam in May.
1 year: 1 credit
Open to seniors only.

## Social Studies Department

## 640 Macroeconomics (AP Prep)

Macroeconomics is a college-level course that introduces students to the principles that apply to an economic system as a whole. Students will learn the basic concepts with a focus on economics at the national and international scale. Students will also become familiar with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students will use graphs, charts, and data to analyze, describe, and explain economic concepts. Students have the option of taking the Advanced Placement Macroeconomics exam with additional preparation.
1 year: 1 credit
Open to seniors only.

## World Languages Department

The World Languages Department offers Classical and modern languages. By mastering those language skills expected by colleges and universities, students gain a new understanding of the concepts of language and learn about other cultures. At the same time, students gain a broad understanding of the linguistic and cultural heritage of our own country.

The study of a world language is a progressive experience and implies the progressive acquisition of linguistic skills. In the Classical languages, the skill of reading the target language is emphasized. In modern languages, four skills are thoroughly learned: reading, writing, speaking, and listening. In addition, the grammatical and structural concepts of English are reinforced by instruction in world languages.

## Classical Languages

The study of Classical language and literature leads us to an understanding of our rich Classical heritage. Our language, our modes of thinking, our political systems, our literature, and our art all have their roots in the civilizations of Rome and Greece. The infinite variety, depth, and challenge of Classical literature enhance our students' abilities to understand themselves and to evaluate contemporary geopolitical and socioeconomic circumstances.

Because Latin is a literary language, the focus of the curriculum is on learning to read the literature of the ancient Romans. Most major grammatical constructions are taught in six semesters within the context of reading Latin prose. While students are advised to complete four years of Latin, completion of three years in the Upper School satisfies the Academy's graduation requirement in world languages. All students take the National Latin Exam for their level of Latin in March of each year and are given the opportunity to participate in enriching co-curricular activities such as Certamen and the Illinois Junior Classical League annual convention.

## 301 Latin I

This course is an introduction to the world of the ancient Roman people and to the Latin language. In Latin I, students are introduced to an inflected language and learn basic grammatical structures and vocabulary in the context of reading simplified Latin prose. Emphasis is on the elements of the language: alphabet and pronunciation, parts of speech, morphology (word-formation), vocabulary (including English derivatives), grammatical/syntactical rules, and strategies for reading and translation. Students also learn about ancient Greco-Roman culture, mythology, geography, and history by reading relevant texts in both Latin and English. An understanding of language is developed through a comparison of Latin and English syntax and grammar. 1 year: 1 credit

# World Languages Department 

Classical Languages

## 302 Latin II

In Latin II students continue their cumulative study of Latin, studying most of the constructions needed to read standard Latin prose. Cultural units covered include Roman daily life, entertainment, Roman political and military institutions, and an introduction to the Classical tradition. The year is focused on grammar and history and students are expected to read lightly edited selections from a variety of prose authors. Simple poetry may be introduced for the first time.
1 year: 1 credit
Prerequisite: Latin I

## 303 Latin III

Students in this course will complete final complex grammar units, which will introduce them to special uses of various constructions and provide students with excerpts from accessible authors, including Livy, Ovid, Petronius, Catullus, Horace, and Cicero. At this level, stress is placed on applying the grammar that students have learned during their Latin careers to their translations in order to solidify concepts and ensure that they are prepared to work through the AP syllabus in the next two years. Additionally, students will encounter extended selections of poetry, allowing them access to a new genre of literature and its own special grammar rules. Cultural units focus on the end of the Republic, ensuing civil war, early Imperial Rome, and epic poetry.
1 year: 1 credit
Prerequisite: Latin II

## 304 Latin IV (Advanced Literature)

 305 Latin V (AP Prep)Students in this course will continue to refine their skills in literal translation, sight translation, scansion, and literary analysis in order to facilitate greater fluency in the reading of authentic Latin texts. There is an emphasis on writing analytical essays and strengthening the skills needed to develop and support arguments based on evidence from the texts. The course syllabus alternates between a year on the Late Republic and a year on the Early Imperial period. Caesar's Gallic Wars, the poems of Catullus, and Cicero's Pro Caelio will provide for a thematic exploration of the historical context of the Late Republican Era from the Gracchi to the rise of Augustus and be able to situate Caesar, Catullus, and Cicero within that context. Vergil's Aeneid and the works of Ovid, Horace, and Livy will be covered to understand the impact of the emergence of the Augustan Principate on literature and in particular, epic poetry. This course will cover the College Board AP Latin syllabus over two years if Latin V is taken as an elective during senior year. At the conclusion of Latin V, students have the option of taking the Advanced Placement Latin exam with additional preparation.
1 year: 1 credit (each)
Prerequisite for Latin IV: Latin III
Prerequisite for Latin V: Latin IV

## World Languages Department

## Modern Languages

The study of modern language also leads us to an understanding of our rich and varied cultural heritage. As the countries of our world become increasingly interrelated, knowledge of other cultures as well as their languages has become a very marketable skill and often is a necessity. Our study of a variety of literature broadens our understanding of the world community as we evaluate contemporary situations and recognize our shared beliefs and feelings.

Completion of three years in French or Spanish study in the Upper School satisfies the Academy's graduation requirement in world language and develops mastery in reading, writing, speaking, and listening, as well as grammatical constructions. Exemplary students are urged to take a level V language course and the associated Advanced Placement Language Exam. Additionally, students can begin a second world language. During the year students are encouraged to take part in National French and Spanish Exams.

## 402 French II

In French II, a communicative approach is used. Students will review and move on to more advanced grammatical constructions. They will extend their knowledge of vocabulary. Students' listening, writing, reading, and speaking skills are developed through exercises presented orally and in written form. Students interact in French to strengthen their skills. French films, music and culture are an important part of this course. Class is conducted in French.
1 year: 1 credit
Prerequisite: French I (not offered in the Upper School)

## 403 French III

French III continues the communicative approach. Students expand upon grammatical concepts and vocabulary learned in the first two years and express their ideas in greater depth. Students work to improve reading skills by reading excerpts from various sources. Increased emphasis is placed on improving students' ability to express themselves in written and spoken French. Compositions, presentations, and French films will be used as a part of our studies. Class is conducted in French and culture is an important part of this class.
1 year: 1 credit
Prerequisite: French II

## 404 French IV <br> 405 French V (AP Prep)

In these advanced French courses, we seek a refinement of all skills learned in French I III, continuing with a communicative approach. Students continue working toward oral and written proficiency and grammatical accuracy. Students explore texts and films in terms of plot, structure, and character. Oral discussions and written assignments revolve around the six AP Themes. The Level V course includes the option to prepare for the Advanced Placement French Language and Culture Exam, and students are encouraged to do so. The class is conducted in French. The class content will vary every year so that French V students will not be repeating course content. Students have the option of taking the Advanced Placement French Language and Culture exam with additional preparation. 1 year: 1 credit
Prerequisite for French IV: French III
Prerequisite for French V: French IV

# World Languages Department 

## Modern Languages

## 411 Spanish I

Spanish I focuses on accurate pronunciation and intonation, as well as the development of conversational, listening, writing, and reading skills. Basic grammatical points are discussed and practiced. Language learning skills are discussed and honed. Through active participation in simulated situations, students gain confidence in their ability to interact in Spanish. Discussion of cultural topics points out similarities and differences between Hispanic cultures and our own.
1 year: 1 credit

## 412 Spanish II

In Spanish II, students review and reinforce the skills learned in Spanish I, including pronunciation, basic grammar, conversation, and listening. The skills of advanced conversation, composition, reading, and grammar are developed. Communication skills are strengthened by the use of Spanish during class.
1 year: 1 credit
Prerequisite: Spanish I

## 413 Spanish III

Spanish III is a crucial part of the language learning sequence because it expands upon the grammatical concepts and vocabulary learned in the first two years. Students continue their listening and speaking skills. Each student is responsible for making oral presentations and participating in more complex guided conversations throughout the year. Numerous compositions are written pertaining to discussion topics and cultural aspects. Students develop their skills in reading for understanding through the study of the Spanish-speaking world.
1 year: 1 credit
Prerequisite: Spanish II

## 414 Spanish IV

In Spanish IV, skills learned in Spanish I - III are reviewed, from pronunciation through advanced composition and literature. There is considerable emphasis on conversation and discussion in Spanish. Course content includes the study of all three genres of literature (prose, poetry, drama). Students will also study history through film, and be introduced to practicing various AP assessments.
1 year: 1 credit
Prerequisite: Spanish III

## World Languages Department

## Modern Languages

## 415 Spanish V (AP Prep)

In Spanish V, the final polish is put on all skills learned in Spanish I-IV. Spanish V offers students the opportunity to use and demonstrate greater proficiency in their language skills. The course will continue to foster an awareness and appreciation of Hispanic civilization and culture with an emphasis on reading and discussing authentic literature. The student will gain greater fluency in the four skills: listening, speaking, reading and writing. Students have the option of taking the Advanced Placement Spanish Language and Culture exam with additional preparation.
1 year: 1 credit
Prerequisite: Spanish IV

## Fine Arts Department

All Fine Arts classes in the Upper School offer a breadth of experiences that are sequenced in a developmentally appropriate framework. Fine Arts courses at EA are process-oriented, not product-oriented. We provide a safe environment where students are comfortable taking risks for their own personal growth. We offer multi-cultural experiences, as well as the opportunity for students to explore who they are and to develop critical thinking skills in an active and vital learning environment. Courses are offered in a variety of visual, performing, and media arts, allowing students to explore their creative options or more fully develop an artistic passion. Students in these courses develop lifelong awareness and appreciation for the arts and the importance of the contribution the arts have made for the betterment of our world. This includes the development of their own personal aesthetic and critical faculties.

## 011, 012, 013 Introduction to Fine Arts

Each 9th-grade student at Elgin Academy will begin the study of Fine Arts with the required Introduction to Fine Arts course. Students will select 2 areas of study, one for each semester, choosing from Visual Art (011), Theatre (012), or Music (013). This course will include elements of the history of the Fine Arts (visual art, theatre, and music) and introduce students to the arts in their applied forms: studio art, acting/design, and music performance/production.
1 year: 1 credit

## Visual Arts Courses for Grades 10-12

## 021 2-D Studio Foundations

2-D Studio Foundations is a studio art class that introduces students to a variety of techniques and materials used in drawing, painting, and multi-media work. Students explore the possibilities and limitations of pencil, ink, charcoal, pastels, watercolor, and acrylic as media for self-expression. Technical focus is on color theory, material handling, line work, and brush work.
1 year: 1 credit

## 022 Advanced Drawing

Through individual instruction, students explore various media and the art movements of the twentieth century. Class is divided into lecture and presentation of contemporary styles, as well as studio time. Evaluation is based on students' research of a particular style and its use in their own work.
1 year: 1 credit
Prerequisite: 2-D Studio Foundations

## Fine Arts Department

## Visual Arts Courses for Grades 10-12

## 032 Advanced Painting

Students may elect to take this studio art course for more advanced work with oil and acrylic. This course further explores color theory and the relationship between color, light, and shadow in painting. Students work through the professional painting process from research, taking their own reference photos, creating their compositions, and engaging in critique. The emphasis is on creativity through context, and students will create work inspired by their art history research and individual style and technique.
1 year: 1 credit
Prerequisite: 2-D Studio Foundations

## 058 Ceramics

This course explores basic form development and material exploration using clay. Students will study ceramics through art history, art aesthetics, art criticism, and art production. In this class, students will learn the primary building techniques in ceramics: pinch pot, coil method, slab method, and throwing on the pottery wheel. Surface decoration, applied design, and glazing are covered. Students will also learn to understand the firing processes involved in making completed projects. There will be a variety of assignments that offer the student an arena to develop his/her creative and technical abilities. Students may take this course only one time.
1 year: 1 credit

## 065 Fine Arts Portfolio Prep / 066 AP 2-D Art and Design

In this course, students work toward a portfolio in either Drawing, Painting, Ceramics, or a mix of the disciplines. The program is intended for students with a serious commitment to the Visual Arts and requires a significant amount of time during and outside of class. Students who take 066 AP 2-D Art and Design are required to submit a portfolio to the College Board AP program in May; this portfolio it must follow specific criteria and will be evaluated for potential college credit. Students who wish to build a portfolio but not submit it to the College Board should take 065 Fine Arts Portfolio Prep, during which they must create a portfolio of at least 20 pieces to be shown at the end of the year art show.
1 year: 1 credit
Prerequisites: Two of the following: Ceramics, Drawing, Painting along with a departmental recommendation. Open to seniors only.

## Fine Arts Department

## Videography Courses for Grades 10-12

## 071 Videography

Videography is an introductory level course that provides students with an understanding of the basics of filmmaking. This course is collaborative, as film is a collaborative medium, and students work in groups to plan, film, and edit projects during class. The first semester is spent learning about effective shot composition and camera work, while students develop their film grammar. Films produced in the first semester are non-narrative based and focus on using the camera to convey meaning. As technical abilities and editing skills advance, students move on to a larger scale film production project during the second semester. Technically, this class will teach you how to effectively use a DSLR camera, how to edit in Premiere Pro, lighting and sound skills, how to use the green screen and teleprompter, and much more.
1 year: 1 credit

## 072 Advanced Videography

Advanced Videography continues building on the processes acquired in Videography. This course focuses less on the development of film grammar, and more on using the film grammar already developed to craft a personal vision. Students will be required to spend intensive amounts of time on pre-production and production, with an expectation that they will spend large chunks of time outside of class developing their projects. This course will delve into film production and history that is influenced by or transgresses Hollywood filmmaking. Students will work through project levels as they work towards independent projects in the second semester.
1 year: 1 credit
Prerequisite: Videography

## Fine Arts Department

## Music Courses for Grades 10-12

## 082 EA Live (Music Performance Ensemble)

The Music Ensemble class gives instrumental and vocal students an opportunity to work together as a combined performance ensemble as they study, learn, and perform a variety of modern pop, jazz, rock, and other styles of music. For instrumentalists, a basic knowledge of music or basic proficiency on an instrument are required. Students must provide and maintain their own instruments and instrument supplies. For 'singers', students with minimal musical knowledge will learn sight-singing skills, vocal exercises, harmonizing, and the art of performing. No previous musical training is required. Additional private lessons are strongly recommended for both singers and instrumentalists, but not required.
Drummers, Bassists, Guitarists, and Keyboardists are all welcome in addition to those who play Woodwind, Brass, or Strings with a group of Vocalists to round out this live performance experience.
1 year: 1 credit

## 084 Music Talk and Trends (A Music Appreciation Course)

Students will learn about how music throughout history has been integrally involved in impacting the hit songs and various music styles and genres of today. Students will take an in-depth look at modern songwriting/performance trends and techniques, and touch on some common aspects of modern music production. This course is an ideal option for those who love to listen to, learn, and talk about music, but may not be interested in performing. 1 year: 1 credit

## Fine Arts Department

## Theatre Courses for Grades 10-12

## 091 Theatre Arts Workshop I

This course concentrates on the skills and techniques required for quality work in beginning acting and directing, technical theatre, and play analysis. Some of the units covered include acting technique, auditioning, scene study, improvisation, directing, design, and technical theatre. Field trips are taken whenever possible to enable students to see professionals working at their craft. Recordings of plays and related subjects will be viewed and discussed. Students are asked to apply learned knowledge through writing, discussion, evaluations, and projects, as well as through work in relevant capacities on the school productions. This course often concludes with a capstone performance.
1 year: 1 credit

## 092 Theatre Arts Workshop II

This course builds on the acting, directing, and design skills learned in Theatre Art Workshop I and focuses on developing further skills as serious practitioners of theatre. This is an upper-level course offered to motivated students for whom Theatre Arts Workshop I is only a first step. The course includes (1) directorial theories, including play selection, organizing a production schedule, casting, working with designers, creating a director's concept, preliminary play analysis, running rehearsals, and working with actors; (2) Developing acting skills through scene study and performance; and, (3) a technical theatre component, including a working knowledge of the lighting, sound, scenic, and costuming areas of the theatre department. In addition, students are required to build evaluative and aesthetic skills by seeing/reading plays, critique, and discussion. This class often concludes with a capstone performance.
1 year: 1 credit
Prerequisite: Theatre Arts Workshop I and a departmental recommendation.

## Computer Science Department

The first electronic computer was built about 75 years ago. Since then, computers have gotten smaller, cheaper, more powerful and more numerous at an astonishing rate. Today computers affect nearly every aspect of our lives, and as we move deeper into the twenty-first century their impact will surely continue to increase. The Computer Science Department's courses are aimed at students who want to understand how computers and computer programs work, not simply how to use them. In addition, the courses provide excellent training in analysis, problem solving, logical thinking, and attention to detail. As an added bonus, they are hands-on and fun.

The Department's first course, Introduction to Computer Science (ICS), is a year-long introduction to the basic principles, practices, and sub-fields of Computer Science. ICS is followed by Programming in Java, which extends the ICS programming unit and prepares students to take the College Board's Advanced Placement Computer Science A exam. Students who are interested in pursuing computer science beyond these two courses are encouraged to design a Hilltop experience that includes such a focus.

## 575 Introduction to Computer Science

This course is an introduction to the field of Computer Science. Students learn the basic thinking and problem-solving skills that underlie the entire field and are introduced to the Java programming language. In addition, they survey and learn the basics of several important subfields within Computer Science, such as computer and network operation, analysis of large datasets, security (including code making and breaking), algorithms, and the limits of computation.
1 year: 1 credit

## 576 Programming in Java (AP Prep)

This course is a continuation of the programming unit in ICS. We review the material covered there (which included object-oriented programming concepts, program design, data types, and control structures), and then go on to study arrays and ArrayLists, recursion, algorithms (e.g. sorting and searching), and as many data structures (linked lists, stacks, queues, binary trees, etc.) as we have time for. Students have the option of taking the Advanced Placement Computer Science A exam with additional preparation.
1 year: 1 credit
Prerequisite: Introduction to Computer Science and a departmental recommendation.

## Physical Education / Athletic Program

Students must earn 2.0 credits in the area of physical education in order to earn an Elgin Academy diploma. This is equivalent to participation in six out of a possible twelve seasons of athletics across a four-year Upper School experience.

Elgin Academy is a member of the Illinois High School Association (IHSA) and, as such, follows a three-season sports calendar. Each season of sport accounts for $1 / 3$ of a graduation credit. Therefore, students need to participate in six seasons of athletics in order to earn their 2.0 credits. In order to ensure that students are participating in athletics throughout their Upper School career, EA requires the following plan:

- 9th grade - students participate in at least 2 sport seasons
- 10th grade - students participate in at least 2 sport seasons
- 11th grade - students participate in at least 1 sport season
- 12th grade - students participate in at least 1 sport season

Participation above and beyond the requirements is welcome and encouraged.
For the 2022-2023 school year, Elgin Academy plans to offer the following sports (dependent on team enrollment) in accordance with IHSA sports seasons:

| Fall Season | Winter Season | Spring Season |
| :--- | :--- | :--- |
| Girls Tennis | Girls Basketball | Girls Soccer |
| Girls Volleyball | Boys Basketball | Boys Baseball |
| Boys Soccer |  | Boys Tennis |
| Co-ed Cross Country |  | Co-ed Track \& Field |
| Co-ed Golf | Boys Volleyball |  |
|  <br> Conditioning |  |  |

Students can also earn their physical education credits through independent athletic programs away from Elgin Academy in sports that are not offered at EA. Earning credits requires a level of commitment and competition that is comparable to an Elgin Academy sports season. There is an application process that must be completed with the Athletic Director prior to the sports season. The Athletic Director has the final decision over the granting of credit. Recent examples of independent credits earned include, but are not limited to, equestrian competition, ice hockey, and swimming.

## Four-Year College Counseling Timeline

## Freshman Year

- Perform to the fullest of your abilities in your classes. Your cumulative grade-point average (GPA) will be calculated and reported on your transcript at the end of each semester.
- Begin to build good relationships and cultivate good character traits with your teachers and advisor.
- Explore a variety of co-curricular activities while balancing your academics, athletics, activities, and family life.
- Take the PSAT 9 exam in October in order to create a baseline for future standardized testing.
- Choose courses for your sophomore year that are challenging and fit your goals.


## Sophomore Year

- Perform to the fullest of your abilities in your classes. Your cumulative GPA will be calculated and reported on your transcript at the end of each semester.
- Continue to build good relationships and cultivate good character traits with your teachers and advisor.
- Meet with several college representatives when they visit EA in the fall so that you can begin to learn more about colleges and how to interact with admissions officers.
- Explore a variety of co-curricular activities while balancing your academics, athletics, activities, and family life. Consider pursuing leadership roles as they become available this year or in future years.
- Take the PSAT at EA in October, and the pre-ACT at EA in March/April. No additional standardized testing is necessary during this year.
- Choose courses for your junior year that are challenging and fit your goals.


## Junior Year

## Fall

- Perform to the fullest of your abilities in your classes. Your cumulative GPA will be calculated and reported on your transcript at the end of each semester.
- Meet with numerous college representatives when they visit EA either in-person or virtually.
- Take the PSAT/NMSQT (National Merit Scholarship Qualifying Test) at EA in October.


## Junior Year Continued

## Fall

- Attend local college fairs either in-person or virtually.
- Register for Advanced Placement (AP) exams related to the classes you are taking.


## Winter / Spring

- Perform to the fullest of your abilities in your classes. Cumulative GPAs will be calculated and reported on student transcripts at the end of each semester. Your transcript created at the conclusion of your junior year is usually the one college admissions review with fall applications, so it is the most important to date.
- Take the SAT and the ACT at least once. Consult with college counselors regarding registration procedures and deadlines. It is not recommended that you send these scores to colleges at this time, but you should report them to EA (code 141760). For your convenience, we will offer the SAT during a school day at least once each Spring.

Items during the remainder of the timeline marked with an asterisk (*) are included in the College Counseling Seminar curriculum. Students will work on these tasks during our regular sessions that begin in the second semester.

## Late January / February

- Discuss your standardized test results (PSAT / PreACT) and to prepare for the SAT and/or ACT. Develop strategies to meet your goal scores by considering test preparation work this coming summer.*
- Participate in weekly College Counseling Seminar meetings*
- Access your Naviance account.*
- Research summer academic experiences, volunteer work, employment, etc. so that you can plan the summer between junior and senior years with intentionality in mind.
- Attend EA College Night for Juniors with your parents.
- Complete Naviance surveys to help you learn more about your interests.*
- Schedule an individual college conference with your parents and college counselors.
- Begin creating a list of potential colleges in Naviance.*
- Select senior year courses, consulting with your advisor, college counselors, and parents to ensure that you are challenging yourself to meet your goals as well as the admissions standards of colleges that interest you.


## Iunior Year Continued

## March

- Begin developing your "long list" of college choices.*
- If possible, visit colleges during spring break. Consult with the college counselors if you need assistance in planning an itinerary or registering for official visits.


## April

- With the assistance of the college counselors, invite two teacher recommenders.*
- Meet with college representatives who visit EA.
- Create a comprehensive resume of your in-school and out-of-school activities.*
- Begin considering your college essays.*


## May

- Take Advanced Placement exams.
- Finish your junior year strongly!


## Summer Between Junior and Senior Year

- Consult with college counselors if you receive any ACT or SAT scores after the school year has ended.
- Continue researching colleges and requesting information.
- Plan summer and/or fall college visits.
- Continue refining your college list.
- In August, Create your Common Application account.*
- Begin working on a draft of your college essay or personal statement.
- Consult with college counselors about your fall testing plans (ACT/SAT). Each senior should take either the ACT or SAT at least once during the fall. At least one Fall SAT School Day exam is offered at Elgin Academy on a school day to be determined in consultation with the College Board each year (typically in mid-October).


## Senior Year

- Perform to the fullest of your abilities in your classes. Your cumulative GPA will be calculated and reported on your transcript at the end of each semester. Some of your colleges may not make acceptance decisions until after they have viewed your mid-year transcript. All colleges will want to see your academic progress remain consistent through the end of your senior year.


## September

- Resume the College Counseling Seminar.*
- Review your personal records with the college counselors to ensure they are accurate.*
- Meet with the college counselors to review your list of colleges and to update your Naviance account accordingly.*
- Determine your deadlines (early decision / early action / priority / regular decision).*
- Inform your teacher recommenders of your deadlines, and provide them with the information required to write your recommendations.*
- Submit registration to NCAA Clearinghouse, if appropriate.*
- Begin scholarship searches through services such as FastWeb or Raise.Me.*
- Meet with college representatives that visit EA, either in-person or virtually, especially for colleges where you will be applying.
- Attend local college fairs, receptions, college nights, and virtual events in order to connect with college admissions officers.


## October

- Work with your family to complete the FAFSA (Federal Application for Free Student Aid) and, where necessary, the CSS Profile in order to qualify for need-based and some merit-based aid programs. Different colleges have different deadlines, so work with the college counselors to identify and adhere to these timelines.
- By mid-October, complete all applications with November 1 deadlines. Notify college counselors and the registrar of your submissions. Send your standardized test scores directly from ACT/SAT to your colleges. Request that the Registrar send your transcript and letters to colleges where you are applying.


## November

- Register for Advanced Placement (AP) exams related to the classes you are taking.
- Continue completing applications with a goal of besting each deadline by at least two weeks. Send standardized test scores directly from ACT/SAT to your colleges at least two weeks prior to deadlines, and request that the EA Registrar send your transcript and letters to colleges where you are applying.*


## Senior Year Continued

## December

- Continue completing applications with a goal of besting each deadline by at least two weeks, and submitting all applications by Winter Break. Send standardized test scores directly from ACT/SAT to your colleges at least two weeks prior to deadlines, and request that the Registrar send your transcript and letters to colleges where you are applying.*
- Provide the college counselors with copies of college decision letters (acceptance/deferral/denial) along with copies of all merit-based award letters.


## January, February, and March

- Continue scholarship search and complete applications.
- The EA Registrar will automatically send a copy of your seventh-semester EA transcript to colleges where you have applied but have yet to receive a decision.
- Plan campus visits for colleges you have not visited or would like to experience again before making your final matriculation decision.
- Provide the college counselors with copies of college decision letters (acceptance/deferral/denial) along with copies of all merit-based award letters.
- Write thank-you notes to teachers, coaches, and others who wrote recommendation letters for you.


## April

- Meet with college counselors to discuss college application outcomes and your college plan.
- Provide the college counselors with copies of college decision letters (acceptance/deferral/denial) as well as copies of all merit-aid award letters.


## By May 1

- Decide on the one college that you will attend. Send in your tuition deposit. Notify the other colleges that accepted you that you have selected another college. Do not double-deposit (commit to two or more colleges).


## May/June

- Take Advanced Placement Exams; when you complete the preadministration process, have your scores sent for free to the college where you plan to matriculate.
- Finish your senior year in a strong fashion!
- Graduate from EA!
- The EA Registrar will automatically send a copy of your final EA transcript to the college where you plan to matriculate.


## Co-Curricular Opportunities

The Upper School offers a number of co-curricular opportunities that appeal to a wide variety of interests. In choosing co-curricular clubs and activities, students should think about where their energies, time, and talents can be engaged most productively. In addition, commitments should be made with an eye toward putting together the strongest possible profile to present for college admission. When reviewing co-curricular activities, colleges look for depth and leadership in an area, not breadth of experiences. Therefore, students are encouraged to be passionate about a few commitments as opposed to being involved on the periphery of many organizations.

The following are short descriptions of a number of the co-curricular opportunities available at EA. This may not be a comprehensive list due to the fluid nature of offerings, which are based upon the needs and desires of the Upper School community. Each co-curricular activity is largely student-driven with the support of at least one faculty sponsor. New organizations can be created when student interest and faculty resources allow for additions. An activity fair during which students can sign up for clubs and organizations is typically held early in the school year.

## Student Body Elected Organizations

Athletic Council: The purpose of the Athletic Council is to promote the athletic program at the school and to provide additional leadership opportunities for Upper School students. The executive council positions (president, vice-president, secretary, treasurer, and public relations officer) are typically elected in the spring and the class representatives (two from each grade) are typically elected in the fall, providing an opportunity for new students to serve on the council.

Student Council: The Student Council is the Upper School's representative form of student government. The Student Council President presides over all weekly Upper School assemblies, and the council and its various committees are responsible to promote school spirit, to plan and organize social events, to sponsor community service projects, and to be effective, positive leaders in the school community. The executive council positions (president, vice-president, secretary, treasurer, and public relations officer) are typically elected in the spring and the class representatives (two from each grade) are typically elected in the fall, providing an opportunity for new students to serve on the council.

## Organizations with an Application / Selection Process

Cum Laude Society: This is a national academic honor society whose membership is based solely on grade point average. Each spring the top 10\% of the junior class and the top $20 \%$ of the senior class are admitted to the society.

International Thespian Society: This group honors high school students for outstanding work in theatre and also strives to increase enjoyment of theatre arts for students both now and in their adult lives. Membership is granted for the performance of meritorious work in theatre arts through participation in productions. Students become members by earning points for work in both performance and non-performing areas. After participation in an initiation ceremony at which initiates present a small performance of their choice, new members are accepted into the group and are then eligible to participate in the society's theatre outings around the Chicago area.

National Honor Society: Each year during the spring, all students in the $10^{\text {th }}, 11^{\text {th }}$, and $12^{\text {th }}$ grades with a cumulative GPA of 3.50 or higher are invited to apply for membership in this national organization whose purpose is to recognize and honor students exhibiting the four characteristics that the society has established as criteria for membership: scholarship, character, leadership, and service. Students must complete an NHS information sheet, which allows them to exhibit their efforts in meeting membership criteria. The final selection of initiates is chosen by a faculty committee.

Academic Challenge in Engineering and Science (ACES, formerly WYSE): Members of the ACES team compete with teams from other schools by taking tests in various subject areas. Competition takes place at a local level, with qualifying teams advancing to regional and state-level competitions. Students are invited to participate on the basis of a combination of past and current academic progress, demonstrated achievement in specific subject areas, and faculty recommendations. The team size is limited due to competition rules.

Yearbook Editorial Staff: Positions of greater responsibility on the Yearbook staff (editor, business manager, etc.) are selected by the yearbook's faculty advisor. These key people are essentially responsible for the entire production of the book, and the advisor bases their selection on the quality of the student's past work as well as their willingness and availability to really commit to this year-long task.

## Interest-Based Clubs and Activities

Unless otherwise specified, the following clubs offer open enrollment for any student.
The Cupola: This student-led school newspaper allows students to explore journalistic interests with the goal of releasing several issues in an online format throughout the school year.

Environmental Club: Students interested in learning about ways to protect and care for our planet are encouraged to join this club. In past years students have advocated for recycling, worked to remove invasive species in local forest preserves, and organized Earth Day celebrations.

Fine Arts Productions: Each year, Upper School students put on two shows, a play and a musical. All students are welcome to audition for roles. Additionally, a host of students is needed for backstage work, including but not limited to set design and building, lighting and sound, and stage crew help during the performances.

Gaming Club: Gaming Club is a place for students to get together to share and play a variety of games, including board, card, and TTRPGs. A new game is usually introduced every week, and students are encouraged to stop by and play their favorites at any time.

Improv Club: Improv Club is open to any Upper School students who enjoy performing in or watching improvisation games and exercises. This student-led club meets once a week before school to play a variety of improv games and to hone their improvisational skills. Club members have also performed at various school events, including the Thespian induction ceremony at the end of the year.

Latin Club: This club is open to all levels of Latin students who want to explore Rome beyond the classroom. Students can compete at local and state Certamen meets, which are similar in format to quiz-bowl style trivia competitions. All Latin students are also welcome to attend the Illinois Junior Classical League Convention each year in February. This event is attended by hundreds of Latin students from across the state competing in creative arts and academics. Latin Club also hosts events at school open to all EA students interested in Greco-Roman history and culture.

Math Club: Students in the Math Club meet on a regular basis to prepare for and to compete in mathematics competitions such as the Illinois Math League contests and the AMC 10/12.

Model United Nations: The goals of the Model UN program are as follows: to educate high school students in the arts of debate, negotiation, and public speaking by providing a forum in which they can hone their skills; to introduce high school students to the fascinating realities and complexities of international relations through simulation of international organizations; and, to demonstrate the potential of the United Nations in resolving international problems while demonstrating its limitations. In recent years, EA students have prepared for and participated in Model UN Conferences at Waubonsie Valley High School, Indiana University (virtually), and Northwestern University. Participation in future Model UN conferences is dependent on student availability and interest.

## Interest-Based Clubs and Activities

Music Jam Club: This club gives students an opportunity to sing or perform various instruments together in an informal music setting. Past iterations have included vocalists, guitarists, drummers, ukulelists, clarinetists, and even a student-led bucket drum group that supported select athletic events. Students choose which songs they want to work on during the course of their club time and will often complete a recording that showcases the progress they've made at the end of each semester.

Public Action to Deliver Shelter (PADS): Interested students visit PADS of Elgin, a local homeless shelter, each week to provide breakfast and perform basic cleaning chores. Students attend PADS on a rotation with a faculty sponsor. The time commitment for PADS is Thursday mornings from 6:30-7:30 a.m.

Prom Committee: This group is open to any juniors who wish to help plan the prom. Students will learn organizational and leadership skills as they determine the location, theme, and other facets of the prom experience. Students also participate in budgeting and fundraising.

Scholastic Bowl: This team is open to all Upper School students. Throughout the year, these students engage in a variety of practices and competitions as they prepare for state-level tournaments sponsored by several organizations, including the IHSA.

Soup Kitchen: Students in Soup Kitchen help serve meals and clean up at the First Congregational Church twice a month. Students attend Soup Kitchen on a rotation with a faculty sponsor. The time commitment for Soup Kitchen is on the second and fourth Wednesday of each month from 5:00-7:00 p.m.

Stock Market Simulation Game: This activity is open to any student with an interest in following the stock market. Students form teams which then track the market in the Chicago Tribune and on the Internet and send their "picks" to the sponsors of the game who monitor each team's progress. At the end of the simulation all teams that participated are ranked.

Yearbook Staff: Although the editorial staff positions on the yearbook are appointed, anyone with an interest in photography, writing, layout, sales, or just helping out is welcome to join the general staff.

## Inspiring students to become our creative, courageous, and compassionate future.

