STRATFORD ACADEMY

# UPPER SCHOOL COURSE CATALOG

## STUDENT COPY

## 2026-2027

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# GRADUATION REQUIREMENTS

Minimum course credits to graduate is 23

A student may receive credit only once per course. If a student repeats a course for which credit has been granted, the repeated course will have no credit indicated on his or her transcript. Exceptions to this rule are Journalism, Band, Chorus, Yearbook, Engineering Design, PE, and Weightlifting, which may all receive credit for additional years taken.

No more than four credits may be earned in credit recovery programs and applied towards graduation requirements, and no more than one recovery credit can be earned in any given content area. Any credit recovery or summer school credits to be applied toward a Stratford Academy diploma must be approved in advance by the Head of Upper School.

Specific minimum course credits in each discipline (one semester equals 1/2 unit):

**ENGLISH**

- 4 units of English (an English class every year of high school)
    - **Required**: Freshman English, Sophomore English (or Accelerated English), Junior English (or AP Language), Senior English (or AP Literature)

**MATHEMATICS**

- 4 units of mathematics (a math class every year of high school)
    - **Required**: Algebra I, Geometry, Algebra II

**SOCIAL STUDIES**

- 4 units of social studies
    - **Required**: Intro to World History and Geography (or AP Human Geography); World History (or AP World); US History (or AP US); US Government* with Economics and Personal Finance* OR US Government* with AP Microeconomics*, OR AP US Government

**SCIENCE**

- 4 units of science (a science class every year of high school)
    - **Required**: Biology, Chemistry (or Accelerated Chem)

**WORLD LANGUAGE**

- 2 units of world language (must be 2 consecutive years of the same language and taken beyond 8th grade)
    - French *ending as in-person option in 2027-2028
    - Latin
    - Spanish

**ELECTIVES**

- 5 units of electives; within the electives, students must fulfill an Arts requirement as below:
    - 1.0 unit of Fine Arts OR
    - 1.0 unit of Media Arts (Yearbook, Journalism, Integrated Digital Media) OR
    - 1.0 unit of Applied Arts (Intro to Design, Engineering Design, Aerospace Engineering)

- Successful completion of a Senior Project
- 75 hours community service minimum

# ENGLISH

**Graduation Requirements:** Students at Stratford are required to complete 4 units of English in Upper School.

**Required**: Freshman English, Sophomore English (or Accelerated English), Junior English (or AP Language), Senior English (or AP Literature)

## Freshman English - Yearlong

In Freshman English, students focus primarily on reading, discussing, and writing about literature. Texts are selected annually to include a wide range of genres, eras, geographical regions, interests, and themes, but students perennially study at least one Shakespearean play. During class, students develop their speaking and listening skills as they discuss the works they read together. Throughout the year, they write formal, analytical, argumentative papers over the literature they read and discuss. In addition to these academic writing assignments, several creative, personal writing assignments are also required of the students. These typically relate in some way to the literature being read. Students are also expected to generate short, informal written pieces (usually of paragraph length) several times a week. Formal grammar review and instruction derive mainly from common errors in the students' own writing and are delivered primarily through a mini-lesson format. Students also work through vocabulary over the course of the year.

## College Prep Sophomore English - Yearlong

Students in Sophomore English will read novels, plays, poetry, and short stories by authors from all over the world. We will work on reading comprehension skills and literary analysis. On major essay assignments as well as daily writing exercises students will work on grammar, mechanics, and vocabulary. The class focuses on the process of writing, everything from structure and mechanics to content and stylistic development. We will use a combination of discussions, writing workshops, Socratic seminars, online grammar tools, writing-to-learn and learning-to-write practices, presentations, vocabulary study, and mini-lectures. You will be responsible for leading class discussions and providing questions for the class to consider.

## Accelerated Sophomore English - Yearlong

The course is designed for students willing to proceed at an accelerated pace through the existing Sophomore English curriculum and to explore both reading and writing in detail. The course is recommended for students who love discussing a wide variety of readings and who have mastered the basic process of writing and enjoy pushing themselves to develop stylistically as writers. The course is also recommended (but not required) for students who wish to enroll in either or both AP English courses.
*Prerequisites: Application, Teacher Recommendation*

## College Prep Junior English - Yearlong

This course focuses on American Literature in the 19th-21st centuries. Students are encouraged to think critically about how these texts relate to the American experience, and more specifically, how the "American Dream" reflects various view points and time periods.  We will read a variety of texts by diverse authors and analyze how American Literature reflects the social, political, and artistic movements in American culture-- past and present. What does it mean to be American is an essential question that we will revisit throughout the year. Students can expect to read actively by annotating and coming to class prepared to discuss key issues in a civil manner. This is a writing-intensive class that includes research, analytical, persuasive, and creative essays. Students will be expected to collaborate with their peers on projects.

## AP English Language and Composition - Yearlong

In accordance with College Board guidelines for this course, students in AP English Language and Composition are engaged in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language complement meaning. Students in AP English 11 write in a variety of styles including formal analytical and argumentative papers, in-class timed essays, and informal personal/reflective pieces. All students enrolled in the course must take the Advanced Placement English Language and Composition Examination administered by the College Board in May. Students earning a three (3) or higher may be eligible to receive college credit and/or exemptions.
*Prerequisite: Application, Teacher Recommendation*

## Senior English I and II

***Either Senior English or AP Senior English is required for graduation***

Senior English focuses on the continued development of communication and critical thinking skills through a variety of texts and assessments, including Socratic seminar-based discussion, multi-draft papers, in-class timed writes, speeches and debates, and group projects. Although specific topics of study (such as war, science fiction / fantasy, crime, or creative writing) will change each year, students will study material representative of a diversity of experiences and time periods, better preparing them to meet the challenges of college and the world beyond. Our 2025-2026 course options are below:

### OPTION ONE

Crime Fiction (Fall Semester); Literature and Film: Stories on Page and Screen (Spring Semester)

### Crime Fiction (Fall)

This course examines crime fiction as both popular entertainment and serious literature. Students will explore how mysteries, detective stories, and thrillers reflect—and critique—the societies in which they are written. Reading classic and contemporary works, students will analyze how authors use crime, guilt, justice, and moral ambiguity to raise questions about power, law, class, gender, and ethics. Students will be able to communicate their ideas clearly and persuasively in both written and oral forms.

### Literature and Film: Stories on Page and Screen (Spring)

Students will study a variety of literary works ( short stories, novels, and plays) and analyze their film/TV adaptations. This course explores how stories change–and remain the same– when they move from the written page to the screen. Through close reading and film viewing, students will compare elements like character, plot, setting, point of view, and theme, as well as visual and cinematic techniques such as framing, lighting, sound, and editing. By the end of the course, students will be able to thoughtfully evaluate adaptations, articulate their own interpretations, and better understand how different mediums tell powerful stories in different ways.

### OPTION TWO

Science Fiction (Fall Semester); Fantasy (Spring Semester)

### Science Fiction (Fall)

This semester-long course delves into the world of science fiction, examining how authors use futuristic and speculative settings to explore complex themes such as technology, humanity, and societal change. Students will read and analyze works by influential writers, considering how science fiction reflects and critiques real-world

issues. Through class discussions, essays, and creative projects, students will investigate the ethical and philosophical questions posed by the genre while honing their analytical and writing skills.

## Fantasy (Spring)

In this semester-long course, students will journey into the imaginative landscapes of fantasy literature, exploring themes of heroism, morality, identity, and the battle between good and evil. Through close readings of classic and modern fantasy texts, students will analyze the genre's use of mythology, world-building, and archetypes. Class discussions, analytical essays, and creative assignments will invite students to engage deeply with fantasy's ability to challenge and inspire readers.

## AP English Literature and Composition- Yearlong

Students study fiction, drama and poetry, all paired with lessons in specific philosophies. The texts include tragedies and comedies. The class is almost entirely discussion-based. During the year, students will participate in formal debates. Students write three long essays (two argumentative and one short fiction), complete in-class timed responses, and compose poetry. All students enrolled in the course must take the Advanced Placement Literature and Composition Examination administered by the College Board in May. Students earning a score of 3 or higher may be eligible to receive college credit and/or exemptions.
*Prerequisite: Application, Teacher Recommendation*

# MATH

**Graduation Requirements:** Students at Stratford are required to complete 4 units of Math in Upper School.

**Required**: Algebra I, Geometry, Algebra II

## Algebra I - Yearlong

The Algebra I course begins with a review of the material covered in Algebra 8 and continues with additional topics of algebra. New topics covered include: solving linear inequalities, solving systems of equations and inequalities, operations with monomials and polynomials, factoring polynomials, solving equations by factoring, simplifying rational expressions, simplifying radicals, and operations with radicals. The course emphasizes the development of critical thinking and problem solving strategies.

## Algebra II - Yearlong

In Algebra II the students begin the year with a brief review of skills and concepts from Algebra I. Students will understand and apply the methods of simplifying and solving equations involving polynomials, rational, and radical expressions. Students should achieve mastery of graphing techniques of linear equations and learn techniques for graphing quadratic and exponential equations. Students will develop methods for solving systems of linear equations in two and three variables. Other course content includes operations with imaginary and complex numbers, solving quadratic equations with emphasis on the quadratic formula, solving linear and quadratic inequalities, and an introduction to functions, conic sections, laws of exponents, and laws of logarithms. A main objective of the course is the improvement of problem-solving skills.

## Algebra III - Yearlong

College Algebra III presents topics in both advanced algebra and introductory statistics. The course expands on many of the topics that were introduced in Algebra II with further study of polynomial, rational, exponential and logarithmic functions. The course also introduces students to topics in basic elementary statistics that are necessary for college and careers, including data analysis, uses and abuses of statistics, probability distributions, correlation and regression, modeling, and inference.

## Geometry - Yearlong

This course is a study of Euclidean geometry emphasizing a deductive system of logical reasoning used in the development of proofs. Students study basic geometric concepts and then progress on to proofs involving congruent triangles, similar triangles and parallel lines. Theorems involving right triangles, quadrilaterals, and circles are examined, and formulas for finding the areas of these figures are derived and applied. The course also includes basic constructions and an introduction to right triangle trigonometry.

## Precalculus - Yearlong

Precalculus serves as a comprehensive bridge between Algebra and Calculus, focusing on the concept of functions and their applications. This course equips students with a thorough understanding of various types of functions, including polynomial, rational, exponential, logarithmic, and trigonometric functions. Emphasis is placed on developing algebraic, graphical, and analytical skills essential for success in higher-level mathematics.

By the end of this course, students will be able to recognize and interpret algebraic and graphical representations of linear, quadratic, polynomial, rational, exponential, logarithmic, and trigonometric functions. Students will determine the zeros of polynomial functions. In addition, students will perform basic manipulations with exponential and logarithmic expressions. Students will verify and prove trigonometric identities. Finally, students will solve polynomial, exponential, logarithmic, and trigonometric equations.

## AP Precalculus - Yearlong ⭐ NEW COURSE ⭐

AP Precalculus is an advanced high school course that serves as a foundation for college-level calculus. It covers topics such as functions, trigonometry, exponential and logarithmic functions, and sequences. The course emphasizes deepening students' understanding of mathematical concepts and honing their problem-solving skills. Special attention is given to graphing functions, analyzing their behavior, and solving equations. Trigonometry is a key component in exploring functions and their applications. AP Precalculus encourages critical thinking, mathematical reasoning, and connections between different mathematical ideas. The course often incorporates practical applications and technology to enhance learning. Successfully completing AP Precalculus prepares students for more advanced courses, particularly in STEM fields.
*Prerequisites: Application*

## AP Calculus AB - Yearlong

AP Calculus provides an opportunity for the high school student to take a course whose content is equivalent to that of a corresponding college calculus course. A mastery of advanced algebra and trigonometry is assumed, and students begin their study with a thorough exploration of limits. They proceed through differential and integral calculus. Specific topics include definition of derivative, techniques of differentiation, related rates, optimization, the fundamental theorems of the calculus, techniques of integration, applications of integration, logarithmic and exponential functions and their applications. Emphasis is placed on the four-fold approach to understanding and applying the concepts of calculus – numerical, graphical, analytical, and verbal. Graphing calculators are essential tools for the course. A majority of students who successfully complete this course also earn college credit through Advanced Placement Testing by the College Board.
*Prerequisite: Precalculus or AP Precalculus, Application*

## AP Calculus BC - Yearlong

AP Calculus BC is an extension of AP Calculus AB, and reflects the curriculum up through what an average second semester College level calculus course would cover. All of the topics from Calculus AB are tested in the Advanced Placement exam for Calculus BC. The additional topics covered in Calculus BC are parametric equations, analysis of planar curves given in parametric form, Euler's method, L'Hopitals Rule, applications of integrals, antidifferentiation by parts and simple partial fractions, improper integrals, solving differential equations, Polynomial approximations of series. Graphing calculators play a major role in understanding the multiple representations for functions, their derivatives, and their antiderivatives.
*Prerequisites: AP Calculus AB, Application*

## AP Statistics - Yearlong

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes that include exploring data, sampling and experimentation, anticipating patterns, and making decisions based on statistics. The AP Statistics course depends heavily on the use of the TI-84 calculator for the investigative aspects of data analysis. The course covers material typically found in a one semester introductory statistics course at the college level.
*Prerequisite: Application*

## College Readiness Math - Yearlong

College Readiness Math approaches a variety of accelerated math topics through the lens of financial applications. Students solve systems of equations, evaluate piece-wise functions, and analyze data. Throughout the course, students will work with quadratic, exponential, logarithmic, and trigonometric functions, while also recapping some statistics and probability.. The applications include but are not limited to expenses, banking, credit, automobile ownership, budgets, employment, income taxes and the stock market.

## Dual Enrollment Advanced Finite Mathematics- Semester ☆ NEW COURSE ☆

Discrete Mathematics, also known as Advanced Finite Mathematics, explores advanced discrete mathematics topics foundational to computer science, logic, and higher mathematics. Students will study set theory, number theory, logic, combinatorics, probability, and graph theory, emphasizing proof-based reasoning and real-world modeling. Students will apply counting principles, work with sets and equivalence classes, explore divisibility and congruences, and apply graph concepts to networks and prove graph properties.
Students will engage in mathematical communication, proof construction, and abstract problem-solving, preparing them for college-level mathematics or technical STEM programs.
*Prerequisite: Application*

## Dual Enrollment Statistics - Semester

Dual Enrollment Statistics offers students an opportunity to earn a semester of college credit while still in high school. The course introduces students to introductory topics in statistics. Students will analyze and summarize data sets, compute probabilities using geometric, binomial, normal and Poisson distributions. The course exposes students to sampling distributions and the Central Limit Theorem. Students will construct intervals and draw conclusions using hypothesis testing.
*Prerequisite: Application*

# SOCIAL STUDIES

**Graduation Requirements:** Students at Stratford are required to complete 4 units of Social Studies in Upper School.

**Required**: Intro to World History and Geography or AP Human Geography; World History or AP World History; US History or AP US History; US Government* with Economics and Personal Finance* OR US Government* with AP Microeconomics* OR AP US Government

## College Prep Introduction to World History AND Geography - Yearlong

This course is an introduction to world history and geography, from the first civilizations to around the year 1200. Students will study societies through the lenses of government, economics, achievements, religion, language, societal norms, and relationships with other societies, in addition to studying the physical geography and current political geography of the regions inhabited by those early societies. CP World Geography examines how place and space affects human interactions. This course will weave together both physical and human geography so students can better understand how geography is a driver of history and the modern world and will include key cultural and historic developments influenced by geography. The course moves through early world history to c. 1200 AD, covering subjects such as the Paleolithic Era, early agricultural societies, the development of world religions, and early world empires. Students will develop reading comprehension and analytical skills, as well as strengthen writing skills. Additionally, students will continue to develop map skills, including using modern GIS and GPS technologies to interpret and understand the earth and humans' interaction within the environment.
*Either Introduction to World History or AP Human Geography is a required course for graduation.*

## AP Human Geography - Yearlong

Advanced Placement Human Geography is a year-long class offered to freshmen in place of the regular World Geography requirement. The course is equivalent to a semester college-level introductory geography course. The curriculum covered in the course examines the patterns by and processes through which humans have understood, used, and altered the Earth. Specific topics covered will be basic geographic concepts and tools, population patterns and distribution, cultural patterns and processes, political patterns and processes, agriculture and rural land use, industrialization and economic development, and cities and urban land use.
*Either Introduction to World History or AP Human Geography is a required course for graduation.*
*Prerequisite: Application*

## College Prep World History - Yearlong

World History begins c. 1200 and covers a broad spectrum of human activity progressing into the modern era. The course examines the themes that seem to drive human relationships: agriculture, population growth, urbanization, power structures, empire, religious belief, trade, technological innovation, and economic systems, clear patterns emerge that help students to better understand the world in which we live. Major units include the development of trade networks across the world, land-based and transoceanic empires, the Columbian Exchange, the Enlightenment, the Industrial Revolution, Imperialism, the World Wars, and post-WWII decolonization. Emphasis is placed on connecting the histories of Asia, Africa, and other continents and world regions to traditional North American and European histories. Among other skills, students will develop skills in reading comprehension, source analysis using both primary and secondary source material, historical research and writing, and presentation skills.
*Either World History or AP World History is a required course for graduation.*

## AP World History - Yearlong

AP World History: Modern is equivalent to an introductory college course on modern world history. The AP World History course is structured around the investigation of six course themes and multiple key concepts across nine different chronological periods, from approximately 1200 C.E. to the present. Those major themes include humans and the environment; culture developments and interactions; governance; economic systems; social interactions and organization; and technology and innovation.
*Either World History or AP World History is a required course for graduation.*
*Prerequisites: Application, Teacher Recommendation*

## College Prep US History - Yearlong

U.S. History is a year-long course that begins with a brief investigation of pre-Columbian North and Central America before examining the causes and consequences of European exploration. Major areas of focus during the year include colonization, the American Revolution, slavery, the Civil War and Reconstruction, imperialism and the world wars, the Cold War, the Civil Rights movement, and post-1960s U.S. History. Students will engage in various types of primary and secondary sources, and they will continue to refine and add to their historical thinking and writing skills.
*Either US History or AP US History is a required course for graduation.*

## AP US History (Dual Enrollment Option) - Yearlong ✯ NEW COURSE ✯

AP U.S. History is equivalent to a college-level survey of U.S. History, beginning with 1492 (and earlier) and continuing to the present. The course focuses on eight major themes throughout U.S. History: American and national identity; work, exchange, technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures. Students are also introduced to schools of historiography and consider how historians have written and continue to write about the past. Students may also have the option to take this course as a Dual Enrollment offering in addition to the AP designation. This option is available by choice and is not mandatory.
*Either US History or AP US History is a required course for graduation.*
*Prerequisites: Application, Teacher Recommendation*

## College Prep US Government - Semester

U.S. Government is a semester-long course that covers the various functions of the American government. Special attention will be paid to the idea of federalism and the interactions between state and local governments, the three branches of government, the concept of checks and balances, past and contemporary debates over the role of government in society, and citizens' role in the political process. Discussion and analysis of current events will be paired with the study of key founding documents, including the Constitution and Federalist Papers.
*Either US Government or AP US Government & Politics is a required course for graduation.*

## AP US Government and Politics - Yearlong

This is a year-long course designed to prepare students for the AP exam in U.S. Government and Politics. Topics include the foundations of American democracy, interactions among branches of government, civil liberties and civil rights, American political ideologies and beliefs, and political participation. Emphasis will be placed on applying course content to real-world scenarios including elections, legislative matters, Supreme Court decisions, and contemporary news media.
*Either US Government or AP US Government & Politics is a required course for graduation.*

*Prerequisite: Application, Teacher Recommendation*

## Economics and Personal Finance - Semester

Economics and Personal Finance is a semester-long class designed to provide students with foundational knowledge of economics and the skills to be able to succeed financially as adults. Topics covered will include markets, supply and demand, supply chains, inflation, unemployment, banking, and the Federal Reserve. Special attention will be paid to practical financial knowledge, such as loans, mortgages, participation in the stock market, the American tax system, and planning for retirement.
*Either Economics & Personal Finance or AP Microeconomics is a required course for graduation (unless a student takes AP Government).*

## AP Microeconomics - Semester

AP Microeconomics is the study of how households, businesses, and governments make economic decisions. The course, equivalent to a one-semester college level microeconomics course, is designed to help students develop critical thinking skills through the understanding, application, and analysis of fundamental economic concepts. Students learn about the relationship between supply and demand in the market. Each student will be familiar with the concepts of production, cost, and the perfect competition model. Students will compare/contrast perfect and imperfect competition, and they will be able to apply concepts of factor markets and discuss market failure and the role of government in economics.
*Either Economics & Personal Finance or AP Microeconomics is a required course for graduation (unless a student takes AP Government).*
*Prerequisite: Application*

# SCIENCE

**Graduation Requirements:** Students at Stratford are required to complete 4 units of Science in Upper School.

**Required**: Biology, Chemistry, or Accelerated Chemistry

## Biology - Yearlong

This introductory course provides a comprehensive overview of biological principles, beginning with the scientific method as a framework for inquiry. Students then explore the complexities of cellular biology (examining relationship between structure and function), cell division and the vital processes of energy transfer (including photosynthesis and cellular respiration). The curriculum then advances into the mechanisms of Mendelian genetics, biotechnology and the theory of evolution. Beyond theory, students develop essential basic laboratory skills and critical thinking through scientific analysis. Emphasis is placed on graphical interpretation and building scientific literacy to evaluate real-world biological data effectively.

## Conceptual Physics- Yearlong ✯ NEW COURSE ✯

This course introduces students to fundamental physics principles of motion, energy, forces, waves, electricity, and magnetism, emphasizing logical reasoning and real-world applications. It aims to build a strong understanding of how the physical world works- understanding how and why things work, not just how to calculate physical quantities. Students will learn how to describe and apply physical principles to the world around them and develop critical thinking and problem-solving skills. Students build knowledge through hands-on laboratory activities, demonstrations, projects, and lectures.
*Prerequisite: Algebra*

## College Prep Chemistry - Yearlong

This course offers a rigorous exploration of the fundamental principles governing the composition, structure, and behavior of matter. Students transition from foundational concepts—such as measurement, energy, and atomic theory—into the complex mechanics of how atoms interact through electron configuration and periodic trends. The curriculum emphasizes the transition from microscopic structures to macroscopic observations by teaching chemical bonding, VSEPR molecular geometry, and chemical nomenclature. Central to the course is the development of quantitative problem-solving skills, particularly through stoichiometry and gas laws, which allow students to predict the outcomes of chemical reactions. The course concludes with an analysis of matter in the liquid phase, focusing on the properties of solutions and the critical role of acid-base chemistry in real-world environments.
*Prerequisites: Algebra I, Geometry*

## Accelerated Chemistry - Yearlong

The course is designed for students willing to proceed at an accelerated pace through the existing chemistry curriculum. Because they move more quickly, students will be exposed to at least three additional units not included in the regular chemistry course: thermochemistry, a more thorough study of equilibrium, and electrochemistry. This course is recommended for students who may pursue further study in the sciences, medicine, or engineering. It is also recommended for students who wish to enroll in AP Chemistry.
*Prerequisites: Proficiency on a Chemistry Pre-test, Math Teacher and Departmental approval.*

## Anatomy and Physiology - Yearlong

This course is an in-depth study into the structure and function of human anatomy and physiology. This organized approach begins on the microscopic level and moves through the various organ systems of humans, showing their relationships, similarities, and differences. We emphasize the correlation between normal function and abnormal pathology, homeostasis and imbalance, and examine physiological changes that occur due to activity and environmental changes. Students become familiar with anatomical terms and medical vocabulary and perform lab exercises involving models, specimens, and data collection.
*Prerequisites: Biology, Chemistry*

## Zoology - Yearlong

Zoology is a one-year course designed to introduce students to animal biology. The course will provide an opportunity for students to explore animal classification, comparative anatomy, and evolutionary relationships among animal groups. Zoology is a dissection-based course that offers a hands-on approach to animal anatomy and physiology. At the end of this course, students should be able to compare and contrast important anatomical and physiological characteristics used in animal classification, understand how the relationship between structure and function is used in the survival, describe the principles that underlie animal development and evolution, recognize and appreciate animal complexity through an in-depth study of taxonomy and systematics, recognize and classify many common species of animals found in Georgia and the Southeast.
*Prerequisites: Biology, Chemistry*

## Human Genetics - Semester (Not offered 26-27)

This one-semester course is designed for 11th and 12th-grade students who are interested in human inheritance patterns and recent developments in genetic engineering and medical genetics. Topics include DNA structure and replication, variations in gene expression and inheritance, human pedigrees, and current methods and applications of genetic engineering (DNA fingerprinting, prenatal diagnosis, gene therapy to cure genetic diseases, etc.). This course will also address bioethical issues related to modern genetics, such as cloning reproductive technologies, and in utero gene therapy. Students will perform some of the laboratory techniques used in forensics, paternity testing, and genetic screening.
*Prerequisites: Biology, Chemistry*

## Microbiology - Semester (Not offered 26-27)

Microbiology covers basic microbial principles with emphasis on bacterial life cycles and their current use in biotechnology. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. Skills learned will include preparing stained smears, culturing microorganisms, conducting biotech experiments, and studying microbial growth control methods. Students will learn to visually recognize and explain the macroscopic and microscopic characteristics of various microorganisms including viruses, fungi, and protists. The course is heavily lab-centered with both written and lab practical evaluations over the content covered.
*Prerequisites: Biology, Chemistry*

## College Prep Physics - Yearlong (Not offered 26-27)

Physics is an algebra-based course covering topics such as linear motion, vectors, forces, circular motion, work and energy, momentum and collisions, rotational motion, waves, sound, light and optics, electrostatics, electricity, magnetism, and modern physics. Students build knowledge through problem-solving and laboratory activities. In addition, students are required to complete several projects in which creative imagination and learned physical concepts are utilized to design various inventions and solve a stated problem or challenge.
*Prerequisites: Algebra II, but can be taken concurrently with Algebra II.*

## Environmental Science - Yearlong

Environmental Science is a course designed to explore the complex interactions between humans and the natural world. Topics include earth systems and resources, ecology, population dynamics, land and water use, energy resources, pollution and climate change. Students will develop critical thinking skills to evaluate environmental risks and examine alternative solutions for resolving or preventing them. This course prepares students for college-level science by emphasizing critical thinking, data analysis, and scientific literacy.
*Prerequisites: Biology, Chemistry*

## AP Biology - Yearlong

AP Biology course is designed for juniors and seniors who have demonstrated proficiency in biology and chemistry. This course offers the opportunity to pursue college-level study and earn college credit through the AP program administered by the College Board. It is a fast-paced, rigorous course that covers an extensive curriculum including cell biology, biochemistry, genetics and gene expression, ecology, and evolution. Students are also expected to master laboratory techniques and to develop the analytical skills necessary to deal critically with the many facets of biology.
*Prerequisites: Biology and Chemistry, Application*

## AP Environmental Science - Yearlong

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Considerable emphasis is placed on field investigations as well as on laboratory studies. Students will practice techniques for ecosystem monitoring in the local environment. This course offers the opportunity to pursue college-level study and earn college credit through the AP program administered by the College Board.
*Prerequisites: Biology and Chemistry, Application*

## AP Chemistry - Yearlong

AP Chemistry is a college-level, general chemistry course with an emphasis on the theoretical aspects of chemistry. The topics include the structure of matter, periodic law and its relationship to atomic structure and chemical characteristics of the elements, bonding principles, thermodynamics, kinetics, equilibrium, acids/bases and pH, reaction stoichiometry, descriptive chemistry, nuclear and electrochemistry, and an introduction to organic chemistry. Laboratories include inorganic synthesis and analysis, instrumental analysis, spectroscopy, and organic analysis. This course offers the opportunity to earn college credit through the AP program administered by the college board. For some college freshmen, this course will enable them to undertake second-year work in

the chemistry sequence or to register for other courses where chemistry is a prerequisite. For others, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses.
*Prerequisites: Chemistry/Accelerated Chemistry, Application*

## AP Physics 1 - Yearlong

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, and conservation. Topics covered include Kinematics, Forces, Circular Motion and Gravitation, Work, Energy, Simple Harmonic Motion, Momentum, and Rotational Motion. The laboratory work used throughout the course includes guided-inquiry laboratory investigations. The course offers opportunities for students to develop their communication skills by recording evidence of scientific investigations through verbal, written, and graphic presentations. AP Physics 1 also provides students with opportunities to improve their problem-solving skills and apply their knowledge of physics principles to real-world questions and scenarios.
*Prerequisites: Algebra II, Application*

# WORLD LANGUAGE

**Graduation Requirements:** Students at Stratford are required to complete 2 consecutive years of the same language in the Upper School.

## Spanish I - Yearlong

Spanish I is an introductory course which emphasizes aural, oral, reading and writing skills. Basic vocabulary and grammar are supplemented by an introduction to cultures of the Spanish speaking world. These building blocks are used to enable the student to socialize, to exchange information, to express attitudes, opinions, feelings and emotions in the Spanish language.

## Spanish II - Yearlong

In this class, students will build on previously studied concepts and topics about the Spanish-speaking world. By the end of the year, students will be able to compare in greater detail a Spanish-speaking community with her/his own or another region, express and defend her/his opinion with “evidence” (examples from the class), ask and respond to open-ended questions. Additionally, students will be able to communicate in the present, future, and past tenses on a variety of cultural topics related to Spanish-speaking communities. By the end of the year, students will develop oral and written interpretative, interpersonal, and presentational skills through exposure to authentic materials from the Spanish-speaking regions. The class will be taught exclusively in Spanish and students will be expected to communicate in Spanish as much as possible. Students will be assessed mostly on their oral and written production in the language.
*Prerequisites: Spanish I, Placement test*

## Spanish III - Yearlong

In this class, students will build on previously studied concepts and topics about the Spanish-speaking world. By the end of the year, students will be able to speak extemporaneously on a variety of topics, articulate a thesis and defend an argument, and respond to hypothetical situations. Additionally, the student will be able to communicate in both the indicative and subjunctive modes; or rather, students will be able to effectively communicate about concrete and abstract topics. Topics include indigenous and modern histories of the Spanish-speaking world, environmental problems and solutions, the power of art and popular culture, among others. By the end of the year, students will develop oral and written interpretative, interpersonal, and presentational skills through exposure to authentic materials from the Spanish-speaking regions. The class will be taught exclusively in Spanish and students will be expected to communicate in Spanish as much as possible.
*Prerequisite: Spanish II*

## Spanish IV - Yearlong

The course will be focused on current events, media outlets, and contemporary literary and cinematic texts to expose the students to the multiple histories and perspectives of Hispanic cultures in a more accessible context. Each thematic unit is designed to allow students the chance to explore current situations faced by Spanish speakers across the globe and allow students the flexibility to approach topics through a creative lens. Students will complete projects and comprehension activities on a variety of sources and will reflect on the socio-cultural, political, and historical contexts to which these sources respond. The students will undergo a review of complex grammatical structures and will work to expand vocabulary across a range of topics. The course will be taught exclusively in Spanish and students will be expected to participate exclusively in Spanish.
*Prerequisites: Spanish III*

## AP Spanish Language and Culture- Yearlong

The AP Spanish Language and Culture course is a rigorous course taught exclusively in Spanish that requires students to improve their proficiency across the three modes of communication within six thematic units: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, Beauty and Aesthetics. The course focuses on the integration of authentic resources including online print, audio, and audiovisual resources; as well as traditional print resources that include literature, essays, and magazine and newspaper articles; and also a combination of visual/print resources such as charts, tables, and graphs; all with the goal of providing a diverse learning experience. Students communicate using rich, advanced vocabulary and linguistic structures as they build proficiency in all modes of communication toward the pre-advanced level.
*Prerequisites: Spanish IV, Application or Departmental Approval*

## French II - Yearlong

In this class, students will build on previously studied concepts and topics about the French-speaking world. By the end of the year, students will be able to compare in greater detail a French-speaking community with her/his own or another region, express and defend her/his opinion with “evidence” (examples from the class), ask and respond to open-ended questions. Additionally, students will be able to communicate in the present, future, and past tenses. Topics include traveling in France, the teenage world ,gastronomy and famous landmarks , the city of the future. among others. By the end of the year, students will develop oral and written interpretative, interpersonal, and presentational skills through exposure to authentic materials from the French-speaking regions.
*Prerequisites: French I*

## French III - Yearlong

In this class, students will build on previously studied concepts and topics about the French-speaking world. By the end of the year, students will be able to speak extemporaneously on a variety of topics, articulate a thesis and defend an argument, and respond to hypothetical situations. Additionally, the student will be able to communicate in both the indicative and subjunctive modes; or rather, students will be able to effectively communicate about concrete and abstract topics. Topics include histories of the French-speaking world, economies of the French-speaking world, environmental problems and solutions, the power of art and popular culture, among others. By the end of the year, students will develop oral and written interpretative, interpersonal, and presentational skills through exposure to authentic materials from the French-speaking regions.
*Prerequisite: French II*

## French IV - Yearlong

This class will develop the student’s skills in critical and cultural analysis, reading comprehension, written and oral expression, and will provide a foundation for the AP French Language and Culture class. The course will be focused on contemporary literary and cinematic texts to expose the students to the multiple histories and perspectives of French cultures in a more accessible context. Each text will expose students to varying topics including the construction of space and time, the construction of generational differences, immigration and societies in contact, and the construction of a literary or cinematic text, among many others. Students will complete projects and comprehension activities on a series of short stories, novels, and films, and will reflect on the socio-cultural, political, and historical contexts to which these texts respond. The students will undergo a review of difficult grammatical structures but will be asked to critically reflect on big themes, complicated verbal and written expression, and textual analysis and literary devices.

*Prerequisite: French III*

## AP French Language and Culture- Yearlong

The AP French Language and Culture course is a rigorous course taught exclusively in French that requires students to improve their proficiency across the three modes of communication. The course focuses on the integration of authentic resources including online print, audio, and audiovisual resources; as well as traditional print resources that include literature, essays, and magazine and newspaper articles; and also a combination of visual/print resources such as charts, tables, and graphs; all with the goal of providing a diverse learning experience. Students communicate using rich, advanced vocabulary and linguistic structures as they build proficiency in all modes of communication toward the pre-advanced level. Central to communication is the following premise from the Curriculum Framework: When communicating, students in the AP French Language and Culture course demonstrate an understanding of the culture(s), incorporate interdisciplinary topics (Connections), make comparisons between the native language and the target language and between cultures (Comparisons), and use the target language in real-life settings (Communities).
*Prerequisites: French IV, Application or Departmental Approval*

## Latin I - Yearlong

Latin 1 is a comprehensive introduction to the foundations of the Latin language and Greco-Roman culture. It emphasizes the fundamentals of vocabulary and grammar which are essential for later classes and also introduces students to daily life in ancient Rome through Latin readings. Additionally students will begin to learn Roman history.

## Latin II - Yearlong

Latin II advances the vocabulary and grammatical skills introduced in Latin 1. The intention of this course is to cover the fundamental linguistic skills required to engage primary Latin texts in the original language. Students will continue to translate and compose Latin readings, study Roman history, and familiarize themselves with elements of Roman culture.
*Prerequisite: Latin I*

## Latin III - Yearlong

This intermediate-advanced Latin course will develop students' language skills particular to ancient Roman prose sources. Students will study canonical classics like Caesar, Suetonius, Cicero, or Pliny while developing grammatical, rhetorical, and analytical knowledge particular to Roman prose sources.
*Prerequisite: Latin II*

## Latin IV - Yearlong

This intermediate-advanced Latin course will develop students' language skills particular to ancient Roman poetry. Students will study canonical classics like Ovid, Vergil, and Catullus while developing grammatical and analytical knowledge specific to poetic genres from the ancient world.
*Prerequisite: Latin III*

## AP Latin - Yearlong

This course is strictly for preparing students to take the Advanced Placement Latin exam at the end of the year. As such students will cover the topics, prescribed by the College Board, while reading selections from Vergil's

Aeneid and Julius Caesar's Commentaries on the Gallic War. Students should be well versed in Roman mythology and history of the end of the Roman Republic and early Empire. Students will be encouraged to analyze and present their own supported thoughts throughout the course, while also delving into the who, what, when, and how of the Latin.

*Prerequisites: Latin IV, Application or Departmental Approval*

# FINE ARTS

**Graduation Requirements:** Students at Stratford are required to complete 1 credit in the Upper School.

## Introduction to Art - Yearlong

This fun foundation art course will teach students a variety of art media including drawing, painting, ceramics, sculpture/installation, and printmaking. The course is designed for any student with or without art experience. If you are a serious art student and want to move onto another art course, this class will help to build up your skills toward upper level art courses like Advanced Art. It is a prerequisite for Advanced Art and AP Art and Design.

## Advanced Art - Yearlong

*10-12th Grade course*
Advanced Art is offered to students who have a serious interest in art and is strongly recommended for students planning to take AP Art and Design. To be accepted into this class a student must have taken Introduction to Art or have permission from the instructor. The class is designed to allow individual exploration of various media. Students are encouraged to pursue their preferred media in the style of their choice, but specific media will also be explored. Some of the work in this class will be large-scale.
*Prerequisite: Introduction to Art and possibly two other art courses and/or permission from the instructor*

## AP Art and Design - Yearlong

*12th Grade course*
AP Art and Design prepares a student to submit a portfolio for college credit. This course requires a student to be self-motivated and to possess a high degree of artistic skills. The requirements for this class are set by the College Board for the submission of an AP Art and Design portfolio, whether it be in Drawing, 2D, or 3D. To take this course a student must display an understanding of art and have proven his or her ability in other art courses. The majority of this work will be done outside of class. There will be both teacher directed and student directed projects. The work for this yearlong course will begin during the summer. Most of the work during the year is completed like an independent study with deadlines every 2-3 weeks.
*Prerequisites: Introduction to Art and Advanced Art in addition to courses in the area of the portfolio submission and/or permission from the instructor*

## Ceramics I - Semester (Fall)

*Offered on rotation every other year | Will be offered in the 2026-2027 year | 10-12th Grade Course*
This course is designed to provide students with a comprehensive study in the methods of hand-built clay construction and glazing. Students will explore 3D design while developing both functional clay pieces and other sculptural forms. Creativity, risk-taking and quality craftsmanship are emphasized. Students will learn a broad history of ceramics, be introduced to basic clay vocabulary and tools, and learn about the properties of both clay and glazes. Light drawing is required.

## Ceramics II - Semester (Spring)

*Offered on rotation every other year | Will be offered in the 2026-2027 year | 10-12th Grade Course*
This course expands on the ideas and skills learned in Ceramics I, and it is geared to the student who is motivated to undertake ambitious work in clay. Student work must reflect well thought-out and detailed planning that shows understanding of the elements and principles of art, which is an integral part of a strong portfolio. Students are encouraged to develop creative thinking and personal expression as well as skills,

techniques, and understanding needed to create quality work. Students will explore and expand on a variety of ceramic techniques, including more complex hand-building, sculptural ceramics, and functional ceramics. Students are to use the skills they've previously developed (and refine techniques) to express ideas in clay.
*Prerequisite: Ceramics I*

## Photography I - Semester (Fall)

*Offered on rotation every other year | Will be offered in the 2027-2028 year | 10-12th Grade course*
This course is designed to teach students how to use a 35mm film camera, how to see through the camera, develop film, print film, work in the darkroom, and how to exhibit photos. Photographic design, composition, and expression are stressed. Most of the photography assignments will take place outside of school, but students will develop the film during class. Digital photography will also be highlighted in this course. Units of study will overlap and build on each other.

## Photography II - Semester (Spring)

*Offered on rotation every other year | Will be offered in the 2027-2028 year | 10-12th Grade course*
Photography 2 builds upon the knowledge and skills gained in Introduction to Photography. Students will continue to explore more advanced camera and darkroom techniques, as well as alternative photographic and cameraless processes. Students are encouraged to develop their own style and work beyond the classroom.
*Prerequisite: Photography I*

## Band - Marching Band/Symphonic Band - Yearlong

Band (Marching Band/Symphonic Band) is a yearlong course for students on standard marching and concert band instruments (to include Electric Bass) where students will pursue basic to advanced skills in musical instrument performance based on a sequential presentation of musical knowledge. Additionally, during the months of August through October, students will participate as members of the Spirit of Stratford Marching Band, and transition to Concert/Symphonic Band literature in mid-late October.

Students will perform at halftime of all Varsity Football games and a minimum of two, Saturday competitions during the Marching Season. Students will also perform at a minimum of two formal concerts (typically Winter & Spring) showcasing skills learned in musical instrument performance.

Students are eligible to participate in, and audition for District and All-State Honor Bands, District and All-State Solo & Ensemble performance, and other performance opportunities for individual performance recognition at the District & State level.
*Prerequisite: One year of formal Band class at the Middle School level*

## Jazz Band - Yearlong

Jazz Band is an accelerated course for students on standard Jazz/Swing band instruments designed to cover the foundations of jazz standards as well as contemporary Rock, Pop, and Blues music with a multicultural perspective that focuses on the unique American History of Jazz. Students are eligible to participate in, and audition for District and All-State Jazz Band, and other performance opportunities for individual performance recognition at the District & State level. Students will also perform at a minimum of two formal concerts (typically Winter & Spring) showcasing skills learned in musical instrument performance in the Rock, Pop, & Jazz genres.
*Prerequisite: Band or Audition*

## Printmaking - Semester

*All grades*

This course introduces students to the world of printmaking, which dates back to the earliest forms of books and papermaking. Students will be introduced to a variety of printmaking processes including linocut, woodcut, etching, silkscreen, monotype, and gyotaku. Students will learn how to create an edition of prints using one drawing. Light drawing required.

## Theatre Performance I - Semester (Fall)

This course is designed for the student who shows continued interest in theatre arts and wishes to take advanced courses in theatre production. Emphasis will be placed on a variety of in-class performance and individual/group presentations, scene study, theatre history, and stage movement styles. Students may also have the opportunity to participate in class/ campus productions and regional and state competitions. This course can also prepare students for potential scholarship opportunities in theatre.

## Theatre Performance II - Semester (Spring)

This course is designed for the student who shows continued interest in theatre arts and wishes to take advanced courses in theatre production. Emphasis will be placed on a variety of in-class performance and individual/group presentations, scene study, theatre history, and stage movement styles. Students may also have the opportunity to participate in class/ campus productions and regional and state competitions. This course can also prepare students for potential scholarship opportunities in theatre.

*Prerequisite: Theatre Performance I*

## Music Appreciation- Yearlong ✯ NEW COURSE ✯

**Semester 1:** Multicultural Perspectives through the study of Jazz. With African and European influences, Jazz Music was born out of a community that had faced fierce oppression through slavery and then freedom in the Emancipation Proclamation. Jazz Music was the expression of this journey and a distinctly American art form created by a community who could now call America home, as a free people. Exploring the foundations of Jazz and its cultural impact on society will help students make the connections between all modern forms of western music (Rock, Country, R&B, The Blues, Gospel & Hip-Hop, etc.) and how they can all find their roots in the music of Jazz.

**Semester 2:** The Musical Heritage of Macon, and the state of Georgia. Exploring the backgrounds, legacies, and musical heritage of musicians born in Macon, or who called Macon home. Musicians studied will include Otis Redding, the Allman Brothers, Little Richard, and more. Later in the semester, the musical heritage of the state of Georgia will be studied including the rock movement that came out of Athens (B-52's & R.E.M.) as well as the Hip-Hop movement that continues to thrive in Atlanta (Ludacris, Outkast, Rick Ross and others).

No prior music experience is required

## Music Technology- Semester ✯ NEW COURSE ✯

Utilizing the State of the Art MIDI-Lab, the Eagles Echo, students will learn the use of computer applications in music, including competencies in the use of music notation software, music recording software, sequencing, smartboards, apps, interactive websites, sound shaping, and other innovative technological applications for an entry level introduction to music production, and sound engineering. Students will focus on the effective use of music technology in the digital age with considerations in music sampling, use of tracks and clips, and the

ethical implications of music production through the use of apps such as TikTok, Instagram, and other relevant applications commonly used on personal electronic devices.
**No prior music experience is required.*

## AP Music Theory - Yearlong

The AP Music Theory course corresponds to one-to-two semesters of typical, introductory college music theory coursework that covers topics such as musicianship, theory, and musical materials and procedures. Musicianship skills, including dictation and listening skills, sight singing, and harmony, are an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural (listening) skills is a primary objective. Performance is also part of the curriculum through the practice of sight-singing. Students learn basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are emphasized.
*Prerequisite: Application*

## Technical Theatre I - Semester (Fall)

Intro to Technical Theatre is an introductory course which explores the backstage world of theatre. Students will investigate several areas of production and design from both a practical and a theoretical base. Students will be given the opportunity to learn about the following areas of technical theatre production:

- Theatre and Shop Safety
- Scenic design fundamentals and set construction
- Costume Design
- Technical aspects and basic operation of lighting technology
- Technical aspects and basic operation of sound technology
- Use and operation of rigging (hanging) lighting equipment
- Explore career opportunities in Technical Theatre
- Technical Theatre History

**All Technical Theatre students will be given opportunities to apply skills acquired in this class, during theatrical productions from both Stratford Academy Theatre and surrounding community theatre, where they can earn community service hours.*

## Technical Theatre II - Semester (Spring)

Technical Theatre II will build on the knowledge and skills gained in Intro to Technical Theatre. In this course, students will investigate several areas of production and design from both practical and theoretical bases. We will examine in greater depth the computerized, electrical, and mechanical systems in the theatre and scene shop as well as the many different crew positions associated with a theatrical production. A student who successfully completes Tech Theatre II will be able to program and operate all sound and lighting systems that are used for Stratford productions, as well as provide leadership to others.
*Prerequisite: Technical Theatre I*

# STEAM

**Graduation Requirements:** Students at Stratford are required to complete 1 credit in the Upper School.

## Introduction to Design Thinking - Yearlong

Design thinking involves applying critical skills to assess why things are as they are and how they could be made better. We stress human-centered design, meaning that design should always attempt to meet human needs and provide an optimal experience for those engaging with what is designed. Design is the ultimate STEAM/STEM offering, as it incorporates science, social sciences, engineering, technology, engineering and most every other discipline. The Stratford Center for Innovation includes a Design Lab that can accommodate 30 students and includes facilities for prototyping, 3D printing, laser cutting, CNC Routing, and electronics work; a maker Lab that includes a wide range of woodworking and metalworking tools (table saws, drill presses, routers, CNC machines, and lathes); and gallery space for displaying design products and concepts. Our program is a certified member of the Stanford d.school's K12 Design Program Network.

This course introduces students to the design process. Students will progress through each stage and do extensive prototyping of several design challenges. Focus will be on specific design challenges requiring students to demonstrate that they thoroughly comprehend every step in the design process. The class emphasizes design ideas that are sustainable in two ways: they should be durable and functional over a long period of time and should use environmentally sound processes, which are minimally disruptive of the environment. Students can work in many different mediums including woodworking, metalworking, and electronics.

## Engineering Design- Yearlong ✯ NEW COURSE ✯

*10th, 11th, and 12th grade course*

This course replaces advanced design and focuses on the design process as applied to engineering. The curriculum is designed around a series of challenges and projects related to one of more of the following topics.

- Mechanical Engineering--designing, developing, building, and testing mechanical systems using the principles of motion, energy, and force
- Electrical Engineering—understanding and using electricity, electronics, and electromagnetism to design, develop, and maintain electrical systems and devices.
- Materials Engineering—evaluating and testing materials, their properties, and how their structure, composition, and processing can be manipulated to create new materials and improve existing ones for specific applications.
- Structural Engineering – designing, developing, building, and testing structures to ensure that they are safes and stable enough to withstand forces and loads.

Topics, challenges, and projects will rotate year-to-year so that the course can be taken more than once.
*Prerequisites: Application, Department approval.*

## Aerospace Engineering: Aeronautics- Yearlong ✯ NEW COURSE ✯

*9th-12th grade course*

Aeronautics is the science and engineering of flight within the Earth's atmosphere, covering the design, construction, and operation of aircraft and other flying vehicles like helicopters and airships. The course will cover topics such as fluid dynamics, aerodynamics, prop engines, jet engines, and material composites. The course will focus on the practical application of these principles in areas like military and commercial aviation, and the design of unmanned aerial vehicles (drones). Students will design, build, and test model aircraft and drones, and enter drone competitions.

*Prerequisites: Application, Department approval.*

## STEM Capstone Course- Yearlong ✯ NEW COURSE ✯

*12th grade course*

This course allows seniors to work individually or in pairs on a significant project that is related to STEM fields. Requirements are:

- First Quarter: Students will work with a community mentor to complete research and training to construct a project. The project must be deemed substantial by the Chair of the STEM Department and should be something that will improve the quality of life at Stratford or in the local community. The quarter will end with a completed project plan and a research paper.
- Second and Third Quarter: Students will build the project under the direction of a member of the STEM Department faculty.
- Third Quarter: Students will present their project to a panel that includes their mentor, members of the STEM Department faculty, and other invited guests. Students will be expected to be ablet to answer questions about choices they made in the design and construction of the project. —senior research and presentation (worked into senior projects)
- They project can be continued as a student's senior project with the approval of the Senior Project faculty advisors.

*Prerequisites: The STEM Capstone Course is open to seniors who have taken at least TWO of the following courses: Introduction to Design Thinking, Integrated Digital Media/Graphic Design, Cybersecurity, Advanced Design/Engineering Design, and Aerospace Engineering: Aeronautics. Interested students will also have to receive STEM Department approval to enroll in the class.*

## AP Computer Science Principles - Yearlong

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. Students will have the opportunity to use technology to address real-world problems and build relevant solutions. Think we can use a Twitter feed to create art – then this class might be for you!

*Prerequisites: Application, Departmental approval*

## AP Computer Science A - Yearlong (Not Offered 26-27)

AP Computer Science goes beyond merely learning how to use applications like word processing, spreadsheets, and internet browsers. This course is not for mere users – it is for creators. It uses the Java language and focuses on the basic principles needed to design and build applications. It's a college level course. At the course's end, students will be expected to take the AP Computer Science A test. If they pass, they may receive college credit for one semester of computer science. Why Java? By any measure Java is one of the top computer languages in the world. A person knowledgeable in Java can generally pick up other top-rated languages such as C or C++ without too much difficulty.

Because the design and implementation of computer programs to solve problems involve skills that are fundamental to the study of computer science, a large part of the course is built around the development of computer programs that correctly solve a given problem. These programs should be understandable, adaptable, and, when appropriate, reusable. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and

analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. In addition, the responsible use of these systems is an integral part of the course.
*Prerequisites: AP Computer Science Principles, Application, Departmental approval*
*NOTE: This course satisfies Georgia's Science course requirement.*

## AP Cybersecurity- Yearlong ✯ NEW COURSE ✯

*10th, 11th, and 12th grade course*
AP Cybersecurity is a yearlong high school course that offers a broad introduction to the field and aligns closely with a college-level, introductory cybersecurity course. Students learn about common threats and vulnerabilities and how they combine to create risk. Students study how individuals and organizations manage risk and how risk can be mitigated through a defense-in-depth strategy. Students explore specific vulnerabilities, attacks, mitigations, and detection measures across a variety of domains including physical spaces, computer networks, devices, and data and applications. Throughout the course, students consider the impact of cybersecurity on individuals, organizations, societies, and governments. Content and skills taught in the course align with the professional skills outlined in the National Initiative for Cybersecurity Education Workforce Framework.
*Prerequisites: Placement Test, Application, Departmental approval*

## Engineering AND Robotics - Yearlong

This year-long elective will focus on the FIRST Tech Challenge Robotics program where students design, build, and program a robot (TETRIX or REV robotic kit) to participate in a floor game competition in local and regional qualifiers with the opportunity to progress to a state or even world championship. This program is new to everyone, so no previous experience is required, expected or necessary. Classroom instruction will build teamwork, critical thinking, and problem- solving skills as students both engage in a robust robotics engineering program and complete a group innovation project connecting STEM (science, technology, engineering, and math) topics to the real-world. Each semester of the course culminates in an event where students present what they've learned and use team robots to compete in a class mini-game based on the current season's competitive challenge.

## Integrated Digital Media- Yearlong ✯ NEW COURSE ✯

Integrated Digital Media is a project-based course that introduces students to the core principles, tools, and creative processes used in today's digital content and design industries. Students explore a wide range of media platforms—including graphic design, digital illustration, video production, animation, and interactive media—while learning how to communicate ideas visually and effectively.

Throughout the course, students develop proficiency with industry-standard software and hardware tools as they create original digital products such as brand assets, multimedia presentations, motion graphics, and social content. Emphasis is placed on design thinking, storytelling, visual literacy, and problem-solving skills that prepare students for advanced coursework in Graphic Design, Computer Science, and digital communication pathways.

# PHYSICAL EDUCATION

## PE for Boys – Weightlifting I and II (Football Only) – Semester

This semester-length course is open to football players in grades 9–12. The goal of the class is to develop strength, speed, endurance, and overall athletic performance through structured strength training, cardiovascular conditioning, and flexibility work. Proper lifting technique, spotting safety, form, and injury prevention are emphasized to support both performance and long-term physical health.

## PE for Boys – Weightlifting I and II – Semester ⭐ NEW COURSE ⭐

This semester-length course is open to boys in grades 9–12 who are interested in improving overall fitness. The goal of the class is to teach fitness for life through strength training, cardiovascular workouts, and flexibility exercises. Emphasis is placed on proper lifting technique, spotting safety, form, and building sustainable, healthy fitness habits.

## PE for Girls – Strength & Conditioning I and II – Semester ⭐ NEW COURSE ⭐

This semester-length course is open to girls in grades 9–12 and is designed to develop cardiovascular fitness, muscular strength, and endurance through a variety of aerobic, anaerobic, and strength-training exercises. The curriculum includes weightlifting, yoga, core-strength programs, injury-prevention training, and team-based workouts, with an emphasis on proper form, safety, and lifelong fitness.

# ADDITIONAL ELECTIVES

**Graduation Requirements:** Students at Stratford are required to complete 1 credit in the Upper School.

## AP Seminar- Yearlong ✯ NEW COURSE ✯

*10th and 11th grade course*

AP Seminar is an elective course for tenth- and eleventh-grade students who want to develop college-level skills in critical thinking, research, and argumentation. Students explore topics of personal interest as they craft explanatory and argumentative essays, conduct research, and create multimedia presentations. This course does not replace Sophomore or Junior English; rather, it is a student-driven elective that complements Stratford's core curriculum. Students who complete AP Seminar are eligible to take AP Research the following year and participate in the AP Capstone Diploma Program. Completing both AP Seminar and AP Research qualifies students for one of two AP Capstone awards recognized and valued by colleges.

*Prerequisite: 9th grade English, Application*

## Public Speaking: Confident Communication for College and Life - Semester (Fall) ✯ NEW COURSE ✯

Public Speaking: Confident Communication for College and Life is an interactive course designed to help students build confidence, find their voice, and communicate clearly in everyday and professional situations. Through hands-on activities and real-world practice, students will learn how to speak comfortably in front of others, organize their thoughts, and respond confidently when put on the spot. The course focuses on practical communication skills students can use right away, including creating a strong elevator pitch, developing a personal brand, preparing for interviews, and communicating professionally in both speaking and writing. Students will also explore how to connect with an audience, use visual aids and props effectively, and apply communication techniques commonly used in college and professional settings. By the end of the course, students will feel more confident expressing their ideas, advocating for themselves, and presenting their best selves in academic, social, and future career environments.

## Journalism- Yearlong

This year-long elective is open to students 9-12. Students are responsible for creating and producing content for *The Gazebo* –(both broadcast and online media)-- which reflects Stratford's Upper School and the Stratford community-at-large.

The goal of this course is to teach mass communication skills to students who are curious, enthusiastic, and hard-working in a creative and collaborative environment. Students will learn to generate ideas, research information, conduct interviews, write and report stories. They will master technical editing (such as Final Cut or Adobe Premiere Pro), photography, videography, broadcasting, podcasting, and website layout. Students will also be in charge of *The Gazebo*'s presence on social media. Students should be diligent, resourceful, and demonstrate the ability to meet deadlines.

*Prerequisite: Application.*

## Intro to Film: Analyzing Film Techniques- Semester ⭐ NEW COURSE ⭐

*11th and 12th grade course*

This elective introduces students in grades eleven and twelve to film as an art form, a storytelling medium, and a reflection of historical, social, and cultural contexts. Through viewing, discussion, and hands-on activities, students will learn how movies are made and how to "read" films with a critical eye. By the end of the course, students will be able to:

- Use basic film vocabulary to describe and analyze what they see on screen
- Identify how cinematic techniques influence mood, meaning, and audience response
- Compare different films and genres with attention to style and theme
- Express informed opinions about films in both speaking and writing

The course will end with a group project (producing a short film) or a multimedia presentation (analysis of a film of their choice).

## Foundations in Yearbook Design and Publication (years 1 & 2) - Yearlong

The Overlook yearbook is a 300+ page memory book produced and run by students in grades 9-12. In their first and second years of the class, students build the requisite skills to become full-fledged designers and editors by learning to write journalistic stories, take and edit photographs, complete pages using professional design software, apply the student-created theme throughout the book, and (in their second year) take on a supporting leadership role. This hands-on project fosters teamwork, responsibility, and attention to detail, preparing students for future creative and professional endeavors. At all levels, members of the award-winning Overlook staff are nominated for awards from the University of Georgia's Georgia Scholastic Press Association and invited to participate in class field trips.

*Prerequisite: Application*

## Advanced Yearbook Design and Publication (years 3 & 4) - Yearlong

Students enrolled in Advanced Yearbook are professional designers, writers, and editorial leaders. They leave their mark on Stratford's history by steering this 300+ page record of the year. These leaders create the yearly theme and cover, select fonts and colors, design layouts, build the yearbook ladder (table of contents) with established core content and newly conceptualized pages, plan for coverage, guide students who are new to the staff, conduct the yearbook assembly, and launch the new book on distribution day. To recognize their contributions and achievements, leadership members of the staff who meet entry requirements are inducted to the Quill and Scroll International Honors Society. As well, they are nominated for awards from the University of Georgia's Georgia Scholastic Press Association, considered for Golden Eagle nomination, and invited to participate in class field trips.

*Prerequisite: Application; two years of Foundations in Yearbook*

## Humanities I - Semester (Fall)

*11th and 12th grade course*

This course is an interdisciplinary study of philosophy, art, theology, history, and literature starting from the Ancient Greeks and ending at the 17th century. We will look at primary sources that reveal how different cultures answered the central mysteries at the heart of what it means to be human: Who are we? Where do we come from? What is our purpose? The course is designed to teach students how to think and speak through critical analysis, logic, reason, and rhetoric.

## Humanities II- Semester (Spring) ✯ NEW COURSE ✯

*11th and 12th grade course*

Humanities I is not a prerequisite for Humanities II. This course is an interdisciplinary study of literature, history, theology, philosophy, art, and music, examining how cultures across time have grappled with questions of power, morality, identity, freedom, and responsibility. Through close engagement with primary sources, students will develop their critical thinking skills,  The course starts in the 18th century and ends with the Beatles.

## Creative Writing- Semester ✯ NEW COURSE ✯

*10th, 11th, and 12th grade course*

This course invites students to explore creative expression through poetry, fiction, and drama. Students will develop original work across multiple genres and engage in a collaborative workshop environment, where drafts are shared in roundtable discussions to receive thoughtful feedback from peers. Emphasis is placed on the writing process—drafting, revising, and refining—while helping students develop their individual voice, craft, and confidence as writers.

## Psychology of Human Relations - Semester

*12th grade course*

This semester course is designed to discover who we are and how we deal with relationships. We will discuss such topics as self-awareness, emotional intelligence, and relationships with peers, family members, and significant others. We will also discuss love, sex, std's and contraception. Other topics may include alcohol and drugs, growing old, death, and suicide. This course is designed for seniors only because of the mature subject matter.

## Survey of World Religions - Semester

Throughout all of history and into our modern world, religion continues to shape the political, cultural, and social landscape of society. This course will introduce students to the major religions of the world, their foundational beliefs, practices, and continued influence on the world today. Throughout the course, opportunities for cultural immersion will be offered to students via guest lectures and excursions to houses of worship and religious celebrations. In a scholarly, open-minded, and objective way, this course will prepare students to be culturally intelligent and responsive leaders in their chosen fields. *Prerequisite: 9th grade Social Studies*

## Slavery and Civil Rights - Semester

The course begins by addressing the inherent deficiencies of Reconstruction Era politics, which—even in the aftermath of an unsuccessful Confederate, pro-slavery insurrection—still laid the ideological foundations for subsequent decades of state-sanctioned, systemically racist legislation at various levels of governance. By tracing the evolution of America's innate structure of ethnic oppression—from slavery through Reconstruction and Jim Crow, and from the Civil Rights movement of the 1960s to the current Black Lives Matters protests—this class aims to untangle the unfinished, and often contradictory, quest for ongoing racial equality in contemporary U.S. society. The courses uses various cultural mediums—oral histories/written testimonials, primary/secondary sources, and documentary/fictional films—to better understand how the enduring struggle over civil rights in the modern era has been enacted in the public sphere.

## Study of the Holocaust - Semester

The course examines the Nazi attempt to annihilate the Jewish people during the years 1933-1945. Over the course of a few short years, leaders from one of the world's most civilized countries organized and carried out the murder of almost six million Jewish men, women, and children, using the most advanced techniques available in management, science, and technology. The course examines the Holocaust from a number of different angles, including its ideological origins, efforts to isolate and marginalize German Jewry during the 1930s, the transition to mass murder during WWII, the experiences of Jewish victims, survival strategies and forms of resistance, the experiences of bystanders and perpetrators, and the memory of the Holocaust.

## AP European History - Yearlong

AP European History is a yearlong introductory college level course focusing on the historical development of Europe from 1450 to the present. Students will study the social, political, economic, cultural, and environmental history of the continent and its role in relationships to the larger world, analyzing the changes that take place over time and across regions. This course delves into essential analytical skills such as source analysis, contextualization, comparison, identifying causation, understanding continuities and changes over time, and how to compose and evaluate historical claims. Both analytical skills and writing skills will be emphasized.
*Prerequisite: Application*

## Dual Enrollment: Intro to Psychology - Semester

This course introduces students to the scientific study of behavior and mental processes through multiple psychological perspectives. Students explore how psychologists explain, predict, and influence behavior by examining the brain and nervous system, learning and memory, personality, social influence, and psychological disorders. Emphasis is placed on real-world application, case studies, and critical thinking about human behavior and mental health. This course is offered as a dual-enrollment opportunity, allowing eligible students to earn college credit while completing high school coursework.
**This course does not fulfill the Stratford social science (history) requirement.*
*Prerequisite: Application*

## Astronomy - Semester

In this class, students will journey through the universe beyond our planet. The course begins with early astronomers' geocentric and heliocentric models. Students will learn how technology has shaped the understanding of the universe's structure. Topics covered include light, astronomical measurements, origins of the universe, planets, stellar life cycles, exoplanets, and galaxies. Through this course, students will foster an appreciation and understanding of the vast universe

## Internship - Semester

*12th Grade Course*
The internship program provides students the opportunity to contribute to the Stratford community via placement with a supervising teacher, coach, or administrator. Students report to their supervisors every day and assist them with various tasks during the year. The program allows students to form closer working relationships with Stratford staff, as well as develop organizational and leadership skills.
**This is a non-graded, non credit-bearing class.*