

ST. LUKE'S EPISCOPAL SCHOOL
Upper School Course Catalog
2018-2019

This course catalog is designed to give students and their parents' insight into the curriculum offered in the Upper School for the 2018-2019 school year. All courses meet or exceed SACS (Southern Association of Colleges and Schools), SAIS (Southern Association of Independent Schools), AHSAA (Alabama High School Athletic Association) and NCAA (National Collegiate Athletic Association) requirements.

English Department

English 9

English 9 solidifies the student's writing repertoire: exposition, persuasion, narration, comparison and contrast, description, and literary analysis. In addition to composing final drafts, students will also be required to complete timed essays and a research project with a published paper. Students will continue the study of vocabulary, grammar and usage, with particular emphasis on sentence composition, revision, and application. Freshman English is the backbone of a student's knowledge and study of literature including the novel, short story, essay and poetry. This study will foster and strengthen the student's ability to analyze literature and read critically.

English 10

English 10 continues building and fine tuning the student's writing portfolio. Students write essays and compose a documented research paper. Grammar in English 10 integrates the rules and conventions of standard grammar in compositions. Refined sentence writing skills incorporate greater sentence variety in all modes of writing. Vocabulary requires application of affixes to build and improve vocabulary, read critically, and determine parts of speech.

English 11

This course follows a rough chronology of American Literature. The curriculum begins, paradoxically, with a 20th century play, *The Crucible*. This work introduces the culture of the Puritan era while examining its connection to 20th century politics. Literary genres and themes are explored through a study of texts by major authors including Hawthorne, Melville, Whitman, Twain, James, Fitzgerald, Faulkner, Frost, and Flannery O'Connor, and by selected authors such as Toni Morrison, Harriet Jacobs, Kate Chopin, David Guterson, Lorraine Hansbury, and Joyce Carol Oates. Included in the course will be an extensive examination of poetry from the 19th century to the present. Building on skills in freshman and sophomore years, the student will further develop writing skills in narration, description, exposition, argumentation and research.

AP English Language & Composition 11

In AP English Language and Composition, students deepen their understanding and awareness of how language works by focusing on three skills: analysis (with a concentration on rhetoric), argument, and synthesis. Students engage in close reading of nonfiction (essays, biographies, autobiographies, speeches, newspaper and magazine articles) from a variety of historical periods from the arts, politics, science and other areas of study. Students consider the visual media that surrounds them whether spoken, displayed or broadcasted and writing assignments will include formal and informal responses, finished and on demand, as well as analytical and argumentative essays. As a college level course, the performance expectation for written work and class participation is high and the workload is challenging. While one goal of the course is taking the AP Language test in May, the primary objective is to sharpen the skills necessary to succeed not only in a college classroom but as thoughtful, educated, and responsible public and private citizens. Admission to this class is based on academic achievement, student interest, and teacher recommendation.

English 12: Advanced Composition

Senior English students will complete one semester of Advanced Composition, with an emphasis on the personal narrative, expository and persuasive essay modes. Students also produce a documented argument research paper employing MLA 8th Edition. Students engage in reading assignments designed to stimulate critical thinking skills and analysis. This is a semester-long course to be taken prior to English 12 Senior Seminar.

English 12: Senior Semester Seminar - *Creative Writing*

This course allows students to explore their own writing and publish their writing in a variety of genres including poetry, narrative, non-fiction, song writing, short fiction, and screenwriting. Students will create, share and critique works in a writing workshop format. This is a semester-long course to be taken after English 12 Advanced Composition.

English 12: Senior Semester Seminar - *Literature and Film*

Over the course of the semester, students examine the relationships between literary texts and film. Topics for review include the fundamentals of storytelling as well as the history of both mediums. Students will examine short stories and novels, evaluating how their adaptation to film enhances or alters the meaning of the work as a whole. This is a semester-long course to be taken after English 12 Advanced Composition.

AP English Literature & Composition 12

Through close reading, academic writing, and engaging discussion, this course will serve as an introductory literature and composition class offered at the university level. This course will follow the curricular requirements as outlined and defined in the AP English Course Description. Students will use both classical and contemporary prose, poetry and drama as a platform to engage in a deeper understanding and appreciation of textual details including figurative

language, imagery, symbolism, tone, structure, style and theme as well as the work's social, cultural and/or historical values. To express this appreciation and understanding, students will write a variety of responses including timed/extended, formal/informal, evaluative, interpretive, analytical, exploratory, argumentative, and creative compositions. Students will engage in the writing process on all compositions to extend their use of vocabulary, grammar, structure, tone, and voice. Admission to this class is based on academic achievement, student interest, and teacher recommendation. Students are required to sit for National Advanced Placement Examination in May. There is a charge for the exam.

Mathematics Department

Algebra I

Algebra I is a basic preparatory math course for college-bound students. The course is a study of the structure and properties of the real number system. It includes concepts such as polynomials and their factors, linear equations and systems of linear equations, solving inequalities, and rational expressions. Function notation and radical expressions are introduced.

Geometry

This course develops the core concepts of Euclidean geometry using the basic elements of points, lines and planes. It also includes topics such as congruency and similarity, parallelograms, special right triangles and basic trigonometric ideas, circles, and surface area and volume of solids. Algebra I prerequisite and achievement qualifications apply.

Algebra II with Trigonometry

Algebra II covers the real and complex numbers focusing on equations, functions, and inequalities of the following types: linear, quadratic, polynomial, radical, rational, exponential, and logarithmic. In addition, the course includes an introduction to conics. Prerequisite: Geometry

Honors Pre-Calculus

Honors Pre-Calculus provides students with a solid foundation of concepts, techniques, and applications needed for the study of calculus and other high-level mathematics courses. The course focuses on the study of functions, trigonometry, polar coordinates, complex numbers, conics, and logarithms. The use of a graphing calculator is important. Prerequisite: Algebra II.

Statistics (12th Grade)

This course is a thorough, yet accessible program designed to help students overcome their apprehensions about statistics. This course provides clear guidance and informal advice while showing students the links between statistics and the world. To reinforce this approach, real-life data from a variety of sources including journals, periodicals, newspapers, and the internet will

be integrated into the course. This course will also address the importance of developing students' critical thinking and statistical literacy skills through special features and exercise.

Honors Calculus (12th Grade)

Honors Calculus is designed for the student who has taken Honors Pre-Calculus and who wishes to continue with Calculus at the honors level. The course will cover limits and derivatives and integrals in detail. Methods of differentiation and integration will be developed with emphasis on application. Transcendental functions will also be studied. A graphing calculator is required.

History Department

Modern World History (9th Grade)

Modern World History is the study of the world from the early modern era through the present. Emphasis is placed on understanding of culture and the forces which have shaped history, including geography, art, architecture, politics, philosophy, religion and technological innovations. Outside readings are used to emphasize the material studied. The course encourages the students to utilize higher-level cognitive skills, to analyze cause and effect relationships, to develop an understanding of how the past influences the present and the future. Considerable attention is given to current events throughout the academic year. Outside readings are used to expose students to great world literature and current relevant issues.

United States History I (10th Grade)

The study of history of the United States I begins with the early Americans and tracing America's foundation through the American Civil War. Students are involved in a chronological study of major events, issues, movements and leaders of the United States. Students are actively involved in and are challenged by the level of expectation inherent in the required content of this course. With more fully developed skills in abstract thinking, students compare, analyze, and explain events and developments rather than simply list or identify them.

United States History II (11th Grade)

The study of history of the United States continues a journey through the economic, geographic, social, and political development of the United States. Beginning with the post-Reconstruction of the United States and its shift into a more industrialized society, the course continues through the 20th century to the present. Students are involved in a chronological study of major events, issues, movements, and leaders of the United States. Students are actively involved in and are challenged by the level of expectation inherent in the required content of this course. With more fully developments rather than simply list of identify.

Pre-AP US History (10th Grade) and AP US History (11th Grade) (10th & 11th Grade Consecutive Course)

The objective of AP U.S. History I and II is a two year course to increase the student's understanding of the United States History from discovery to the present with the goal of having each student pass the Advanced Placement exam at the end of the second year. The areas of concentration include historical, political, and economic history joined with an intense study of cultural and intellectual institutions and their development. This course is taught at the collegiate level. The major differences between high school and college history courses are the amount of reading and the focus. Most high school courses focus on "What happened?" intending to provide enough background to ensure good citizenship. College courses stress "Why?" and "How?" things happen, as well as the consequences of actions. Students enrolled in AP course are required to sit for the National Advanced Placement examinations provided by the College Board in May. There is a charge for the exam, and students are billed for this in their tuition. Admission to the class is based on academic achievement, student interest, and teacher recommendation.

Government / Economics (12th Grade)

Government/Economics are two separate one-semester courses. Government will be taken one semester of senior year, and Economics will be taken during the other semester. Government is a general survey course designed to expand a student's knowledge of the function and purpose of the United States government. The course begins with an introduction to the three branches of government and their Constitutional mandates. Next, students will learn about the different political parties and institutions as they pertain to government, and will study different social issues and important judicial decisions that affect the political landscape. Economics is designed to give students an understanding of macro and micro economic principles. The course covers basic supply and demand, market structures, and forces that affect economic growth. Students will also study current economic problems such as inflation, recession, and depression. Students will be expected to examine and evaluate the current economic situation in the United States and how it relates to the global economy.

AP Government and Politics (12th Grade)

The AP Government and Politics: United States course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. policy reality. Admission to this class is based on academic achievement, student interest, and teacher recommendation. AP courses are intended to offer a college level academic program. Students enrolled in AP courses are required to sit for National Advanced Placement Exam provided by the College Board in May. There is a charge for the exam, and students are billed for this in their tuition statement. AP Government and Politics is a year-long course. Students who enroll in AP Government must also take a semester-course in Economics.

Science Department

Biology (9th Grade)

Biology is a laboratory-oriented introduction to the basic biological principles with evolution as an underlying theme. Topics will include biochemistry, cell structure and function, genetic principles, anatomy and physiology, taxonomy and ecology. Biology is a required course.

Chemistry (10th Grade)

Chemistry is an introductory course which develops student understanding of atomic structure, periodic trends, chemical bonding, reaction stoichiometry, the gas laws and introduces thermodynamics. The course is conducted as a lecture/laboratory-oriented experience. It is designed to be a challenging course that will develop critical thinking and problem solving skills. Chemistry or Honors Chemistry is a required course.

Pre-AP Chemistry (10th Grade)

Honors Chemistry is a more mathematics based introductory course which develops student understanding of atomic structure, periodic trends, chemical bonding, reaction stoichiometry, the gas laws, and introduces thermodynamics, nuclear chemistry and chemical equilibria. The course describes the use of chemistry in applied technological applications and it is conducted as a lecture/laboratory-oriented experience.

Physics (11th Grade)

The College Preparatory Physics course provides students with an understanding of the interrelationship of matter, energy, and the forces of nature. Emphasis is placed on practical applications of physics in our daily lives. Topics include Newton's Laws of Motion, energy, work and power, heat and introduces thermodynamics, light, magnetism, and sound. Appropriate opportunities for mathematical reasoning and laboratory investigation are utilized throughout the year. Physics or Honors Physics is a requirement for graduation.

Honors Physics (11th Grade)

Honors Physics is an in-depth study of the relationship between matter, energy, and the forces of nature. Newtonian mechanics, thermodynamics, wave motion, electricity, magnetism, light, sound, and modern physics are investigated through problem solving and the scientific method. The class moves at an accelerated pace with a heavy emphasis on mathematical reasoning. Physics or Honors Physics is a required course for graduation. Prerequisites: Algebra II/Trig or teacher recommendation. The mathematics prerequisite may be waived with appropriate teacher recommendations.

Anatomy and Physiology (12th Grade)

Anatomy and Physiology is designed to provide an integrated view of how the human body works. Each of the body systems will be studied in detail. Computer simulations and dissections

will be used to show how anatomy (structure) and physiology (function) are related. Basic chemistry, medical terminology, cell biology, and tissue organization will be covered. Organ systems to be studied include the integumentary, skeletal, muscular, nervous, endocrine, circulatory, lymphatic, digestive, respiratory, urinary, and reproductive systems.

Marine Science (12th Grade)

Marine Science studies the dynamic processes of the world's oceans and seas. Coursework includes physical and chemical analysis of ocean water, examination of the ocean floor and coastal features, investigation and measurement of currents, waves, and tides, and analysis of the interaction of atmosphere and sea. Marine life and ocean and coastal habitats will also be studied.

AP Chemistry (11th or 12th Grade)

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the freshman year of college. Topics such as the structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics and the basic concepts of thermodynamics are covered in considerable depth. An emphasis on chemical calculations and the mathematical formulation of principles, and the nature and variety of experiments done in the laboratory differentiates the AP course from Honors Chemistry. Prerequisites: Algebra II/Trig and Honors Chemistry. The prerequisites may be waived with appropriate teacher recommendations. Students enrolled in AP courses are required to sit for the national Advanced Placement examination provided by the College Board in May. There is a charge for the exam, and students are billed for this in their tuition statement. This course is offered in alternate years with AP Biology. It will be offered in 2019-2020.

AP Biology (11th or 12th Grade)

AP Biology is an introductory collegiate level biology course. Students cultivate their understanding of biology through inquiry based investigations as they explore the following topics: evolution, cellular processes-energy and communication, genetics, information transfer, ecology, and interactions. A minimum of 25% of the instruction time will be spent in hands on laboratory work with an emphasis on inquiry based investigations that provide students with opportunities to apply scientific practices and skills. Student placement in the course is based on successful completion of Biology and Chemistry, AP Biology potential score, and teacher recommendation. Students are required to sit for the National Advanced Placement Exam in May. There is a fee for this exam. This course is offered in alternate years with AP Chemistry. It will be offered in 2018-2019.

Foreign Language Department

Spanish I

Spanish I is a full year course that focuses on developing skills in reading, writing, listening, speaking and cultural literacy in the target language. This involves a great deal of active conversation and participation. Sample topics include basic greetings and introductions, leisure activities, and personal descriptions. Various authentic resources are used such as movies, music, and other media. Grammatical structures will also be explored to achieve communicative goals. Student proficiency is evaluated through a testing program that features quizzes and tests based on listening, reading, and writing comprehension.

Spanish II

Spanish II is full year course for those who have successfully completed Spanish I. Students will continue to develop skills in reading, writing, listening, speaking, and cultural literacy in the target language. Sample topics include travel, leisure activities, daily routines, health and healthcare, and narration of past and future events. Various authentic resources are used such as movies, music, and other media. Grammatical structures will continue to be explored to achieve more advanced communicative goals. Evaluation follows the same format established in Spanish I.

Spanish III

Spanish III is a full year course for those who have successfully completed Spanish I & Spanish II. Students will continue to develop strong skills in reading, writing, listening, speaking and cultural literacy in the target language. Throughout the course, conversation and practice are emphasized along with grammar and mechanics. Hispanic culture and cultural themes are also integrated into classes by learning about cultural practices, products and perspectives of the Hispanic world. Students will also write short essays and have activities to reinforce concepts learned and practiced in class. This course will focus on past, future, and conditional tenses, as well as the subjunctive mood. Evaluation follows the same format established in Spanish I & II.

Honors Spanish IV

Students will continue to develop strong skills in reading, writing, listening, speaking and cultural literacy in the target language. Student will read and study about the culture, geography, and the history of the Spanish speaking world. Classroom discussion will center on readings of literary selections from Spanish and Latin America. Students will also be writing in response to the readings. Student proficiency is evaluated through quizzes and tests based on listening, reading, and writing comprehension. Admission to this class is based on academic achievement in Spanish III and teacher recommendation.

Latin I

Latin I includes the study of basic vocabulary and grammar, conjugation of verbs in four tenses in the active voice, declension of nouns and adjectives of the first three declensions, and the reading and translation of passages in simple Latin. Emphasis is placed on Latin used in English today and on modern derivatives from Latin roots and prefixes. A survey of Roman culture includes lessons on classical mythology, Roman history, and daily life in the ancient world. Cultural units include Roman sports and entertainment, festivals, the house, family life, and meals. The testing program features quizzes and tests assessing skill mastery in vocabulary, grammar structures, and translation.

Latin II

Latin II concentrates on extending the study of verbs, nouns, and grammar begun in Latin I. Grammar study expands to include thorough understanding of participles, infinitives, fourth and fifth declension nouns, personal, relative, and interrogative pronouns, and irregular and comparative adjectives, as well as basic subjunctive tenses and uses. Emphasis is placed on reading Latin passages taken from ancient authors. Study continues to focus on etymology of English words derived from Latin, and cultural themes include Roman history, art and civilization, and famous people from this period. The testing program features quizzes and tests assessing skill mastery in vocabulary, grammar structures, and translation.

Latin III

A review and strengthening of students' ownership of Latin grammar, syntax, and vocabulary acquired at the previous levels of Latin study. Readings from Latin authors supplement instruction in grammar, syntax, and vocabulary. Translations include Historians such as Livy and Julius Caesar as well as selections from the story of the Golden Fleece. Admission to the course is based on academic achievement and teacher recommendation.

Fine Arts Department

Art I

Art I addresses the question, "What is art?" Students will become familiar with the elements of art and the principles of art. They will learn to critique and describe artworks based on artistic elements used. They will then apply these concepts to their own artwork.

Art II

Art II will explore art through the ages from prehistoric art all the way through today. The students are expected to be able to identify different time periods, artist, and pieces of artwork. They will learn more advanced techniques in a variety of media. They will tackle more challenging projects and should continue to develop their own style.

Art III

Art III will take the skills learned in Art I and Art II and focus on the development of drawing and learning to see like an artist. They will then progress to a thorough study of color theory to enhance their art work. Students will be drawing from still lifes, their imagination, along with portraits to create original works of art.

Art IV

Art IV uses the skills and concepts learned in Art I, II, and III to create more advanced works of art. Two and three dimensional media is explored by students at a higher level applying their knowledge of production, elements of art and principles of design to create meaningful original works for inclusion in a portfolio. Admission is based on teacher recommendation.

Center Stage I, II, III, IV

Center Stage is designed to give young people the opportunity to learn about the art of the theatre in an environment that is challenging as well as nurturing. Students will develop a sense of stage presence that will serve them in setting other than theater. The arts curriculum will train students not just as performers but also as creative thinkers and problem solvers in a manner that will positively impact their lives for many years to come.

Chorus I, II, III, IV

The purpose of this course is to give students an opportunity to develop fundamental individual and ensemble skills in choral performance through preparation of various choral literatures for high school voices. Emphasis will be placed on healthy and expressive vocal musicianship, technical skills, and aesthetic awareness. The content includes but is not limited to vocal production, choral performance techniques, music literacy, sight reading and ear training elements. Students will study characteristics of music, performance analysis, role and influence of choral music and musicians. Participation in music activities is required. Performances include school activities as well as special events within the community.

Concert Band I, II, III, IV

Advanced band is open to all students who demonstrate ability above the beginner level. Advanced middle and upper school students are combined to create the concert band. Students in this ensemble will continue to learn music fundamentals. The study of music is based upon a repertoire chosen by the director with input from the students. The performance year includes pep band music, and Christmas themed music in the fall and a variety of pieces in the spring. Student achievement is evaluated through playing tests, written assignments, class participation, performance attendance, and various in class assignments. Performances include football games, various school events, fall and spring concerts. and a spring band trip.

Journalism/Yearbook I, II, III, IV

Journalism is a comprehensive course which enables students to creatively engage in the entire journalism process from idea conception to publication of a finished product. Students write copy and captions, take photographs, design page layouts, learn publication software and create the school's yearbook. Through this process, students hone the necessary life skills of teamwork and leadership, organization, writing, creating, and editing.

Strings I, II, III, IV

Music provides students with a wealth of fringe benefits. Strings classes offer introduction and continuation of string instrument (violin, viola, cello) playing, basic music theory and history training, solo and ensemble performance coaching. Team work, dedication, self-discipline and responsibility required for the strings class also prepares a student for a successful future in any profession he or she may choose.

Additional Course Requirements

Personal Communication (11th)

This semester course is designed to focus on academic and professional skills. This course will teach resume writing, writing cover letters, interview skills, using technology to support the speeches and presentations. Professionals from the community will present from time to time to help coach the students. Personal Communications is a required course for all 11th grade students. Credit 1/2

Standardized Test Preparation (11th and 12th Grade)

Standardized Test Preparation is a required semester preparatory course for high school juniors. The class is designed to develop the skills necessary to improve ACT scores. This course emphasizes test-taking techniques in addition to providing the preparation in each portion of the test in English, mathematics, reading, and science. Standardized Test Preparation is a required course for all 11th grade students. Credit 1/2

Electives

Biological Health Science Program I, II, & III

The Biomedical Health Science Program is a series of three elective courses beginning the sophomore year of high school. Students explore a variety of medical fields and occupations both in and out of the classroom. Students begin by learning basic clinical skills and HIPPA guidelines. They are introduced to a wide range of careers from local health care professions who volunteer their time to teach classes in their fields of expertise. Later students are introduced to the clinical setting and begin learning in a hands on environment. Our gracious medical hosts

invite our students to participate in their daily activities including patient care and equipment operation. Finally, senior students select a specific area of interest and spend a year immersed in research and job shadowing. The program culminates with their Capstone Project Presentation that is attended by their peers, faculty, parents, and a panel of medical professionals. BioMed I, II, and III count as additional science credits, but cannot replace the required Biology, Chemistry, Physics and Senior Science Elective. BioMed III is offered the student's senior year based on teacher recommendation and must be taken in conjunction with Anatomy and Physiology. BioMed I, II, and III will count as additional Science credits, but will not replace the required Biology, Chemistry, and Physics.

Computer Science

Computer Science provides students with a general orientation to computer science including a basic understanding of the components of a computer and how it functions. It introduces the student to the process of program development, accepting user input/output, learning to write pseudocode as well as learning to document programs.

Driver's Education

This course is offered as an elective over the course of one semester. It is available to 10th grade students or other students who are eligible for a learner's permit. The course is divided into behind the wheel instruction and at least 30 hours of classroom training. This course must be balanced with another semester course. A course fee and a free on-line textbook will be required for Driver's Education. The instructors are licensed to administer the DMV written and road test. No credit is awarded for this course and no adjustment to the GPA.

Engineering / Architecture (11th or 12th Grade)

Engineering/Architecture is a survey course intended for students to better understand the intricate fields of Engineering and Architecture. Many areas of each discipline will be explored during the year. In our modern world, engineering functions with a balance of social, environmental and economic resources. Today's engineers have knowledge of a broad range of disciplines and through partnerships with Universities and professionals in our area, our students will learn the baseline necessary to determine if engineering would be an educational experience they would like to pursue as their college career.

Physical Education / Strength and Speed Training I, II, III, IV

St. Luke's athletic department believes that the heartbeat of the department is in strength and speed development. We focus on core strength, flexibility, and running form. We offer traditional physical education or strength and speed development. All workouts are supervised by trained coaches and are open to all students. Workouts are designed to be age appropriate and encouraged for the entire St. Luke's community.

University of Alabama Online Early College (11th and 12th Grade)

Students between the spring of their sophomore year and the fall of their senior year, and who have a cumulative GPA of 3.0 or higher since the 9th grade, are eligible to take University of Alabama online courses at St. Luke's. The students will simultaneously receive college credit from Alabama and high school credit from St. Luke's. Since the Alabama courses are semester-long, the student must take two to receive one St. Luke's credit. The University of Alabama guarantees that these credits will transfer to any Alabama state college or university. Students must apply through the University of Alabama, attend an orientation meeting, take the Gateway online orientation course, and assume all financial expectations from the University of Alabama to be enrolled in the program. For more information, visit the website www.uaearlycollege.ua.edu.