SAINT GEORGE
CLASSICAL ACADEMY

Upper School Curriculum Overview

Theology

Students will alternate studies of New Testament and Old Testament on a four-year cycle which will have somewhat different emphases each time they are encountered. An example of a four-year sequence of theological study:

Year 1: New Testament - the Gospels of Saint Luke and Saint Matthew and the Epistles of the Holy Apostles.

Year 2: Old Testament - the Pentateuch (five books of the Law)

Year 3: New Testament - the Gospels of Saint Mark and Saint John and the Wisdom Books of the Old Testament (Psalms, Proverbs, etc.)

Year 4: Old Testament - the books of history and the books of the prophets

Passages from the writings of the Church Fathers will be incorporated throughout the sequence to provide context for the Biblical texts. In addition to the four-year Biblical studies sequence, students in their fourth-year will complete a project in apologetics which will engage with other religious and ideological worldviews while grounded firmly in a Christian paradigm.

Science

Students in 9th and 10th grade will enter a two-year study of Biology and Chemistry. Students in 11th and 12th grade will enter a two-year study of Physics that will incorporate computer programming to allow students to gain important skills in data analysis, visualizations, and simulation.

Biology: Our Biology program will begin at the atomic level and progress to ever-larger scales: cells, genes, microorganisms, plants, animals, and human organ systems. We take inquiry-based approaches aimed at making sense of biological phenomena through laboratory investigations, class discussions, and readings. Students explore how organisms make and use energy, how traits are developed and passed to offspring, and how populations and their traits change over time. Units include: the nature of scientific inquiry, the molecular basis of life, cell biology, comparative anatomy, genetics and inheritance, DNA structure and function, protein synthesis, viruses and bacteria, the origins of diversity, and population genetics. Students also discuss current bioethical issues and anthropology within a Christian paradigm.

Chemistry: Our chemistry program will begin with a review of the scientific method and its application to the study of atomic structure, before moving to the periodic table, chemical bonding, stoichiometry, gas properties, acids and bases, thermochemistry, and organic chemistry. Inquiry-based learning, laboratory experimentation, class discussion are the primary methods of learning and instruction, supplemented with relevant readings.

Physics: We will provide a two-year course of study in physics that will begin as algebra-based and proceed to incorporate calculus as it is introduced in the students' mathematics instruction. Our physics program will include studies of kinematics, force, momentum, work, energy, power, torque and rotational dynamics, oscillations, fluids, thermodynamics, electrodynamics, electrical circuits, optics, waves, and radioactivity. Alongside their course of study in physics, students will learn the basics of programming (either MATLAB or Python) and will use these skills to augment their study through data analysis, simulations, and visualization techniques (both 2D and 3D). Problem solving and lab work will be emphasized to develop skills in scientific reasoning, experiment design and execution, and data analysis. The course of study will also incorporate careful observation of the stars, planets, and Moon to provide students with

the skill of taking detailed records over time and to appreciate how the **Liberal Art of Astronomy** gave rise to the empirical methods of modern science.

Mathematics

Students entering the Upper School will begin with a two-year study of mathematics that integrates the elements of what are typically taught in modern Geometry and Algebra I courses (incorporating some elements of Algebra II and Precalculus). Students will then proceed to a one year course of study that will round out the remaining topics typically covered in modern Algebra II and Precalculus courses before capping their Upper School mathematics education with a thorough study of Calculus. This integrated approach to studying mathematics is intended to provide students with a deep foundational understanding of core principles that will develop their critical thinking facilities while preparing them for advanced studies in mathematics and the sciences.

Geometry/Algebra: This is in keeping with the historical reality that many algebraic concepts were first discovered and will provide deep spatial and mathematical intuition that will provide a solid foundation as they advance toward the study of calculus by the end of their Upper School education.

Calculus: Students will study derivatives, integrals, coordinate transformations, differential equations, partial differential equations, series, and sequences in coordination with their study of physics. Their analytical studies will be supplemented with numerical calculations using their programming skills (MATLAB or Python).

Humanities

We will offer a four-year seminar-style course of study of the humanities which students will participate in across grade levels. Our humanities program teaches students to be readers, thinkers, writers and speakers by incorporating scripture, philosophy, primary historical texts, and the great literary works of the western canon. This program emphasizes:

Primary Texts: Students engage with history as a living through first hand accounts recorded in the contexts in which they were experienced, rather than through the detached, analytical lens of the textbook.

Socratic Discussions: Students discuss texts with a teacher as an experienced guide who aims not to reveal truths to the students but rather to guide them to the truth by revealing discords or inconsistencies in their thinking.. The Socratic approach challenges students to think through and articulate ideas and for themselves and to develop ability in public speaking.

The Great Conversation: Texts students read have endured for generations and are valued for their truth, goodness, and beauty, as well as their impact on society. Many of these works are no longer read in high schools, even though they had a shaping influence on our society and culture. We believe that training leaders requires not mere familiarity with current ideas and trends, but an understanding that the great problems and questions of our day are not new - they have been formulated and contemplated over centuries of thinkers and leaders. Students need to understand the history and currents of ideas, thereby taking part in "The Great Conversation."

Essays: Students exercise the Liberal Arts of Logic and Rhetoric by clearly and persuasively taking a stand and defending it.

Public Speaking: Rhetoric and presentation will be emphasized throughout the Upper School course of study, however students will also begin with a semester of explicit instruction in public speaking.

An incomplete sampling of potential books covered during a four year program of study are listed below:
Year 1: The Iliad (Homer), The Odyssey (Homer), Oedipus Rex (Sophocles), History of the Peloponnesian Wars (Thucydides), Themistocles (Plutarch), Meno (Plato),

Year 2: The Aeneid (Virgil), Julius Caesar (Shakespeare), The Inferno (Dante), Confessions (Saint Augustine), Merchant of Venice (Shakespeare), The Prince (Machiavelli)
Year 3: Paradise Lost (Milton), Hard Times (Dickens), Crime and Punishment (Dostoyevsky), Anna Karenina (Tolstoy), True End of Civil Government (Locke), Of the Original Contract (Hume), What is Enlightenment? (Kant), Candide (Voltaire)
Year 4: Republic (Plato), Ethics (Aristotle),Moby Dick (Melville), Walden (Thoreau), Huckleberry Finn (Twain), The Federalist (Hamilton), Amerika (Kafka), Death of a Salesman (Miller), A Tale of Two Cities (Dickens), Demons (Dostoyevsky)

Fine Arts

Studio Art: Studio Art focuses on increasing spatial intelligence while developing a range of technical skills and establishing a solid conceptual foundation. Students focus on two-dimensional art and develop their knowledge of design, planning, and creative thinking.

Music: Students develop proficiency with an instrument and voice, music theory and composition, and participate in ensemble performance. Liturgical music is also incorporated and is regularly exercised in the life of the school (e.g. singing the daily troparia).

Art History: Art History surveys master works of art ranging across different cultures and time periods. Students study various mediums including sculpture, architecture, and painting in order to recognize and describe timeless works of beauty.

Theater: Students study acting, stage presence, technique, collaboration, and exploration. Students perform full-length plays from Shakespeare's body of work in addition to other performances relevant to their studies in the humanities.

Language

We currently offer Latin and will offer Greek beginning September, 2025. As we expand our programming, we plan to add more language options in the coming years.

Study Abroad: As part of our language programming, each student will have the opportunity to travel abroad to Greece during their Upper School course of study, which will provide enrichment and context for their study of classical art and literature, as well as Biblical and Church history.

High School Graduation Requirements

Math: 4 years
Science: 4 years
English/ History: 4 years
Language (Latin or Greek): 4 years
Theology: 4 years
Music: 4 years