

# Saint Thomas' Episcopal School Middle School Curriculum Grades 6-8

Our Middle School curriculum prepares students for the challenges of high school and beyond. Beginning in sixth grade, Saint Thomas' exposes students to the classical education model by introducing Latin, science, English, history, and mathematics as the core curriculum. Students also gain the opportunity to select elective courses from a variety of choices that best fit their personal interests, including foreign languages, physical education, robotics, computer programming, and fine arts. Sixth grade students start their academic experience in the Middle School attending an academic skills course during one of their elective periods to introduce them to the Middle School environment and to give them tools to manage the academic rigor of our Middle School model.

# **English**

Our English program develops students who can write with understanding and grace, who can read and understand what they have read, and who have begun to understand the lessons of life to be learned through acquaintance with the great characters of literature. Our goal is understanding, which cannot be rushed or quickly produced. To that end, we have divided our program into four parts: the studies of grammar, vocabulary, writing, and literature.

#### Grammar

We teach grammar thoroughly at every grade level because this study is fundamental to a real understanding of reading and writing our beautiful English language. Fads come and go about whether to teach grammar. We have found, however, that while students need no instruction in current slang and colloquialisms, they do need to be taught the higher and harder language of literature—the only one of lasting value.

# Vocabulary

Each week we devote some time to vocabulary study because many reading and writing difficulties come directly from not knowing what words mean. Moreover, since vocabulary knowledge is so important on standardized tests like the SAT, regular drill gives students experience in the form and content of test questions. Finally, careful use of words stems directly from our respect for the Word, God's agent in creation.

### Writing

Middle School continues the program begun in the earlier grades: to produce correct and interesting sentences; to understand the paragraph as a unit; and to produce reports and essays with clear organization. Students also begin to develop the skills used in writing a research paper.

#### Literature

Our literature choices emphasize—but are not limited to—the classics of Western civilization, chiefly those written in English. We choose works of proven and lasting value because we believe exposure to things that are true, honest, pure, lovely, and of good report will help our students recognize those things, or the lack of them, in whatever literature they encounter.

Students learn to analyze these works for content, form, style, and theme. In literary analysis, we insist on careful, thorough, open-minded reading, and we insist that students produce evidence for their opinions from the text itself, not from some disconnected imaginings.

# Math

By the completion of fifth grade, students at Saint Thomas' Episcopal have achieved mastery in most arithmetic skills. The curriculum introduced elementary grade students to topics in algebra, geometry, probability, and statistics. The Middle School math program enhances this understanding, introduces new capstone concepts to these fundamental skills and prepares students for high school courses.

## Sixth Grade (Sixth Grade Math)

The sixth grade math course provides a bridge from Lower and Middle School mathematics to an entry-level understanding of algebraic concepts. The application of arithmetic operations, ratios, and proportions are incorporated into solving algebra-based problems. Percents are applied to business problems and probabilities for two-level experiments.

# Seventh Grade (Pre-algebra)

Students continue to explore arithmetic operations and their applications. We solidify knowledge and introduce word problems on ratios, proportions, and percents. Students study arithmetic and geometric sequences and are introduced to geometric concepts such as perimeter, area, and volume. Graphing on a number line and on the coordinate plane is introduced as well. Seventh graders continue to master fundamental vocabulary that will serve them in future courses.

# Eighth Grade (Algebra I or Accelerated Algebra I)

The eighth grade course provides a foundation of knowledge for all high-level mathematics courses a student will take in high school. By focusing on algebraic concepts with regard to rational numbers, equations and inequalities, linear systems, quadratics, and probability, students gain a comprehensive understanding of why numbers behave the way they do and how to utilize these behaviors in various analytical environments.

Additionally, some students are placed in the Accelerated Algebra I course, our first "honors" level course in the Middle School. Students who take this course find more challenging problems, a faster and broader pace, and significantly advanced analytical expectations with regard to how math works.

Prerequisite: The accelerated course is reserved for individuals who meet a number of criteria, including high sixth and seventh grade math averages, standardized test scores, student interest, and teacher input. Furthermore, students are expected to maintain an 85 average in the accelerated track.

# **Science**

The goal of the science program at Saint Thomas' is to provide our graduates with a fundamental and integrated knowledge of those sciences that explain the nature of our Creator's orderly universe.

### Sixth Grade: Earth Science

The earth science curriculum begins with an examination of the nature of science. Emphasis is placed on the scientific method and the skills involved in scientific inquiry. Students establish the significance of studying science, as well as understand how many elements of science can be applied to their daily lives. Throughout the year, students improve graphing skills and their science vocabulary. Additionally, students stay current with science events in the news by completing an article summary concerning the topic of study each marking period.

Earth science students are expected to apply skills of scientific inquiry to their study of the earth, its physical features, and the forces that shape it. Students explore a wide variety of topics, including environmental science, geology, and astronomy. Class activities focus on laboratory investigation and learning productions. Hands-on learning and laboratory practice are integral to student understanding and highly valued.

This class will ultimately familiarize students with the scientific process, introduce them to lab work, and help them understand the world that surrounds them. Other fields of science including chemistry, biology, and physics are incorporated into the study of the earth.

# Seventh Grade: Life Science

The life science curriculum is investigative as students ponder the characteristics of life, learn of the nature and structure of the cell and the processes that exist within it, observe and test structure and function of different human body systems, and examine life at the cellular level in bacteria and protists. The course aims to provide a strong foundation for high school biology and introduce a number of significant lab techniques. Students also participate in a Middle School Science Fair to experience the scientific method firsthand.

## Eighth Grade: Physical Science

The physical science curriculum stresses an in-depth understanding of the nature and structure of matter and the characteristics of energy. Major areas covered by the standards include: the organization and use of the periodic table; physical and chemical changes; nuclear reactions; temperature and heat; sound; light; work, force, and motion; and the basics of organic chemistry.

The scientific method is used in all laboratory work in the class. Students generate a formal report written in outline form for most experiments. The scientific method involves the identification of a question or problem. Based on personal experience and existing knowledge, an hypothesis or answer is generated. This hypothesis is tested by experimentation; the procedure used in the experiment is described in detail sufficient for another person to duplicate the work. The data from the experiment are collected and analyzed. A conclusion is drawn as to the validity of the original hypothesis.

# **History**

Middle School History is not simply a collection of past names, dates and facts. Specifically, our curriculum has an educational planning approach that follows a classical methodology to understand our past. It relates the past to today's government/economic systems and geographic locations. Through hands on projects, organized note taking on lectures and historical films, and Socratic discussions, our students focus on guiding themes and big ideas. Students also develop skills to allow them to adapt to any specific historical content, giving them the tools to interpret and analyze American and world history/geography.

### Sixth Grade: Biblical History

Sixth grade students study ancient history from creation until the life and resurrection of Christ. This will include learning of the cultures of the Egyptians, Mesopotamians, Hebrews, Assyrians, Chaldeans, Persians, Greeks, Romans, as well as the beginning of the Church. The course provides a framework for placing events in context, emphasizes and develops note-taking skills, and introduces students to reading maps as they relate to historical changes and Biblical journeys.

# Seventh Grade: World History & Geography

Seventh grade World History and Geography focuses on the Middle Ages, starting with the Fall of Rome and ending with the Enlightenment. By the end of the course, students will understand the development of both Eastern and Western cultures. Strong emphasis will be placed on world geography, map skills, current events, and student-centered discussion. Throughout the year, students will evaluate primary documents, develop note-taking skills, complete a variety of hands-on projects, conduct oral presentations, and participate in student-led discussion. These discussion groups will develop awareness of today's world by profiling current events. Finally, all seventh grade students will attend the annual Texas History trip, which ties to a two-week course on our state's unique geography, ecology, topography, and history.

### Eighth Grade: United States History

The eighth grade history curriculum focuses on the development of the United States of America, from indigenous cultures to the Vietnam War. Throughout the course, students will evaluate biographies of historical figures, analyze primary documents, develop note-taking skills, participate in group discussions, complete a variety of hands-on projects, conduct oral presentations, and further develop their map skills. The course also facilitates the completion of a high-school level research project (in coordination with eighth grade English). Finally, all eighth grade students are expected to attend an annual trip to Washington, D.C. as a part of our classical curriculum.

# **Latin**

Latin plays an important role at Saint Thomas'. It is required of every student in the sixth and seventh grades and is offered as an elective for students in eighth grade and beyond. We believe Latin is important for many reasons. The major language of the Western world for more than two thousand years, it is the parent language of French, Spanish, and Italian, among others, and is a cousin to Greek, Sanskrit, and the Germanic languages. Thus, a good understanding of Latin facilitates learning both the Romance and the Germanic languages. English itself is overwhelmingly indebted to Latin. It is far easier for a student to learn English vocabulary when he or she can analyze the basic Latin roots and infer the definition rather than memorize meanings in a vacuum. Latin is also an invaluable aid in teaching English grammar because basic grammatical concepts become clearer in a student's mind when presented in the logical structure of the Latin language. Finally, the ability to logically deduce sense from statement, i.e., comprehension, is greatly increased.

The sixth through eighth grades are spent mastering the basic word forms, vocabulary, and grammar of the Latin language. The eighth grade level is correlated with the history program, with an intensive study in Roman history and civilization. Eighth grade students participate in the American Classical League's National Latin Exam, in which they regularly excel. We use the Cambridge Latin Series, which uses a reading approach to help students master the language. Written as a historical novel, students meet ancient characters and are exposed to the classical heritage that is the foundation of our world today. The program is chronological, with sixth and seventh graders completing a High School Latin I equivalency and eighth graders completing a Latin II equivalency.

# **Grade Level Class Trips**

#### Sixth Grade: Mo-Ranch

Students entering Middle School require orientation, motivation, and teamwork. The sixth grade trip to Presbyterian Mo-Ranch Assembly provides our Middle Schoolers a safe, fun location to get to know their classmates. In this special environment, students journey through applied science classes and adventures in confidence while learning to depend on one another. The three-day, two-night trip occurs in the early weeks of the school year.

### Seventh Grade: Texas History

Our seventh grade students embark on a research-based trip to our state's capital and surrounding central Texas cities. After a dedicated introduction to Texas history while they are still in class, seventh grade students explore various landmarks in Austin, San Antonio, and Washington-on-the-Brazos and use curriculum facilitated by history and English faculty to expand their understanding of the various iterations of our great state.

### Eighth Grade: American Heritage, Washington, D.C.

We envision the D.C. trip as a way for eighth grade students to experience classroom content in person. By incorporating material presented during the trip into your student's history, English, and science classes, the founding of our nation comes alive and reflects the classical education presented to your child throughout the school year. The trip is a unique academic experience, and a capstone to an incredible Middle School experience.

Rev. 7.2021 5

# **ELECTIVES**

# Introduction to Logic (6th Grade), Logic & Debate (7th Grade) and Logic/Pre-Rhetoric (8th Grade)

These three courses develop the knowledge and skills essential to the art of debate. We begin by defining what an argument is, identifying why arguments are valuable, and developing techniques to analyze arguments. In addition to studying great historical debates, students must maintain a premier knowledge of current events. Various debate styles are presented, including Lincoln-Douglas, Policy, and Public Forum.

#### Art

This course offers an introduction to the basic elements and principles of art that are woven into projects that are inspired by the students' life experiences, environment, and interests. A variety of media and techniques are explored while creating works in two and three dimensions.

# Bagpipe Band - Drumming and Piping

Students involved in the band program receive first-class instruction on the Great Highland bagpipe or Scottish snare, tenor, or bass drum. Participation in the A, B, or C band requires students to compete in pipe band competitions and perform at several school functions. Students who reach the A band earn the chance to perform in Scotland and to compete in the World Pipe Band Championships in Glasgow. Band members also participate in the annual Sounds of Scotland that typically occurs in March.

Prerequisite: Instructor Approval

# **Introduction to Programming 1**

Many young people with access to computers participate as consumers, rather than designers or creators. This course will attempt to give to our students the knowledge, practices, and fundamental literacies that they need to understand what they already use and to be able to create the types of dynamic and interactive computational media that they enjoy in their daily lives.

We will use a variety of resources to quickly teach them the basics of computer science. We will base most of our teaching on Scratch with many game-building examples. Some of our activities will be connected to scientific or mathematical concepts. If we have enough time and interest we will proceed to JavaScript and HTML, giving them the ability to create their own Web pages.

## **Introduction to Programming 2**

This course will be based on the previous one but does not require having taken it. We will start by explaining how the internet works and introducing the concepts of networks and internet protocols. We will learn HTML and use our knowledge to produce web pages. We will then learn JavaScript with the dual goal of introducing the students to a real programming language and making our webpages fully interactive.

If we have enough time and interest we will proceed to Python, a language still reasonably easy to learn and very widely used on the internet and in colleges, especially to develop scientific applications.

# Chinese I, Eighth Grade

The eighth grade Chinese program is a Chinese I equivalent course. Students who complete this course will enter Chinese II as a ninth grader at Saint Thomas'. Students will study basic Chinese and learn about Chinese culture. Basic conversation and vocabulary will provide foundation for later coursework. Students will learn Pinyin, correct tones for each word and learn correct stroke order for writing the characters.

#### Choir

Choir students extend their high and low vocal ranges and learn focused tonal placement through proper breath support and vowel placement.

This graded, elective course provides an opportunity for students to develop their musical potential through singing in a choral ensemble. Focus on a beautiful tone, breathing, extension of the vocal range, sight-reading, learning to execute the technical aspects of music, and responsible rehearsal habits are emphasized. Students carefully prepare music used in the Chapel service, sacred anthems, classical music, and secular music.

Choir students provide community service programs and participate in competitions. Concerts are given at Christmas, in the spring, and at graduation.

Prerequisite: Ability to match pitch and maintain a tonal center while singing accompanied or a cappella. Students new to STE or to the STE choir must audition with the respective choir director prior to enrolling in the course.

## Highland Dance

Highland dancing is open to all students. Students who participate in highland dancing program might have the opportunity to perform in the annual Sounds of Scotland, which typically occurs in March. Students may also participate in medals tests. Highland dancing counts as a P.E. credit.

#### **Journalism**

Students will become discerning customers of information as they are introduced to the principles and elements of media literacy and learn to apply these principles to a variety of print and non-print media for analysis and discussion, with an emphasis on how those principles apply specifically to print newspapers and their online counterparts. Students will become journalists as they learn about journalistic ethics, informed analysis of news sources, conduct interviews, styles of journalistic writing, and text structures for writing. Students will serve in roles of reporter, editor, and publisher, as they apply their new understanding to create articles for publication in the Middle School newspaper, *The Loop*.

### MATHCOUNTS/Cryptography

This elective is open to sixth, seventh, and eighth graders with a high interest in mathematics. The main focus during the second and third quarters will be to prepare for the school, regional and, if qualifying, the state and national MATHCOUNTS competition. MATHCOUNTS is a national middle school coaching and competitive mathematics program that promotes math achievement through a series of engaging "bee" style contests. The second part of this course deals with cryptography, the art of writing or solving codes.

Cryptography is taken during the first and fourth quarters of the school year. Cryptography is a method of protecting information and communications through the use of codes so that only those for whom the information is intended can read and process it. The prefix "crypt-" means "hidden" or "vault" and the suffix "-graphy" stands for "writing." Cryptography refers to secure information and communication techniques derived from mathematical concepts and a set of rule-based calculations called algorithms to transform messages in ways that are hard to decipher. These deterministic algorithms are used for cryptographic key generation and digital signing and verification to protect data privacy, web browsing on the internet, and confidential communications such as credit card transactions and email.

### **Oral Presentation**

Oral Presentation provides the student with instruction on presenting information in front of a live audience. Students will learn different types of speeches, how to execute them, and how to analyze them. The class also includes a creative writing element of speech writing to help each student create presentations that will help prepare them for speech opportunities in real-world scenarios. Students will also get opportunities to explore oral presentation through theatre, with a strong focus on diction, volume, and vocal articulation.

## Physical Education

Students learn the principles of physical fitness and wellness. Classes include strength conditioning and sport-specific, skill-related components with an emphasis on team competition and sports offered by the school.

All activity begins with proper stretching to prevent injury. Students participate in lessons that teach relevant skills then play "lead-up" games that put the skills into practice. For example, the football unit lessons include: passing techniques, catching, carrying the ball, blocking/stance, punting, and rules of the game. Class Units include: football, volleyball, circuit training (fitness stations, weight lifting, yoga/pilates/kickboxing), basketball, soccer, health/nutrition and games, such as frisbee, kickball/mat ball, Wii, and sports tournaments/competitions.

#### **Private Music Instruction**

Private music lessons in piano, voice, organ, violin, viola, cello, flute, and guitar are offered. A very fine group of teachers has been engaged to provide this convenient service. Quarterly and year-end recitals are held to provide students several performance opportunities.

### Quiz Bowl

This is a competitive, academic, interscholastic competition that includes questions from the areas of knowledge including history, literature, science, fine arts, current events, sports, and popular culture. The Academic Games course will be a 3-day elective, and will focus on different topics each session to hone student knowledge and skills. Activities include studying geography and history, staying abreast of current events including sports, entertainment, and political events, as well as competing against one another in trivia games and mock Quiz Bowl tournaments.

#### Robotics I

The Robotics elective at Saint Thomas' helps develop an understanding of the nature of robots, their historical development, uses, and limitations, and the general trends in their future. After constructing working vehicles/machines using LEGO materials, the students will program their vehicle to use each machine's unique capabilities to accomplish an assigned task. While student teams work to accomplish their missions, the emphasis is on cooperation, respect for others, and good engineering practices and attitudes, including teamwork, personal responsibility, and professionalism. Students learn about and appreciate scientific discovery, engineering accomplishments, and innovative design. Students are expected to utilize creative solutions to solve technical problems via the Lego Mindstorm software system. Robotic vehicles will compete, solving and completing a series of fantasy missions. Each mission requires your bot to "drive" through a series of obstacles to "rescue" or "deliver" a payload. Students will work in teams of two as they analyze the mission board, design useful attachments, and plan the "best" route to accomplish the mission.

#### Robotics II

The Robotics II elective at Saint Thomas' builds on the experiences of Robotics I. The advanced material allows for greater emphasis on the design process and basic engineering principles, including careful analysis of the problem, trying multiple options, careful record keeping, and communicating their ideas. Teams will "battle" each other in various "war" scenarios using bots they will design and build. Students will select their chassis design from a series of building plans and add attachments that they design for the specific mission. The class will plan the "war" scenario, deciding the nature and location of the conflict. New teams will be assigned for each "war" scenario.

# Spanish, Sixth Grade

Sixth grade Spanish focuses on vocabulary and communication. Additionally, students are introduced to Spanish verbs *ser* and *estar*. Students learn basic grammar points, the alphabet, numbers, and other basic vocabulary concepts. The curriculum focuses on pronunciation and having a basic conversation in Spanish.

# Spanish, Seventh Grade

Students begin their study of Spanish by reviewing the alphabet, rules of pronunciation and accents, greetings and simple conversations, ordering in a restaurant, counting, and the weather before moving on to more complicated grammar.

Covered this year will be -ar, -er, -ir and irregular verbs, both in the present and preterite tense; adjectives; and adverbs. Ser vs. estar are covered thoroughly as well as direct and indirect object pronouns. The vocabulary comes from lessons on friendships, student life, shopping, time, school activities, eating out, family life, sports, health, the seasons, cultural events, and vacationing. Labs are incorporated into the classroom routine on a regular basis.

### Spanish I, Eighth Grade

The eighth grade Spanish program is a Spanish I equivalent course. Students who complete this course will enter Spanish II as a ninth grader at Saint Thomas'. In this course, students become fully competent in the present tense and past tense verb forms. The curriculum enhances student vocabulary, listening comprehension skills, and verbal communication in Spanish.

### Spanish I – Accelerated, Eighth Grade

This course is a foundational course for students with previous experience with Spanish in sixth and seventh grades. Students will continue their journey toward language proficiency and cultural competency through an in-depth and accelerated curriculum in Spanish. Successful completion of this course is equivalent to completing Spanish I in high school.

### String Ensemble

Violin, viola, cello, and bass students with prior experience and the appropriate level of note-reading and technical skills will be instructed in orchestral technique, ensemble, and performance. Different musical periods and their stylistic characteristics will be explored and performed in ensemble.

Performing opportunities include formal Christmas and Spring concerts, as well as Chapel services, competitions, and community concerts. Advanced students may audition for Region and All-State Honor orchestras.

All students will receive instruction in music fundamentals, including basic harmony and theory; major, minor, and chromatic scales; and rhythmic drills as a regular part of classes. Special listening assignments will also explore a wide range of composers and styles.

Additional information about our string ensemble is located in the Arts section on the website: <a href="mailto:stes.org/arts/orchestra">stes.org/arts/orchestra</a>.

Prerequisite: Students new to STE or to the STE string ensemble must audition with the orchestra director prior to enrolling in the course.

# **English Grammar**

The Middle School English Grammar Elective will be available to qualifying seventh and eighth grade students who are new, incoming students or recommended by their English teachers. The English Grammar Elective will help students increase their understanding of primary grammar principles and help students apply those principles to their writing. Students will benefit from grammar lessons and practice with individualized instruction. There will not be any homework in this class, and students will often work on their core English class assignments. Teachers will identify students who qualify for this elective through the students' performance on grammar assignments throughout the year and a year-end grammar test. The class will take place every other day.

### Study Hall

Study Hall provides a supervised environment in which students may work on class assignments and homework, get ahead in a class, or read quietly. Students are required to come to Study Hall with all necessary materials to complete two or more tasks. Extra textbooks and computers are available. Students may also use the time to meet with teachers, tutors, or study buddies on an as needed basis. Please note that Study Hall is a respected and serious workspace, designed to be a productive environment for all. Chatting and/or wasting time is not allowed; consistent inability to follow Study Hall procedures, distracting neighbors, or poor conduct will lower homeroom conduct grades. Persistent poor behavior will result in permanent removal from Study Hall.