



Southern Maryland Christian Academy

Course Catalog
2018-2019
Middle School

6th Grade

Mathematics

Math 6

The Math 6 course is designed for students to master and advance whole number concepts, operations, and problem solving. This course includes mastery of arithmetic operations with decimals, fractions, and percent. Students will comprehend and analyze various graphical representations and basic statistics to analyze data. Students will develop basic geometric and measurement concepts, probability and statistics, and be given an introductory scope of algebraic concepts. A firm grounding in these concepts gives the students an awe and appreciation of an orderly universe designed by an all-knowing Creator God.

Prerequisites: placement test

Honors Math 6

Honors Math 6 seeks to solidify and expand skills and concepts learned in previous math courses. Students will be introduced to fundamental algebraic concepts and basic abstract thought. Reinforcement is used to further prepare students for high-level thinking required in Algebra. A various array of activities will be used to develop critical thinking and problem solving skills. As with previous math courses, Honors Math 6 will build on mathematical operations that include decimals, fractions, percent, integers, and work with graphs. Geometry and measurement are covered, as well as an introduction to data analysis, probability and statistics.

Prerequisites: placement test

Science

Life Science – Order and Design

Life Science is observations and decisions about living things. It is the study of living organisms in God's creation. In this course, students learn and study in depth compositions of animals and humans. Students will classify animal structure and function. Comparing and contrasting different animals will build a knowledge base of God's perfect creation. Students will also study the human body systems, health, cell structure and function, heredity, and genetics. This course also provides the framework that prepares the student to further study other fields of science in High School.

Prerequisites: n/a

Foundations and Frameworks (Reading 6)

Foundations & Frameworks is an instructional reading program that uses a collection of best practices for equipping students to fully understand ideas conveyed in text. Time is dedicated to skill mastery. High quality literature is used as a natural conduit for skill instruction. Small groups are used to enable teachers to know their students and adjust instruction to meet the needs of individuals. Visual tools are used to organize and represent patterns of thinking. Vocabulary instruction is integrated throughout instruction to emphasize complete word understanding. Thinking skills are explicitly taught and modeled. (Students will be enrolled in both English 6 and Foundations and Frameworks.)

Prerequisites: n/a

English 6

The sixth grade language arts course presents reading skills that allow the students to read and interpret literature effectively and decipher the meanings accurately. Students will be given the tools necessary to apply these skills to Scripture developing stronger comprehension as well as a better understanding of a Christian worldview. Grammar is taught both as a representation of the orderliness of language as well as a necessary part of proper professionalism. Strong writing and grammar are an expectation in today's professional world and grammatical tools are a necessary foundation for improving writing and comprehension skills. (Students will be enrolled in both English 6 and Foundations and Frameworks.)

Prerequisites: n/a

History 6

Heritage Studies

The Heritage Studies course surveys a view of God's world from Biblical times through the middle Ages. Investigation of historical events, evaluation of true and false philosophies, and geography lead students to learn and decipher God's Truth, developing a stronger testimony among unbelievers. Studying the history of the world and the features of the earth, students can see illustrations of God's wisdom, omnipotence, sovereignty, and benevolence. Students will learn Christian philosophy, character, and attitudes, which promotes a balanced approach to social studies instruction.

Prerequisites: n/a

Bible 6

In this course, students begin to formulate and relate learned Bible principle with their own lives in order to incorporate 3 basic truths - to love God, follow Jesus, and to live their lives so others will know who Jesus is. XP3 Middle School curriculum is designed to help students learn about God, themselves, and their love for others.

Prerequisites: n/a

7th Grade

Mathematics

Math 7

Math 7 seeks to solidify and expand skills and concepts learned in previous math courses. Students will be introduced to fundamental algebraic concepts and basic abstract thought. Reinforcement is used to further prepare students for high-level thinking required in Algebra. A various array of activities will be used to develop critical thinking and problem solving skills. As with previous math courses, Math 7 will build on mathematical operations that include decimals, fractions, percent, integers, and work with graphs. Geometry and measurement are covered, as well as an introduction to data analysis, probability and statistics.

Prerequisites: Math 6

Honors Pre-Algebra

Honors Pre-Algebra is to promote and establish a strong foundation in abstract algebraic concepts by expanding operations and number sense to include exponents, roots, and radicals. The skills in this course establish a foundation of integers, equations and inequalities, coordinate graphing, and an introduction to solving algebraic equations. Students will explore and solve linear equations with whole number integers, decimals, fractions, and percent. Algebraic functions and geometric concepts are introduced.

Prerequisites: Honors Math 6

Science

Earth and Space Science

Earth Science will explore four basic spheres of God's physical non-living Creation: the celestial sphere (outer space), the atmosphere (the layers of gas surrounding the earth), the lithosphere (the solid part of the earth and its surface), and the hydrosphere (the natural waters that cover and penetrate the earth's surface). Each sphere will be studied while at the same time exploring proper scientific methods and common fallacies about each sphere. The role of our Creator will be identified in each area, and students will learn how to better defend God's Creation, blending both their faith and true Science. They will apply a biblical worldview to defend their faith about Creation.

Prerequisites: n/a

English 7

English 7

This English course presents the reading skills to study and interpret literature and the composition skills to effectively communicate with others. Investigation of fictional stories, biographies, poetry, and selections from the Bible lead students to develop stronger comprehension skills and understand of a Christian worldview. Studying standardized grammatical terminology and structure provides a foundation for improving composition skills.

Prerequisites: n/a

History 7

The American Republic

This course begins with the early explorers and then proceeds to establish the differences between ideas on exploration, colonization, and religion. Students will study the many wars that created and establish the United States of America. The course integrates scriptural truths with history, the lives of men who were explorers and nation builders, lives of great church leaders and reformers and practical everyday situations which confront the students in today's world. Along with emphasis on the importance of knowing our history, an emphasis is placed on having a personal knowledge of scripture and personal relationship with Christ.

Prerequisites: n/a

World Studies

This history course presents world studies to the students giving them an accurate view of the world. Through investigation of different culture, the students will explore the world God has created and learn ways to share the Gospel with all people. Through evaluation and activities, the students will be given a better understanding of the world around them and develop a stronger and clearer Christian worldview.

Prerequisites: n/a

Bible 7

In this course, students begin to formulate and relate learned Bible principle with their own lives in order to incorporate 3 basic truths - to love God, follow Jesus, and to live their lives so others will know who Jesus is. XP3 Middle School curriculum is designed to help students learn about God, themselves, and their love for others.

Prerequisites: n/a

Mathematics

Pre-Algebra

Pre-Algebra is to promote and establish a strong foundation in abstract algebraic concepts by expanding operations and number sense to include exponents, roots, and radicals. The skills in this course establish a foundation of integers, equations and inequalities, coordinate graphing, and an introduction to solving algebraic equations. Students will explore and solve linear equations with whole number integers, decimals, fractions, and percent. Algebraic functions and geometric concepts are introduced.

Prerequisites: Math 7

Honors Algebra 1

Algebra 1 is foundational to future math courses and life skills. It is the beginning course in higher mathematics. Algebraic concepts are developed with the goal of developing reasoning and problem-solving skills so that students can apply these concepts outside of the math classroom. The course covers the basic elementary algebraic concepts, beginning with the study of number relations and going through applying fractions. Other algebraic topics covered through the year include working with algebraic expressions; writing, reasoning with, and solving single variable equations and inequalities; working with rational expressions and polynomials; graphing linear equations, solving equations and inequalities graphically; solving systems of equations and inequalities (two-variables); and exponents and radicals. Students will apply real life applications to each objective they learn, displaying mastery of the content.

Prerequisites: Honors Pre-Algebra

Science

Physical Science: Matter and Energy

In Physical Science, students apply and combine science and mathematics in order to discover exactly why and how matter and energy interact. This course demonstrates hands-on interactions with the subject matter. The format takes the conceptual concepts and ties in mathematical content, maximizing the students' critical thinking and understanding of the everyday world. Topics include mechanics, sound and light, electricity and magnetism, atomic and nuclear physics. A basic understanding of physics will enable students to appreciate the world around them as they begin to understand the natural processes at work. This course is designed to give students insight to the world around them by studying the foundational laws that God established for His creation. Although Physical Science is not taught as a math course, it does require the application of many mathematical principles.

Prerequisites: n/a

English 8

English 8

This English course builds on prior knowledge retained from previous courses. The course presents the reading skills to study and interpret literature and the composition skills to effectively communicate with others. Investigation of fictional stories, biographies, poetry, and selections from the Bible lead students to develop stronger comprehension skills and understand of a Christian worldview. Studying standardized grammatical terminology and structure provides a foundation for improving composition skills.

Prerequisites: n/a

History 8

The American Republic

This course begins with the early explorers and then proceeds to establish the differences between ideas on exploration, colonization, and religion. Students will study the many wars that created and establish the United States of America. The course integrates scriptural truths with history, the lives of men who were explorers and nation builders, lives of great church leaders and reformers and practical everyday situations which confront the students in today's world. Along with emphasis on the importance of knowing our history, an emphasis is placed on having a personal knowledge of scripture and personal relationship with Christ.

Prerequisites: n/a

World Studies

This history course presents world studies to the students giving them an accurate view of the world. Through investigation of different culture, the students will explore the world God has created and learn ways to share the Gospel with all people. Through evaluation and activities, the students will be given a better understanding of the world around them and develop a stronger and clearer Christian worldview.

Prerequisites: n/a

Bible 8

In this course, students begin to formulate and relate learned Bible principle with their own lives in order to incorporate 3 basic truths - to love God, follow Jesus, and to live their lives so others will know who Jesus is. XP3 Middle School curriculum is designed to help students learn about God, themselves, and their love for others.

Prerequisites: n/a

Middle School Electives

Middle School electives vary based on academic year and interest levels of students. Below are electives that have been and could be offered for each school year.

STEM – Project Lead the Way

Project Lead The Way Gateway's hands-on activities, projects, and problems in computer science, engineering, and biomedical science boost classroom engagement and excitement, support student-led learning and teamwork, and inspire “aha! moments” and deep comprehension. PLTW Gateway is divided into independent, nine-week units, using a 45-minute class period and is designed to be taught in conjunction with a challenging academic curriculum.

Design and Modeling

Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. Using Autodesk® software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

Prerequisites: n/a

Grade: 6,7,8

Automation and Robotics

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

Prerequisites: n/a

Grade: 7,8

Computer Science for Innovators and Makers

Throughout the unit, students learn about programming for the physical world by blending hardware design and software development, allowing students to discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects.

Prerequisites: n/a

Grade: 6,7

App Creators

This unit exposes students to computer science as a means of computationally analyzing and developing solutions to authentic problems through mobile app development, and conveys the positive impact of the application of computer science to other disciplines and to society.

Prerequisites: n/a

Grade: 7,8

Energy and the Environment

Students are challenged to think big and toward the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption.

Prerequisites: n/a

Grade: 6,7,8

Flight and Space

The exciting world of aerospace comes alive through Flight and Space. Students explore the science behind aeronautics and use their knowledge to design, build, and test an airfoil.

Prerequisites: n/a

Grade: 6,7,8

Science of Technology

Science impacts the technology of yesterday, today, and the future. Students apply the concepts of physics, chemistry, and nanotechnology to STEM activities and projects, including making ice cream, cleaning up an oil spill, and discovering the properties of nano-materials.

Prerequisites: n/a

Grade: 6,7,8

Magic of Electrons

Through hands-on projects, students explore electricity, the behavior and parts of atoms, and sensing devices. They learn knowledge and skills in basic circuitry design, and examine the impact of electricity on the world around them.

Prerequisites: n/a

Grade: 7,8

Green Architecture

Today's students have grown up in an age of "green" choices. In this unit, students learn how to apply this concept to the fields of architecture and construction by exploring dimensioning, measuring, and architectural sustainability as they design affordable housing units using Autodesk's® 3D architectural design software.

Prerequisites: n/a

Grade: 6,7,8

Medical Detectives

Students play the role of real-life medical detectives as they analyze genetic testing results to diagnose disease and study DNA evidence found at a "crime scene." They solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health.

Prerequisites: n/a

Grade: 7,8

Fine Arts

A Personal Journey

A Personal Journey of Art introduce your student to art's most fundamental concepts; art's forms and purposes, subjects, themes, and media. This course takes a visual look at the elements of art and principles of design and explores basic steps in art criticism and the 5-step process for studio work. A personal journey reinforces concepts and skills and reviews basic skills, techniques, and concepts by revisiting elements and principles. Students will study a simplified chronology of western art styles and movements. Students will explore art forms, as well as matting, framing, and other essential skills.

Prerequisites: n/a

Grade: 6,7,8

A Global Pursuit

A Global Connection of Art helps students connect with ideas that are shared by people around the world. Art History and Traditions lessons focus on European history, making this book a good fit with the study of Western history and culture. Global View lessons focus on cultures around the world.

Prerequisites: n/a

Grade: 6,7,8

A Community Connection

A Community Connection of Art focuses on how communities use art to communicate. Art History and Traditions lessons focus on U.S. History, making this book a good fit with the study of U.S. History. Global View lessons focus on cultures around the world.

Prerequisites: n/a

Grade: 6,7,8

Music Appreciation

This music appreciation course will provide students with experiences that foster a basic understanding of music theory and connections between the music performed during historical periods from the Middle Ages to the present. Students will leave this course, with a basic musical vocabulary, knowledge of some of the great musicians of past eras such as Bach, Mozart, Beethoven, and Stravinsky, and connections with music and historical time periods. They will also be able to identify musical styles from listening to examples of music from the Middle Ages through the present.

Prerequisites: n/a

Grade: 6,7,8

Drama

Drama is designed to teach students about theatre arts and how they can support, reinforce, and enrich our lives. This course is based primarily to develop foundational acting skills. Students will develop principles, methods, and philosophies of theater. Students learn movement, vocalization, and characterization. Students will perform various arrays of performances that include plays, improvisation, reader's theatre, impromptu, and pantomime scenes. Students will be exposed various arrays of drama productions. Through activities, students will learn physical and vocal presentation skills and develop basic knowledge of the theatre arts.

Prerequisites: n/a

Grade: 6,7,8

Stage and Guild Preparation

The success of every production depends as much on what goes on behind the scenes as what takes place on stage. That's where the stage crew comes in: designing and building sets, working out lighting, and dreaming up costumes that not only look the part, but work well for the actors. To learn the ropes, Stage Guild and Preparation course focuses on everything from scenic design & lighting to stage make-up and mask making. The nuts and bolts of Theatre begins with Stage and Guild Preparation.

Prerequisites: n/a

Grades: 6,7,8

Technology

Keyboarding and Document Processing

Students must be prepared for a lifetime of technology skills. This class introduces keyboarding skills that promote success with innovative solutions updated to reflect today's business challenges. Students will use an array of activities that reinforce the most important skills for keyboarding success. Throughout this course, students tap into the latest keyboarding technology, learn to master computer applications using Microsoft Office, and increase communication skills with relevant activities. Students will combine keyboarding skills with cybersecurity's, e-mail, database, electronic presentations, spreadsheets, and advanced word document processing. This course will encompass cross-curricular themes that will reinforce skills and enhance learning in other disciplines: Arts and Literature, Social Studies, Science and Math, Environment and Health, and Technology. All skills learned will prepare students to excel in college as well as today's business environment.

Prerequisites: n/a

Grade: 6,7,8

Internet Literacy

This course is the first in a three-part series that offers a thorough introduction to the Internet and World Wide Web. This course provides students with the necessary awareness and skills to recognize, understand, and make best use of the many research and communication resources available online. Course topics include: Internet literacy, history, and definitions; popular file types; societal issues such as copyright, free speech, and plagiarism. To gain the greatest benefit, students are encouraged to enroll in all three courses

Prerequisites: n/a

Grade: 6,7,8

Google Tools Classroom Training

Technology is increasingly being integrated into classrooms to facilitate communication, collaboration, and classroom management, as well as to prepare students for the 21st century. Google Classroom is a classroom management tool that connects teachers and students, provides a way to manage learning materials and workflow in a classroom. Think of Google Tools Classroom Training as a class to learn how to organize, manage, collect, distribute, communicate, and collaborate with fellow students and the teacher by using as aspects of google tools.

Prerequisites: n/a

Grade: 6,7,8

Physical Education and Health

Physical Education

Physical Education provides students with essential knowledge related to cooperation, teamwork, participation, intense effort, and the importance of a healthy lifestyle. Students will transition past elementary forms and an emphasis on skill-related and sport-specific activity will be developed. Students are introduced to variety of team sports and their individual roles within the framework of team play. Throughout the course, heavy emphasis will be placed on students to distinguish between ethical and unethical behaviors during team competition. Students will learn how to incorporate healthy habits such as sufficient rest, exercise, and good nutrition into daily routines. This will enable students to readily identify the different fitness components including: cardio-respiratory conditioning, muscular strength, endurance, flexibility, and body composition.

Prerequisites: n/a

Grade: 6,7,8

Health

Health teaches students the wonders of the human body and encourages them to establish good health practices which affect total wellness. The recurring thrust is the importance of establishing lifelong habits which affect total wellness. Students learn that a responsible action is one that is moral, safe, healthy, legal, and in accord with their parents' rules or guidelines. Thought-provoking questions motivate students to make Biblically sound personal decisions regarding their own health actions. This course will establish good eating habits, heighten safety awareness, and help each student learn to respect others and to properly care for his body. Students will apply concepts that encouraging them to take more responsibility in caring for their own health. Health is a course that is relevant and uses up-to-date information regarding such topics a physical fitness, personal appearance, human anatomy and physiology, eating for energy, drug abuse, safety, disease, first aid, mental and spiritual health, and social behavior.

Prerequisites: n/a

Grade: 6,7,8

Foreign Language

Introduction to Spanish

Middle School Spanish will introduce students to the basics of the language and culture. The learning objectives include familiarizing students with basic vocabulary plus oral and written use of the Spanish language. Students will study the culture to better understand the Spanish speaking people and their customs. Students will develop an enduring understanding that effective communication requires knowing how, when, and why to say something to someone. An ability to communicate in another language fosters an appreciation of cultural similarities and differences and an understanding of God's beautiful designing of language. Learning other languages and exploring their cultures enables an individual to interact within our global community and reach beyond the classroom. This course is designed to equip students with the fundamental tools that will prepare them for foreign language in High School.

Prerequisites: n/a

Grade: 6

Spanish 1A

Spanish 1A will introduce students to the basics of the language and culture. The learning objectives include familiarizing students with basic vocabulary plus oral and written use of the Spanish language. Students will study the culture to better understand the Spanish speaking people and their customs. Students will develop an enduring understanding that effective communication requires knowing how, when, and why to say something to someone. An ability to communicate in another language fosters an appreciation of cultural similarities and differences and an understanding of God's beautiful designing of language. Learning other languages and exploring their cultures enables an individual to interact within our global community and reach beyond the classroom. This course is designed to equip students with the fundamental tools that will prepare them for foreign language in High School. Successful completion of Spanish 1A and Spanish 1B in addition to passing Spanish 2 placement test, SMCA students will earn 1 high school Foreign Language credit.

Prerequisites: n/a

Grade: 7,8

Spanish 1B

Spanish 1B develops a deeper understanding of Spanish 1. Spanish 1B provides an introduction to the Spanish language and many Spanish cultures. Students develop listening, reading, speaking, and writing skills in a cultural context. The basic structure and syntax of the language is developed. Grammar is taught directly and practiced in each of the skill areas. Students will comprehend elementary spoken Spanish, develop and apply simple grammatical concepts, and read and write novice Spanish sentences and paragraphs using a wide range of vocabulary. Successful completion of Spanish 1A and Spanish 1B in addition to passing Spanish 2 placement test, SMCA students will earn 1 high school Foreign Language credit.

Prerequisites: Spanish 1A

Grade: 8

Math

Everyday Math

Everyday Math is an exploratory course in which students' take a look at the various branches of mathematics and ways in which math is used in the world around us. Students will solidify their basic computational skills through repeated practice and drills. They will conduct individual and group research projects. Students will also engage in multiple hands on activities that demonstrate the uses and importance of mathematics. Oral presentations will be given of the works they compile.

Prerequisites: n/a

Grade: 6,7,8

Math Counts

Math Counts is an exploratory course that begins by reinforcing basic mathematical terminology. Basic computational skills and problem solving will be solidified through repetitious practice and drills. Students will conduct many research based projects centered on the contributions of famous mathematicians and how mathematics is used in our society. They will examine their personal interests and how mathematics is used in the career fields they wish to explore. Students will also learn a variety of math games and give oral presentations of the work they compile.

Prerequisites: n/a

Grade: 6,7,8

Middle School Financial Literacy

Students taking Foundations in Personal Finance learn how to avoid debt, budget with intention, invest early, and build wealth so they can live generously. This course provides real-life up-to-date applications to students. Students learn through engaging relevant financial understanding. Students will be introduced to case studies to engage students in practical application of financial principles.

Prerequisites: n/a

Grade: 8

English

Journalism

Middle School Journalism introduces students to the exciting world of print, online and broadcast media. Students will investigate major units of study: reporting, writing, editing, photography, advertising, design, management, and teamwork. In addition, students will have the opportunity to use computer-aided publishing tools and other hands-on production tools as well as modern photo techniques. The course may provide students insights into the field of journalism. Throughout modern history, people have depended on the mass media to spread the word about events and people of interest to the general public. Students will have a hands on application by participating and contributing towards the SMCA newspaper.

Prerequisites: n/a

Grade: 6,7,8

Creative Writing

Creative writing is designed to aid students in their creative expression, as well as delivery of one's writing. This course is designed as a writing workshop. It explores the elements of fiction and poetry through analyzing different genres of fiction and poetry. Students will read and discuss poetry, stories, and articles on the craft of writing. Students will read and evaluate the effectiveness of fiction of varying styles. Students will learn poetic vocabulary and read interpret poems of varying styles. During this course, students are encouraged to improve writing skills through creating and revising poetry, short stories, and creative nonfiction. Students will write and workshop each other's poetry throughout the course. Student work culminates in a final portfolio in which students will demonstrate the ability to convey experience and meaning in their writing.

Prerequisites: n/a

Grade: 6,7,8

Other

Study Skills

Study Skills is a core program, addressing basic, fundamental organizational and learning skills for students. All skills emphasized are catered to student centered learning and development. Study Skills helps students with the collection of abilities needed to keep schoolwork organized and learn and retain new information. The course will help students develop the skills of time management, setting and meeting goals, memorizing, note taking, long-term project management, and adapting to various assessment styles. Students will be exposed to goal oriented learning and set priorities to reach those goals. Students will investigate their own learning styles and learn about the most advantageous ways to study within those particular learning styles. The purpose of this course is to prepare each student to ultimate success and ownership of their educational experience.

Prerequisites: n/a

Grade: 6

Hermeneutics

The term hermeneutics can be intimidating. It sounds academic and is foreign to most of our vocabularies. However, the act of interpretation is as common as communication itself. This course will instruct in various parameters for biblical interpretation and will show how specific methods are applied to Bible study.

Prerequisites: n/a

Grade: 8

Household and Personal Management Skills

Our society has lost the fine art of homemaking. The push to excel in employment outside of the home is what is deemed successful. We are taught to micromanage, multitask, and be proficient at keeping a clean and neat work zone. Why is it that so many people excel at this in employment but fail when it comes to applying it at home? Structure at work is important because work itself is important. We need money to survive, thus we put most of our attention to where we would receive an “outcome” such as a paycheck at the end of the work week. Being able to maintain a home will help you just as much as a paycheck will help you in life. Learning home skills makes you self-sufficient, saves you money, keeps you healthy, can make you creative, and boosts your social skills.

Prerequisites: n/a

Grade: 8