

PRESTONWOOD CHRISTIAN ACADEMY

CURRICULUM GUIDE

N O R T H C A M P U S



Bible

Fifth Grade Bible

In the Fifth Grade Bible course, our goal is to acquaint the students with the basic principles and history of the Bible, equip them to use the Scriptures with ease and confidence, and prepare them to share their knowledge and faith with others according to God's Word. The Bible (*ESV*) and Christian School International's *Witness to the Gospel* are our main sources of study. The students explore various sections of the Bible, which include the prophecies about the Messiah in the Old Testament, four Gospels, and the Life of Christ. Students learn the themes, authors, and audience of the four Gospels as well as study the word choices of those authors. It is our strongest desire that each student exiting fifth grade will have a personal relationship with Christ, a thorough knowledge of Scripture, a clear and precise vision of right from wrong, the tools to lead others to Christ, and spiritual wisdom that only God can impart.

Sixth Grade Bible

In the Sixth Grade Bible course, the students study the *House of Israel*. This course includes the Old Testament books from Genesis to Leviticus. The main focus of the course is to present the Bible as the story of God's acts and words, written so that the students might know God and themselves, accept His gift of salvation, and live lives of joyful service and obedience. The goal is to help the students understand the Bible literally, culturally and geographically, so the study of these units is integrated into the World History coursework. The students are encouraged with life applications from each unit of study.

Seventh Grade: Old Testament Survey

This Seventh Grade Bible course guides the student through the Old Testament. Each book's background, author, theme, and message are surveyed along with key verses. While examining the particulars of each book, the consistent theme of God's redemption of humankind is reinforced.

Eighth Grade: New Testament Survey

The Eighth Grade Bible course begins with a review of the Old Testament. The Old Testament prepares the way for Christ, and He is fully manifested in the New Testament. All 27 books of the New Testament are examined and presented as God's infallible Word. The overriding theme of the class is presented in John 3:16: "For God so loved the world that He gave..." Each student finishes the course with the abiding truth that they are secure in God's love for him or her. The goal being that they understand our responsibility as Christians to reflect the love of Jesus by loving others as He loves us.

History

Fifth Grade: American History

The Fifth Grade History course is a study of history of the United States with the early American Indians and ending with the wars of the 20th century. Both primary and secondary sources are utilized as students survey the influence of

historical perspective and point of view on issues, decision-making and actions. A special emphasis is placed on the impact of the Christian faith in the formation of our country and its historical documents. The Constitution, Bill of Rights and the three branches of government are studied, and interactive scenarios are presented to teach basic ideology and principles. Critical thinking skills, discussion and presentation techniques, note taking, role playing and persuasive writing are implemented throughout the course as students participate in learning significant historical events. Most importantly, students are taught that the history of man has a distinct inception, purpose, and end and that God has, and will, oversee even the smallest detail in our American story.

Sixth Grade: World History

The Sixth Grade History course covers the evolution of our society from the early cultures of the world thousands of years ago to the World Wars of the last century. It begins with a basic study of geography, which includes reading maps, and learning the terms listed in our curriculum. Map skills are reviewed and extended throughout the course. Some topics of study include the River Valley Civilizations, Ancient Egypt, Ancient Mesopotamia, Greece, Rome, Medieval Europe, and the dawn of the Modern World. Skills throughout this study include listening, note taking, writing, critical thinking, and discussion. The students also answer various questions that require them to recall facts, find the main idea, make inferences, determine cause and effect, and draw conclusions. A biblical worldview is emphasized through the integration of Bible objectives in this course of study.

Seventh Grade: World Geography

Seventh Grade World Geography is a year-long course which focuses on the influences of geography upon historic development, government, economics, culture, religion and aesthetics of the world's ten cultural regions. The emphasis on the physical aspects of geography is designed to encourage students in evaluating and drawing conclusions about cause/effect relationships that might affect the origins, intellectual and social aspects of the major regions of the world. This course is designed to help students develop their biblical worldview by giving them tools to evaluate the world around them and grow in seeing the world through the eyes of Scripture.

Eighth Grade: American History

The American History course focuses on the history of our country and enables students to determine cause/effect relationships throughout the building of our nation as well as predict how current trends in government, economics, religion, and politics might affect the history and the responsibilities related with a Christian worldview. The emphasis of this course is on the Christian heritage of our nation and the leaders and events, past and present, and the foundations that have shaped our great nation. This course is designed to encourage student awareness of the Judeo-Christian, geographical, and economic influences that have molded our nation; studies also include Texas' role in various major events throughout our history. Current events are also analyzed and evaluated.

Language Arts

Fifth Grade English

The Fifth Grade English course focuses on reviewing and expanding grammatical skills using the *Shurley Grammar* method. *Shurley Grammar* provides a sequentially oriented curriculum that incorporates the use of rhythm, repetition and student/teacher interaction. This program provides the sustained momentum that allows teachers to build on a student's previous successes. Focus begins with expository paragraph structure and development, moving into various forms of expository essay writing. They write to a variety of audiences using formal and creative forms of writing such as narrative, descriptive, persuasive, creative, compare/contrast and various forms of expository. They continue to develop mastery of the writing process, including prewriting, drafting, editing and publishing. In addition, students are guided through the research process and complete research papers.

Fifth Grade Literature

The Fifth Grade Literature course emphasizes reading comprehension and literary analysis. Students engage in several novel studies and read a collection of folklore and poetry as the primary tools of instruction to develop literary element concepts such as characterization, plot development, types of conflict, and writing style analysis through figurative language. Students begin to develop their concept of a text's theme or message viewed through the Biblical worldview lens. Vocabulary development is studied through *Membean*. Individualized practice of comprehension skills is developed with the PCA Reads independent reading program. The instructional intent is to engage students in the kinds of activities that prepare them for reading, thinking, and problem-solving in real-world situations.

Sixth Grade English

The English course focuses on reviewing and expanding grammatical skills using the *Shurley Grammar* method. *Shurley Grammar* is used to teach the foundation of grammar using rhythm, repetition, and a question and answer flow to classify each word in a sentence, as well as, the sentence as a whole. These concepts are used to expand, improve, and edit writing. The students write for a variety of purposes including responding to topics, developing sophisticated expository multi-paragraph compositions and writing for the purpose of presenting and debating ideas. They write to a variety of audiences using formal and creative forms of writing such as narrative, descriptive, persuasive, poetic and expository. Students continue to develop mastery of the writing process, including prewriting, drafting, editing and publishing. The course takes time to focus on and develop each of the traits of writing including ideas, word choice, organization, sentence fluency, voice and conventions.

Sixth Grade Literature

Sixth Grade Literature is a year of significant transition for students as they use the skills they previously learned and apply them to more complex learning in deeper and more rigorous ways. As students read closely to gain understanding and construct meaning from texts, they learn to monitor their own understanding as they read and use strategies to clarify any questions that arise. Students continue to develop their analysis of a text's thematic content, supported with text evidence from conflict and character elements. They also engage in meaningful collaborations with peers to enhance their learning. *Membean*, an online vocabulary program, is incorporated throughout the year with weekly required times of practice as well as periodic tests. Students engage in several novel studies and read and analyze poetry from a variety of cultures around the world with emphasis on African/American, Hispanic, and Asian cultures. Literary study enhances students' understanding and analysis of themes with emphasis on connecting meaning to Biblical worldview. Individualized practice of comprehension skills is developed with the PCA Reads independent reading program.

Seventh Grade English

This course includes an intensive study in vocabulary, writing, and literature. Students read from different literary genres such as the short story, novel, poetry, and drama. Elements of literature, such as characterization, plot, structure, theme, context clues, and imagery are developed. Through analysis, discussion, and written responses to literature, students examine how an author creates a work of literature. In addition to several novel studies, students are also exposed to poetry and various short stories. Oral reports and research are also included in this course, and students continue to compose in all genres and reinforce grammar and language usage skills. *Membean*, an online vocabulary program, is incorporated throughout the year with weekly required times of practice as well as periodic assessments. Individualized practice of comprehension skills continues with the PCA Reads independent reading program.

Eighth Grade English

The Eighth Grade English course offers students the opportunity to expand their knowledge of literature and increase their skills in analyzing and interpreting various texts from a variety of genres while developing vocabulary by using

context clues and Membean. Students develop critical thinking skills and cultural awareness by reading several engaging novels. Students practice the development of organized expository and literary analysis paragraphs which develop into essays by practicing analysis of literary elements such as characterization, allegory, irony, imagery, argumentation, and persuasion. Eighth Grade English places a strong emphasis on improving writing skills. Students read examples of excellent writing from a variety of sources to compose literary responses and analyses, and eventually to synthesize multiple text sources into thoughtful presentations of critical thinking that successfully integrate Biblical worldview. Students are encouraged to incorporate Biblical text and examples into their compositions and presentations throughout the year. Vocabulary development is studied through *Membean*. Individualized practice of comprehension skills continues with the PCA Reads independent reading program.

Math

Fifth Grade Math

The Fifth Grade Mathematics course reviews and further reinforces operations with whole numbers, place value from millions to thousandths, graphing, decimals, fractions and geometry. Fundamental algebraic concepts introduced and further developed include ratios, variable, probability and order of operations. Problem solving, logic, and real world applications are emphasized. Building math confidence and providing an enjoyable hands-on learning environment are a primary focus. Math units are seasoned with the biblical principles of order and spiritual truths.

Sixth Grade Math

The Sixth Grade Mathematics course reinforces foundational math concepts and introduces fundamental algebraic skills. The curriculum is devoted to number patterns in algebra, graphs, decimals, fractions, integers, expressions, equations, percent's, probability, measurement, geometry as well as the use of measurement and data reasoning to draw conclusions, evaluate arguments and make recommendations. Projects are assigned periodically and coordinate with other disciplines. Most importantly, mathematics is a course where the students attain a greater awareness of our infinite God.

Seventh Grade Math

The Seventh Grade Math course continues to develop and expand basic skills and concepts studied in Fifth and Sixth grade. Critical thinking skills and problem-solving strategies are further developed throughout the year. The content includes rational number properties, hands-on geometry, measuring two (and three) dimensional figures, statistics (analyzing data), Algebra (integers, linear equations and functions), fractions, decimals, percents, proportional reasoning ratios, probability and graphing calculator procedures. Mathematics is a course where the students attain a greater awareness of our infinite God.

Pre-Algebra

Seventh and Eighth Grade

A prerequisite to Algebra I, this course explores and expands on introductory concepts of Algebra such as variables, integers, graphing of inequalities, algebraic phrases, two-step problems, advanced equations and geometric concepts. Students use appropriate statistics, representations of data, and reasoning to draw conclusions, evaluate arguments, and make recommendations. While the use of all types of technology is important, the emphasis on algebra readiness skills necessitates the implementation of graphing technology. Integrated critical thinking skills and problem-solving strategies are applied throughout the year. This course is designed to take the student from Sixth Grade Math or Seventh Grade Math to Algebra I as a transitional course.

Honors Algebra I

Eighth Grade

Two Semester Course Credit: 1.0

Prerequisites: *Pre-Algebra, Student must meet 2 of 3 requirements*

- *Grade of 90 percent or higher in Pre-Algebra*
- *PSAT Math 80 percent or higher*
- *Department recommendation/ Mathematics Department Assessment*

Honors Algebra I is a course within the Honors program that prepares students for AP Calculus concepts at the Algebra I level. This course moves at a faster pace and has a higher level of difficulty. In addition to the Algebra I curriculum, this class covers quadratics and rational expressions in much greater depth. Critical thinking skills are emphasized to develop competence in problem solving.

Science

Fifth Grade Science

The Fifth Grade Science course is designed to develop students' ability to explore, discover and investigate the world around them. In Life Science, students study the classification of vertebrates and invertebrates, cells, plants and the human body system. Within Physical Science, light waves are covered. Within Earth Science, ecology is covered. Students have opportunities to conduct experiments as they work through each topic using the scientific method and metric system. Scientific equipment is utilized throughout the course to provide a hands-on approach to learning about God's design in the world around them.

Sixth Grade Science: Earth Science

Students in the Sixth Grade Science course are involved in a broad range of sciences that make up Earth Science. They review the scientific method and laboratory technique. They further extend their knowledge of measurement and the metric system as well as the use of advanced scientific instruments. Included is an introduction to atomic structure and states of matter. A major component of Earth Science is geology. While studying geology, students delve into such areas as minerals and rocks, erosion, plate tectonics and its impact on the Earth's surface, as well as looking at theories of the Earth's origin. A brief look at ecology helps each student learn how to be a better steward of God's world. Studies of meteorology and astronomy are other major parts of this course. The students study stars, planets, and other astronomical objects as well as the history of space exploration. Concepts for weather and weather forecasting are also explored. Each topic is presented from a biblical perspective.

Seventh Grade Science: Life Science

The Seventh Grade Life Science course is designed to provide students with a solid foundation to prepare them for Upper School Biology. Emphasis is placed on inquiry skills, interpreting data, understanding relationships in the living world, and making connections between science and the Christian faith. Specific areas of study include cellular structure, plants, animals, disease and microorganisms, heredity, classification, ecology and how these relate to the world God created. Inquiry skills are enhanced by laboratory investigations and hands-on activities. Students study characteristics of organisms belonging to each of the five kingdoms of classification and develop an understanding for the ways living things reproduce and grow.

Eighth Grade Science: Integrated Physics and Chemistry

Eighth Grade Science is an integrated physics and chemistry course in which students learn the basic concepts in each area. The first semester focuses on physics and the basic laws of nature that God established. Topics include

electricity and magnetism, electric charges and current, motion, forces and energy. The second semester focuses on chemistry and the processes that occur in the world around us. Students gain a deeper understanding of atomic structure, ionic and covalent bonding and the periodic table. Chemical formulas are studied with an emphasis on balancing chemical equations. IPC uses a hands-on approach to teach the concepts through chapter projects and lab activities throughout the year. Lab safety while learning to manipulate lab equipment is an integral part of the IPC course.

Fine Arts

Fifth Grade Art

Fifth Grade Art is an introductory level course for the Middle School student. The student is introduced to the elements and principles of art and their application for successful drawing and design. Students are provided the opportunity to experience a variety of mediums and techniques that may include drawing, painting, mixed media and sculpture. The curriculum integrates biblical principles into aesthetic appreciation. Students have opportunities to show their work to fellow students and families. Art contests are available for participation upon the recommendation of the art teacher.

Sixth Grade Art

Sixth Grade Art is designed to build upon and increase the student's knowledge of the art elements and principles of design. The curriculum is integrated with biblical principles into aesthetic appreciation. Students are provided the opportunity to experience a variety of mediums and techniques that may include drawing and mixed media, sculpture. Students have opportunities to show their work to fellow students and families. Art contests are available for participation upon the recommendation of the art teacher.

Middle School Art

Seventh and Eighth Grade Elective

One Semester Course

The Middle School Art course is a one-semester introductory level course for the Middle School student. There is an emphasis on the elements and principles of design and basic 2-D composition. The curriculum integrates art history and biblical principles. Students explore a variety of media and attention is given to the development of drawing skills and art criticism. Homework is required.

Honors Eighth Grade Art I

Eighth Grade Elective

Two Semester Course

Fulfills High School Prerequisite for Art I

Prerequisites: *Middle School Art, Departmental recommendation*

Honors Eighth Grade Art is an introductory level, two-dimensional and three-dimensional design course with an introduction to three-dimensional design for the Upper School student. The curriculum focus is on creativity. Emphasis is placed on developing compositions using the elements/ principles of design and critiquing major projects. Color theory is studied as well. Ceramics, sculpture, drawing, printmaking, and painting using a variety of media is explored. Homework is required and a semester exam is given at the end of each semester. Participation in art contests is encouraged and available. Biblical integration is included throughout the curriculum.

Beginning Band

Sixth Grade

Beginning Band is designed with Sixth Grade in mind. This Band has open enrollment so anyone can come and be a part of this outstanding group. No musical knowledge is necessary, only a willingness to practice at home and work hard in class. Students are taught basic music theory, characteristic tone production, pitch delineation, instrument fingerings and basic rhythmic skills. These fundamentals are needed to advance to the Intermediate Band. Almost no before or after school practices are held for this group. Instruments in the Beginning Band include the following: Flute, Oboe, Bassoon, Clarinet, Alto Saxophone, Cornet, (Trumpet) French Horn, Trombone, Euphonium, Tuba and Percussion. Note: Most students obtain instruments through a rental program at Music & Arts music store. *PCA supplies Tubas, Euphoniums and French Horns for a yearly usage fee of \$240.00.*

Choir

Fifth Grade Choir

The Fifth Grade Choir course is designed to build upon music concepts learned in the fourth grade. Students sing a varied repertoire as they continue to develop their vocal skills, singing alone and with others, while increasing pitch and rhythmic accuracy, and beauty of tone. Students also learn music theory concepts of increasing difficulty through rhythm exercises and written work. All Fifth Grade music students are involved in performances throughout the year.

Sixth Grade Choir

Sixth Grade

The Sixth Grade Music course is designed to build upon music concepts learned in Fifth Grade. Students sing a varied repertoire as they continue to develop their vocal skills. Special attention is given to the changing voices of boys at this age, and a suitable repertoire is selected. Students also learn more advanced music theory concepts through rhythm exercises, theory lessons, written assignments, and tests. All Sixth Grade music students are involved in performance throughout the year.

Middle School Choir

Seventh and Eighth Grade Elective

One Semester Course

The Middle School Choir is an elective course for Seventh and Eighth Grade students designed to build upon music concepts learned in Sixth Grade. Students sing a varied repertoire as they develop their vocal skills. Students also learn more advanced music theory concepts through rhythm exercises, theory lessons, written assignments and tests. All Seventh and Eighth Grade music students are involved in at least one major performance throughout the year. Students may request two semesters of choir per year.

Middle School Theatre I - Introduction to Theatre

Seventh and Eighth Grade Elective

One Semester Course

Middle School Theatre I is an elective course offered to Seventh and Eighth Grade students. In Theatre I, students are introduced to theatre as a gift from their Creator that can be used to bring glory to His name. The students learn the basics of theatrical performance and theatre history. Character development, stage direction and movement are developed through individual and group performances. Students learn the rules of improvisation and create dramatic works through group improvisation and collaborative playwriting.

Middle School Theatre II

Eighth Grade Elective

One Semester Course

Prerequisites: *Middle School Theater I, Departmental recommendation*

The Middle School Theatre II elective course is for the Eighth Grade student who wishes to continue in theatre. In this class, the students continue to learn more about the production process through the production of a One Act Play. Students study, rehearse, design and perform a One Act Play for the community and for competition. A student who has completed Middle School Theatre II may go directly into the Upper School Theatre II course. A student must audition for the course in the spring of Seventh Grade.

World Languages

Fifth Grade Spanish:

In Fifth Grade Spanish the main objective is to develop, reinforce, and refine communicative competence in listening, speaking, reading, and writing skills. Cultural competency is also developed and explored. Most lessons are taught through songs, stories, interactive games, and activities. Online apps that help build vocabulary and grammar in a fun way are also utilized. Goals for this class include learning new vocabulary, building familiarity with grammar, gaining confidence speaking and communicating in Spanish in authentic ways and interpreting written Spanish.

6th Grade

The Sixth Grade Spanish class is a continuation of 5th Grade Spanish, emphasizing expanding and strengthening what they learned. As with the 5th Grade class, the main objective is to develop, reinforce, and refine communicative competence in listening, speaking, reading, and writing. Cultural competency is also developed and explored. Most lessons are taught through songs, stories, interactive games, and activities. Online apps that help build vocabulary and grammar in a fun way are also utilized. Goals for this class include learning new vocabulary, building familiarity with grammar, gaining confidence speaking and communicating in Spanish in authentic ways and interpreting written Spanish.

World Language Spanish

Seventh and Eighth Grade Elective

For Rising Seventh Graders: A semester of World Languages is required before a student enters Ninth Grade.

Middle School World Languages Spanish is an exploratory course that meets four times a week and introduces students to the Spanish language and culture. This course uses interactive lessons that involve activities, games, projects, and technology platforms to help students build language learning skills. One of the main goals of this course is to help students be successful in their language courses in the future.

Spanish I*

Eighth Grade Elective

Two Semester Course

HS Credit: 1.0

Prerequisites:

- *World Languages Spanish grade of 90 or above*
- *English grade of 90 or above*
- *Achievement Test Score: English/Language Arts Composite Score 85% or above*

**Meeting the prerequisites does not guarantee that a student will be enrolled in this course. Class space for this course may be limited based on demand.*

The Spanish I course develops the four language skills of reading, writing, speaking, and listening. Students learn the present tense of both regular and irregular verbs, while students are introduced to the preterit tense of regular verbs. Vocabulary is also emphasized to give the student a basis for communicating. In addition to the actual study of the language, a secondary goal is to further enrich the student's knowledge of the culture, history and geography of the

Spanish-speaking world. Students receive credit toward their Upper School diploma and PCA graduation requirements.

Speech and Communication

Multimedia Journalism

Seventh and Eighth Grade Elective

One Semester Course

In Multimedia Journalism, students will develop an in-depth understanding of digital media in today's world. In the class, students learn the basics of printing and publishing both newspapers and videos. During the year, students learn the importance of journalists in promoting and exploring issues both domestically and internationally. The instructional goal is to provide fundamental theories and lab experience to produce multimedia news stories that combine different media formats: text, hypertext, audio, video, and photo. Students will learn concepts and skills necessary for developing news stories, reporting, gathering, and production of news in changing media environments.

Non-departmental Electives

Future Problem-Solving Program

Seventh and Eighth Grade

Two Semester Course

Future Problem Solving is an international program where students compete in teams of three or four at the state level after researching topics that have implications for the future (three in-house competitions and the State Bowl during one weekend of April). State Bowl winners compete at the international meet held each June. The program develops creative thinking, research, decision-making, and critical/analytical thinking skills. This element increases awareness of, and interest in, the future, improving communication skills, and utilizing problem-solving strategies. Students are graded on their individual performance, not what they do collectively as a team. Students must commit for the full year and compete in all of the competitions. Additional opportunities for students to compete are FPS Scenario Writing and Scenario Performance. In Scenario Writing, students use their creative writing skills to write a narrative story set in the future. In Scenario Performance, students write a shorter version of a scenario and perform it.

Learning Lab

Fifth - Eighth Grade Elective Two Semester Course

Prerequisite: *The student must be enrolled in the Learning Lab. Students must:*

- *Have a documented learning disability with a full individual evaluation*
- *Exhibit an academic need as demonstrated through achievement testing or classroom grades*
- *Demonstrate a need for accommodations*
- *Current testing within three years on file*

Once reviewed by the Director of Specialized Learning, services will be determined based on a continued need. The purpose of Learning Lab is to assist students in monitoring their academic progress, provide test-taking in the lab, develop self-advocacy skills and support classroom accommodations. When students attend Learning Lab as an elective, during monitored sessions they complete assignments and make-up work, have extended time to complete tests, and use

this time to consult with instructors regarding progress on upcoming assignments, tests, or projects as well as grade status. More information can be found on the Specialized Learning Resource tile on MyPCA.

Physical Education

Fifth and Sixth Grade PE

The purpose of physical education is to guide children to be physically active for a lifetime. It is our goal to enable students through physical education to perform basic skills in individual and team sports and fitness activities. Opportunity is provided to accomplish this goal through activities appropriately designed for the student's developmental level. Believing that God wants us to respect authority and maintain self-control in all areas of our life, physical education provides the perfect setting for learning self-discipline through competition while learning to respect the rules of the game and the officials.

Seventh and Eighth Grade PE/Athletic Period

Middle School Physical Education/Conditioning is offered the first period of the day four days a week. The program is designed to promote physical fitness, develop motor skills, and instill knowledge and understanding of rules, concepts and strategies. Students learn to compete as a team member or as an individual through a wide variety of competitive activities.

Technology

Fifth Grade Technology

In the Fifth Grade Technology course, the students achieve an overall understanding of correct keyboarding techniques, computer programming, the movie making process, robotics and digital citizenship. Fifth Grade students are set on individualized keyboarding plans according to their skill. This ensures the use of the correct finger positions and increases their typing speed and accuracy. The Digital Citizenship lessons introduce students to the awareness and knowledge they need to be safe and responsible digital citizens online. Through the use of hands-on projects and quizzes, the students exhibit their knowledge of the computer skills/concepts they have learned. The instructional goal is to prepare students with computer application skills, so they are confident of their abilities and are able to complete assignments that require the use of technology.

Sixth Grade Technology

In the Sixth Grade Technology course, the students develop an in-depth understanding of correct keyboarding techniques, and are introduced to Photoshop digital graphics, computer programming, robotics, and the movie making process. Students also continue their study of digital citizenship. Sixth Grade students are set on individualized keyboarding plans according to their skill. This ensures the use of the correct finger positions and increases their typing speed and accuracy. The Digital Citizenship lessons introduce students to the awareness and knowledge they need to responsibly create and share digital content and be safe online. Through the use of hands-on projects and quizzes, the students exhibit their knowledge of the computer skills/concepts they have learned. The instructional goal is to prepare students with advanced skills, so they are confident of their abilities and are able to complete assignments that require the use of technology.

Middle School Programming Concepts and Principles I

Seventh and Eighth Grade Elective

One Semester Course

The Middle School Programming Concepts and Principles I course is designed to inspire students to be STEM leaders, creators of technology and influencers for the future. By implementing the design process and computational thinking, students develop critical thinking, problem solving, collaborative and communication skills as they are challenged to complete complex, project-based assignments. This course covers the basic fundamental concepts involved in programming such as developing IPO charts, algorithms and pseudo code, basic program structure and proper syntax, conditional statements, Boolean expressions, variables, bug fixing, loops, operators, etc. The course moves from using block programming tools to beginner levels of actual programming languages. Students learn how computers operate by gaining an understanding of the connection between hardware and software. Students learn both physical and non-physical computing skills.

Middle School Programming Concepts and Principles II

Seventh and Eighth Grade Elective

One Semester Course

Prerequisite: *Middle School Programming Concepts and Principles I*

The Middle School Programming Concepts and Principles II course is designed to continue a student's growth to be STEM leaders, creators of technology and influencers for the future. By implementing the design process and computational thinking, students develop critical thinking, problem solving, collaborative and communication skills as they are challenged to complete complex, project-based assignments. Students continue to build knowledge in IPO charts and algorithm and pseudo code development. This course moves forward in covering more complex concepts involved in programming such as developing functions, parameters, arrays, variables, types, initialization of more complex conditional statements and Boolean expressions, etc. The course moves deeper into actual programming languages. Students develop a more complex understanding of computers by continuing to gain an understanding of the connection between hardware and software. Students learn both physical and non-physical computing skills.

Programming/Robotics

Seventh and Eighth Grade Elective

One Semester Course

The Middle School Programming/Robotics course is designed to inspire students to be technology and engineering leaders so they are creators of Technology and not just consumers of it. Students develop critical thinking, problem solving, collaborative and communication skills as they are challenged to solve complex tasks through the use computers, programming and robotics