

## **WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS**

### **Accounting (12<sup>th</sup> Grade)**

In this course designed for those with no previous accounting experience, students are introduced to the basic accounting procedures required to operate a business. Students learn how to process transactions, prepare bank documents, and complete financial statements and ledgers for sole proprietorship and partnership businesses. These fundamentals of accounting will help students who wish to study business management in college.

### **Algebra I (9<sup>th</sup>/10<sup>th</sup> Grade)**

In Algebra I, students will learn how to work with linear and quadratic functions.

***Pre-Requisites: Pre-Algebra***

### **Algebra II (11<sup>th</sup> Grade)**

Algebra II expands the student's familiarity with functions to include polynomials with powers higher than 2, and exponential and logarithmic functions.

***Pre-Requisites: Algebra I***

### **Ancient History I (7<sup>th</sup> Grade)**

This introductory course explores cultures from some of the world's most ancient civilizations including Babylonian, Egyptian, Greek, and Roman societies. This discussion-based course focuses on interacting with ancient civilization through a biblical worldview by employing activities including primary and secondary source analysis, debates, research-based writing, and reenactments.

### **Ancient History II (10<sup>th</sup> Grade)**

This course seeks to explore the foundational influence of Greek and Roman civilization on Western society. To that end, this course focuses on the Greek city-states, the Persian War, and the Peloponnesian War, as well as engaging with the philosophical ideas that flourished in the ancient world. Finally, this course analyzes the conception of Rome and its subsequent growth to an empire. This discussion-based course focuses on interacting with ancient civilizations through a biblical worldview by employing activities including primary and secondary source analysis, debate, research-based writing, and reenactments.

***Pre-Requisites: Ancient History I encouraged, but not required***

## **WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS**

### **AP Calculus AB (12<sup>th</sup> Grade)**

Calculus is an essential part of applied mathematics, first created in the 17<sup>th</sup> century by the great mathematicians Gottfried Leibnitz and Isaac Newton. It enables individuals to describe how things change with time, and in relationship to one another. It is a vital underpinning for the fundamental principles of physics and is widely used in science and engineering. Calculus Students will be able to prepare for the College Board AP Calculus AB test if they wish.

### **Art (7<sup>th</sup>/8<sup>th</sup>)**

This project-based course is designed to both teach students the fundamentals of art and to allow for adequate practice of these concepts. Utilizing several models, historical examples, and through an analysis of the beauty with which God has created the Earth, students will come to appreciate art as they refine their abilities in various artistic disciplines.

### **Art (9<sup>th</sup> – 12<sup>th</sup>)**

This project-based course is designed to both teach students the fundamentals of art and to allow for adequate practice of these concepts. Utilizing several models, historical examples, and through an analysis of the beauty with which God has created the Earth, students will come to appreciate art as they refine their abilities in various artistic disciplines.

### **Art – Specific Medium (9<sup>th</sup> – 12<sup>th</sup>)**

(Course Description Coming Soon...)

### **Beginner Band (7<sup>th</sup>/8<sup>th</sup> Grade)**

Students will learn the fundamentals of instrumental music and apply appropriate techniques to play concert band instruments. Students will also learn proper instrument care, performance etiquette, music notation literacy, and ensemble playing skills. No previous musical experience is required. Instrument rental is available through Marshall Music (all instrument repairs are included through the rental program). Students will have the opportunity to showcase their skills and talents in school-wide concert performances.

## WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS

### **Beginner Band (9<sup>th</sup> – 12<sup>th</sup> Grade)**

Students will learn the fundamentals of instrumental music and apply appropriate techniques to play concert band instruments. Students will also learn proper instrument care, performance etiquette, music notation literacy, and ensemble playing skills. No previous musical experience is required. Instrument rental is available through Marshall Music (all instrument repairs are included through the rental program). Students will have the opportunity to showcase their skills and talents in school-wide concert performances.

### **Bible (7<sup>th</sup>/8<sup>th</sup> Grade)**

(Course Description Coming Soon...)

### **Bible (9<sup>th</sup>/10<sup>th</sup> Grade)**

(Course Description Coming Soon...)

### **Bible (11<sup>th</sup>/12<sup>th</sup> Grade)**

(Course Description Coming Soon...)

### **Biology (9<sup>th</sup> Grade)**

In this course, students study basic biological ideas through a biblical worldview: biochemistry, cell structure and function, cell reproduction, DNA and genetics, ecology, and botanical and zoological systems. Emphasis will be on how organisms are designed to maintain homeostasis throughout their life spans. Students will participate in laboratory exercises and small group investigations and discussions.

***Pre-Requisites: Life Science encouraged, but not required***

### **British Literature (10<sup>th</sup>/11<sup>th</sup> Grade)**

This discussion-based course explores some of history's greatest literary works that have been produced by British authors. Through a thorough study of authors including Chaucer, Mallory, Shakespeare, Bacon, Milton, Donne, Pope, Defoe, Scott, Bronte, Lewis, and others, students will be challenged to comprehend and discuss complex ideas while simultaneously placing these ideas in a biblical worldview.

## **WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS**

### **Chemistry (10<sup>th</sup> Grade)**

In this course, students survey basic chemistry information through a biblical worldview: atomic structure, periodic law and periodic trends, formulas, chemical bonding, chemical reactions and stoichiometry, states of matter and solutions, acids and bases, gas laws, and thermodynamics. Emphasis will be on how chemistry is all around us. Students will participate in laboratory exercises and small group investigations and discussions.

***Pre-Requisites: Physical Science or Higher, Algebra I, Biology encouraged, but not required***

### **Choir (7<sup>th</sup>/8<sup>th</sup> Grade)**

Students will learn age-appropriate vocal techniques including part-singing skills and ensemble performance skills through vocal exploration exercises and through the preparation of a variety of choral repertoire. This course also provides ear training through solfege and sight-singing exercises. Students will hone their performance skills and performance etiquette by participating in school-wide performances. No previous musical experience is necessary.

### **Choir (9<sup>th</sup> – 12<sup>th</sup> Grade)**

Students will learn age-appropriate vocal techniques including part-singing skills and ensemble performance skills through vocal exploration exercises and through the preparation of a variety of choral repertoire. This course also provides ear training through solfege and sight-singing exercises. Students will hone their performance skills and performance etiquette by participating in school-wide performances, the annual MACS Fine Arts competition, and other school performances. No previous musical experience is necessary.

### **Christian Literature (12<sup>th</sup> Grade – Semester Two)**

This discussion based course endeavors to encourage students to grow deeper in their faith and relationship with Jesus Christ through a study of the literary works of renowned Christian authors. In addition to studying C. S. Lewis' *Mere Christianity*, genres including theology, autobiography, Christian fiction, and fantasy will be studied.

## WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS

### **Conceptual Physics (11<sup>th</sup>/12<sup>th</sup>)**

In this course, students explore physics through a biblical worldview. Ideas explored include: motion, momentum, and gravity; work and energy; light and sound, heat transfer, changes of phase, and thermodynamics, electricity and magnetism; and relativity and string theory. Emphasis will be that everyone can know and understand the basic ideas of physics. Students will participate in laboratory exercises and small group investigations and discussions.

***Pre-Requisites: Physical Science or Higher, Algebra I, Biology, & Chemistry encouraged, but not required***

### **Creative Writing (12<sup>th</sup> Grade – Semester One)**

This course focuses on developing the student-author's effective expression, description, and storyline in writing. Different styles of writing will be analyzed, allowing students to learn from the example of the best writers, explore the styles through experimentation, and practice imitating various models. Several types of literature will be utilized throughout this writing course including short stories, poetry, prose, essays, and writing prompts.

### **Drama (9<sup>th</sup> - 12<sup>th</sup> Grade)**

This course provides an overview to theater, introducing basic techniques for dramatic activities and performances. By utilizing activities such as interpretation, improvisation, analyzing play structure and character development, theater production, rehearsal, memorized performances, and other activities, students will develop their fine arts and performance talents. This course also focuses on preparing students for the Spring Drama performance.

### **English (7<sup>th</sup> Grade)**

In addition to reviewing basics of grammar, this course introduces new concepts including independent clauses, complex sentences, relative pronouns, participles, adverb clauses, and writing summaries. Students will continue to grow in their spelling and vocabulary skills, and explore classic literature including, *Where the Red Fern Grows*, *Around the World in 80 Days*, *Tuck Everlasting*, *The Scarlet Pimpernel*, and *The Odyssey*.

## WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS

### **English (8<sup>th</sup> Grade)**

Building straight off 7<sup>th</sup> Grade English, this course focuses on the fundamental skills of grammar and composition. Students are challenged to develop skills in areas including analytical thinking, writing, research and organization. Students continue to develop their spelling and vocabulary skills as they study classic literature, including *The Hiding Place*, *The Hobbit*, *The Pilgrim's Progress*, and *The Iliad*.

### **European History I (8<sup>th</sup> Grade)**

Utilizing Eusebius' *The Church History*, the first recorded history of the early Church since Luke wrote Acts of the Apostles, this course analyzes the challenges encountered and the triumphs experienced by the early Church as they sought to accomplish the Great Commission. Students will be awed and inspired by the sovereignty and grace of God as they analyze and interact with the stories recorded in *The Church History*. This course further studies Augustine's *Confessions* and Athanasius' *On the Incarnation*, both of which lend insight into the life of the early Christian and challenge students to deeper understanding of God and to deeper faith. This discussion-based course focuses on interacting with Church history through a biblical worldview by employing activities including primary and secondary source analysis, debate, research-based writing, and reenactments.

### **Geometry (8<sup>th</sup>/9<sup>th</sup> Grade)**

Geometry has been studied for thousands of years. This course will focus on constructing geometric figures, so a compass will be a required piece of equipment. Students will be introduced to proofs, which is the mathematician's formal version of logic. In second semester students will study the coordinate system, invented by the great philosopher Renee Descartes, and move into a more algebraic approach to shape and space.

### **Health (9<sup>th</sup> -12<sup>th</sup> Grade – Semester One)**

This course aspires to help students develop a greater understanding of the intricately created human body through studies on healthy lifestyles, nutrition, and fitness. This course challenges students to view health through a biblical worldview so as to conceptualize how to honor God through our healthy choices.

## **WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS**

### **Intermediate Band (9<sup>th</sup> – 12<sup>th</sup> Grade)**

This course is designed for students with at least one year of prior experience learning a concert band instrument. Students will build upon their fundamental understanding of rhythm, tone, sight-reading, technique, ensemble-playing, and musical expression by preparing intermediate concert band repertoire in a variety of genres. Intermediate band students will have the opportunity to showcase their skills by performing in school-wide concerts and in the MACS Fine Arts competition, when possible.

### **Intro to Literature (9<sup>th</sup> Grade)**

This introductory course explores some of history's great literary works seeking to develop students' knowledge of plot, character development, complex ideas, and other literary devices. While seeking to fathom the complex ideas presented in the text, students are also challenged to comprehend the text through a biblical worldview. Additionally, this course focuses on developing students' mastery of the English language through a thorough study of grammar, including the rules for punctuation, capitalization, and sentence structure with the goal of instructing students in the art of formal essay preparation.

### **Journalism/Yearbook (11<sup>th</sup>-12<sup>th</sup> Grade)**

Students become school historians as they seek capture special moments as they transpire throughout the year. Students develop skills in yearbook production while learning basic skills in writing copy, captions, and headlines, using digital photography, understanding desktop publishing, and using appropriate technology tools for media production. Students will also learn and employ introductory marketing skills while selling books and securing investors from the community to advertise.

### **Keyboarding (8<sup>th</sup>)**

This course focuses on fundamental computer skills. Students will demonstrate mastery of touch keyboarding skills by using correct keying techniques including correct posture and finger placement. Students will improve their speed and accuracy in keyboarding by using appropriate drills and timed writings. The emphasis of this class is placed on letters, numbers, symbols, the numeric keypad, and basic word processing applications.

### **Latin I (7<sup>th</sup>-12<sup>th</sup>)**

This course aspires to teach students the Latin language and develop Latin fluency in reading and writing through the use of several learning activities including discussion, song, translation, writing, and games.

## **WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS**

### **Life & Earth Science (7<sup>th</sup> Grade)**

Students are introduced to earth and life science ideas in this course. The main concepts studied include: earth's structure, earth's water, weather and climate, classifying and exploring life, cells, genetics, and plant and animal diversity. Students will participate in laboratory activities and discussions.

### **Logic I (7<sup>th</sup> Grade)**

This course focuses on laying the foundation for reasoning in light of the truth from God's word, then trains students in the crucial skills of defining terms, determining the truth of statements, discerning and constructing valid arguments, identifying informal fallacies. The thinking exercises, analysis, and reasoning taught in this course will equip students to excel in every subject they study in the future.

### **Photography (9<sup>th</sup> – 12<sup>th</sup> Grade)**

This introductory course to photography explores God's World through the art of photography. In addition to learning to take clearer, higher quality pictures, students will be taught to appreciate the natural beauty with which God has surrounded them. Through the hands-on use with cameras and photo editing software, discussion, presentations, field trips, and other means, students are instructed both in the theory and practice of photography.

### **Physical Education (7<sup>th</sup>/8<sup>th</sup> Grade)**

This course focuses on training students to glorify God with their kinesthetic movement and fitness. Students set fitness goals at the beginning of the term and are encouraged and challenged to persevere to achieve these goals. Moreover, through a study of team sports and other athletic activities, students will develop coordination, fundamental skills, interpersonal skills, and a love for physical activity.

### **Physical Education (9<sup>th</sup> – 12<sup>th</sup> Grade)**

This course focuses on training students to glorify God with their kinesthetic movement and fitness. Students set fitness goals at the beginning of the term and are encouraged and challenged to persevere to achieve these goals. Moreover, through a study of team sports and other athletic activities, students will develop coordination, fundamental skills, interpersonal skills, and a love for physical activity.

## **WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS**

### **Physical Science (8<sup>th</sup> Grade)**

Students are introduced to physics and chemistry ideas in this course. The main concepts studied include: motion, forces, work energy, thermal energy, electricity and magnetism, states and properties of matter, periodic table, and chemical bonds and reactions. Students will participate in laboratory activities and discussions.

### **Prealgebra (7<sup>th</sup>/8<sup>th</sup> Grade)**

After many years of general math, students will begin to explore some of the more abstract mathematical concepts. Most topics will extend familiar ideas, and students will learn to generalize, and express generalities in accurate mathematical language.

### **Precalculus (11<sup>th</sup> Grade)**

This course focuses on how functions are built up out of the basic mathematical elements, and how their graphs behave, in preparation for learning Calculus. It also covers advanced trigonometry.

### **Research (8<sup>th</sup> Grade – Semester Two)**

The ability to conduct quality, efficient research is an invaluable skill for students progressing into High School. As such this course focuses on equipping students with the skills they need to utilize several scholarly databases, cite sources according to proper MLA format, integrate research into presentations, and discern bias in sources.

### **Robotics 1.5 (9<sup>th</sup>-12<sup>th</sup> Grade)**

Students in Lego Robotics 1.5 will build and program robots using the LegoMindstorms EV3 platform with its graphical programming language. They will learn to break down complex behaviors into simple commands that use motors, gears, and sensors to determine the actions of the robot, including movement, detection of obstacles, and line following. By second semester, students will be designing their own robots to take to a Robofest Bottle Sumo competition.

## WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS

### **Robotics 3 (9<sup>th</sup>-12<sup>th</sup> Grade)**

This course is for motivated students who already have some experience with Lego robotics and/or computer programming. In the fall, students will learn the basics of programming in RobotC, a text-based programming language, using control structures (while, if-else, switch, etc.), motor and timing commands, sensor inputs, functions, etc. Previous Robofest Game challenges will provide practice designing robots for competition. In December, students will begin preparing for the Robofest 2018 Game. This course can be repeated, as the Game is different every year.

***Pre-Requisites: Pre-Algebra, Entrance Test***

### **Spanish (7<sup>th</sup>/8<sup>th</sup> Grade)**

This course aspires to teach students the Spanish language and develop Spanish fluency in reading, writing, listening, and speaking through the use of partial immersion and several learning activities including discussion, song, translation, writing, and games. This course focuses on equipping students for the Great Commission by assisting students to develop communication skills that can be utilized both locally and internationally. Further, this course will help prepare students for WCA's 1:1 Mission to Guatemala.

### **Spanish I & II (9<sup>th</sup> – 12<sup>th</sup> Grade)**

This course aspires to teach students the Spanish language and develop Spanish fluency in reading, writing, listening, and speaking through the use of partial immersion and several learning activities including discussion, song, translation, writing, and games. This course focuses on equipping students for the Great Commission by assisting students to develop communication skills that can be utilized both locally and internationally. Further, this course will help prepare students for WCA's 1:1 Mission to Guatemala.

***Pre-Requisite for Spanish II: Spanish I***

### **US History 1620 – 1877 (9<sup>th</sup> Grade)**

Beginning with the Pilgrims' journey to the New World, this course explores God's sovereignty and provision in the foundation and formation of America, including the faith of America's founders as witnessed in the country's foundational documents. The course continues on to study America's continued growth and fracture in the Civil War. This discussion-based course focuses on interacting with America's history through a biblical worldview by employing activities including primary and secondary source analysis, debate, research-based writing, and reenactments.

## WASHTENAW CHRISTIAN ACADEMY UPPER SCHOOL COURSE OFFERINGS

### **US History 1877 – Present (12<sup>th</sup> Grade)**

This course begins its study of American history following the Reconstruction era and continues its analysis of the country through the modern times. This course emphasizes and analyzes the changes in American culture as America became increasingly involved in international affairs including the Spanish-American War, World War I, World War II, and the Cold War. This discussion-based course focuses on interacting with America's history through a biblical worldview by employing activities including primary and secondary source analysis, debate, research-based writing, and reenactments.

***Pre-Requisites: American History 1620-1877 encouraged, but not required***

