

THURSDAY COURSE OFFERINGS (2021-2022)

HISTORY THROUGH STORIES: This middle school class on American history will focus this year on some of the key times and characters in United States history starting with colonization up through the mid 1800s. Some topics that we will learn about are the colonies, the Declaration of Independence, the Revolutionary War, the Constitution, Lewis and Clark, westward expansion War of 1812, the growing United States, industrialization and pre-Civil War. In this class, the students will get a foundation in American history. Each week, students will discover the time period from reading a book from my “book box”, reading an ebook, or listening to an audiobook. Both nonfiction and historical fiction are helpful to students in understanding the people and the period. In addition to reading, weekly homework may include answering questions, making timeline cards, working on maps or a project. Because students are required to learn from books, I am flexible about whether they read them independently, read with a parent, or listen to audio books (which is my favorite way to learn history). About once a month, the students will do a project for homework that relates to their reading and share it with the class so that the students can learn from each other. Making a timeline, each student works on a yearlong project that will help him or her to understand the relationship of different historical events to each other. Additionally, we will use maps on a regular basis to get a picture of U.S. geography and how it relates to the historical events that we’re studying. Because the more students read about history, the more they will understand and remember (not to mention the “I love history” factor!), I give the students a history reading challenge (including both nonfiction and historical fiction) with prizes for all the students based on their reading and/or listening to books. I believe that each year my students surprise themselves and in some cases even their parents with how much history they read or listen to for this class. That’s the best way to learn history! Materials: \$10.00. *Taught by France Vivenzio.*

HISTORY: THE NINETEENTH CENTURY: (high school) This course is based on *Tapestry of Grace, Year 3: The Nineteenth Century*, and includes both US and world history, to make more sense out of both. Why learn history? Because it helps us understand God’s work, our own place, and how to make history in our own age. (Our post-modern world does not study history the way we used to because they don’t see any “big picture”, the ways ideas have influenced history.) Why study the hands-on way, even in high school? To make learning more fun, to stick in the brain more permanently, and because kids who learn in dynamic ways tend to face other things in life in a more involved way, rather than sitting on the sidelines. We will be studying God’s working through the course of world history during the 19th century. Each week students will be assigned vocabulary, map work, biography/timeline characters, history and literature reading (stories; lots and lots of stories!), some research. On Thursdays we will have discussion and presentations based on the week’s work, group projects, related videos and activities, discussions and debates, as time allows. This course should provide a full high school credit in history, and students can also keep track of ¼- ½ credit in art. A student could easily log more credits for this course, in subjects such as theology, church history, philosophy, history of science, etc., simply by doing more of the work that we will just cover briefly. Unit celebrations and field trips bring the learning alive when we are able to do them, and students take tests quarterly.

Literature element: We are unable to offer the literature component as a class this year, but students would benefit from a Tuesday literature class or doing the one from *Tapestry* that coincides with this year’s history. There are so many wonderful books written during the 19th century that it’s very hard to narrow down a list, but some of the books in the curriculum are *A Tale of Two Cities*, *Les Misérables*, *Uncle Tom’s Cabin*, and *The Scarlet Letter*. (See *Tapestry* website for more). Materials: \$20.00 *Tapestry* licensing fee (unless you own the curriculum) and \$15.00 materials. *Taught by Julie Shorey.*

SPANISH 1: Whether taking this course to fulfill the two year high school requirement, or to become fluent in it, learning a second language should be as natural as mastering our first. Teaching Proficiency through Reading and Storytelling is a method developed by Blane Ray based on the idea that the brain needs an enormous amount of Comprehensible Input to acquire a new language. Similar to learning one's native language, this method uses stories to circle vocabulary and structure. Students hear and read high frequency words and phrases repeated in stories. We will use this method of story-telling, visuals, realia, manipulatives, and other concrete materials. In addition to TPRS, we will use conventional methods of language learning: vocabulary lists and grammar explanations. The four skills of learning: Listening, Reading, Writing, and Speaking, will be incorporated every week. **Expectations:** This is a high school course. Students should expect to complete one hour of practice and study per day. Because language learning is time-consuming and cumulative, it is imperative that students complete all assignments throughout the week. We are covering 5-days worth of material each week... so personal responsibility at home is absolutely necessary. Students may also be asked to practice via the Duolingo app – which is a free tool for teachers to monitor student drills. The textbook: *Mastery 1* by Valette & Valette will be provided by tutor. Copy fee: \$20.00. *Taught by Alicia Bailey.*

SPANISH 2: This high school level class picks up where the Spanish 1 leaves off, quickly reviewing vocabulary, pronouns, present-tense verb conjugations, and noun/adjective agreement. Students should have completed level one successfully and will now begin building upon prior knowledge. Teaching Proficiency through Reading and Storytelling is a method developed by Blane Ray based on the idea that the brain needs an enormous amount of Comprehensible Input to acquire a new language. Similar to learning one's native language, this method uses stories to circle vocabulary and structure. Students hear and read high frequency words and phrases repeated in stories. In addition to this method of storytelling and reading, we will use conventional methods of language learning: vocabulary lists and grammar explanations. The four skills of learning: Listening, Reading, Writing, and Speaking, will be incorporated every week. **Expectations:** This is a high school course. Students should expect to complete one hour of practice and study per day. Because language learning is time-consuming and cumulative, it is imperative that students complete all assignments throughout the week. We are covering 5-days worth of material each week... so personal responsibility at home is absolutely necessary. Students may also be asked to practice via the Duolingo app – which is a free tool for teachers to monitor student drills. The textbook: *Mastery 2* by Valette & Valette will be provided by tutor. Copy fee: \$20.00. *Taught by Alicia Bailey.*

EXPLORING CREATION WITH CHEMISTRY AND PHYSICS: Named after the Apologia text by Jeannie Fulbright, this class is an exciting bridge between the elementary Exploring Creation series and Apologia's General Science. Geared towards 6th graders, or middle school students who are not yet ready for General Science, students will be introduced to the fascinating world of chemistry and physics, covering topics such as atoms, molecules, simple chemicals, laws of motion, electricity, magnetism, and simple machines. Class time will be packed with fun hands-on experiments and projects to make the concepts come alive! Students will have weekly reading (approximately 5-9 pages/week) and skill building/comprehension written assignments in the form of note-taking pages, worksheets, and vocabulary flashcards to be completed at home in preparation for class. **Required materials:** *Apologia Exploring Creation with Chemistry and Physics* by Jeannie Fulbright; and a STURDY 2-inch 3-ring binder with plastic pocket on the front. Materials: \$50.00. *Taught by Dana Cloutier.*

ENGINEERING: Ideal for students in grades 5-7. This is a hands-on science class that will lead students through the engineering design process. Working in teams to problem solve and think creatively, students

will be presented with a new engineering challenge each week that will build on concepts over several classes to culminate into a final design challenge! Each unit will focus on a different area of Engineering (mechanical, civil, electrical etc) Using a variety of curriculum including *Teachengineering.org*, *Design It!*, online videos and *Middle School Engineering* projects and online videos, students will be introduced to the concepts, principles and processes used by engineers. Students will learn new vocabulary, about engineering history, research famous engineers and complete one age appropriate report each month. Students will have weekly reading assignments and will be asked to complete design challenges at home as well as in class. Supplies will be provided and recycled materials will be used as much as possible. Please note that projects are rotated between two years, so students may take Engineering for two years without repeating the same ones. Materials/Copies: \$40. *Taught by Denise Mudge.*

GENERAL SCIENCE: This Apologia junior high school level course is the foundation for all the upper level Apologia high school science courses due to its easy introduction to areas of biology, physical sciences, and anatomy and physiology in a simple and approachable manner. Labs and fun projects will be done in class while bi-weekly tests will be proctored at home. Apologia science courses follow a routine and rhythm that helps the students and that routine is established effectively in this foundational course. Required Materials: Apologia *Exploring Creation with General Science*, 2nd edition, by Jay Wile; ring binder with college ruled filler paper and 16 insertable dividers with tabs. Materials/lab fee: \$20.00. *Taught by Dana Cloutier.*

BIOLOGY: (1½ hour tutorial) This high school biology course is an introduction to general biology topics including: classification of organisms, basic cell biology, biochemistry concepts, anatomy and physically of organisms, genetics, ecology, and a discussion of evolution. Laboratory experiments, including dissections, are performed throughout the year. Students will create Biology Laboratory books so to demonstrate to college admissions the true nature of this Lab Biology course. Homework and bi-weekly examinations help build students' understanding of the material. Required Materials: Apologia - *Exploring Creation with Biology*, 2nd edition, Jay Wile and Marilyn Durnell, lab book (graph ruled 1/4" bound composition book 9 3/4"x 7 1/2"), 3 ring binder with college ruled filler paper 8"x 10.5" and 16 insertable dividers with tabs. Material/Lab fee: \$25.00. *Taught by Dana Cloutier.*

CHEMISTRY (1½ hour tutorial): This Apologia high school chemistry class provides each student with an introduction to measurement, matter, atomic structure, chemical equations, acid and base chemistry, thermodynamics, kinetics and reduction/oxidation reactions. A basic knowledge of Algebra is needed to master the mathematical equations. The experiments include building models, measurement, and observing changes in matter. Classes include lectures, experiments, and games. Homework includes a written study guide and test for each unit. Required Materials: (1) Apologia - *Exploring Creation with Chemistry*, 3rd edition. (hardcover or now also available in softcover), (2) Apologia - *Exploring Creation with Chemistry Student Notebook*, 3rd edition. (softcover), and (3) Calculator (Christian Book Distributors offers competitive pricing for books.) Required Communication: Each student (or parent) must have an email account for weekly updates and submit work and view assignments on Google Classroom. This process will be explained in the class. Materials/Lab fee: \$25.00. *Taught by Denise Mudge.*

FORENSIC SCIENCE: (1½ hour tutorial) This high school level lab science explores the exciting field of crime scene investigation, covering topics in biology, chemistry, and physical science. Students will use a unique hands-on program to perform intriguing investigations weekly as they seek to discover the culprits in *The Mystery of Lyle and Louise*. Topics include: blood detection, blood spatter analysis, evidence processing, forensic entomology, footprint analysis, questioned document and handwriting analysis,

fingerprinting, bite mark analysis, gunshot residue, bullet striations, and drug testing. To learn more about the program, visit this website: <http://www.crosscuttingconcepts.com/about-mystery-lyle-and-louise>). In addition to the labs, there will be an online forum, reading and workbook assignments, quizzes, and short oral reports about historical crime cases. Students should purchase a copy of *Cold Case Christianity* by J. Warner Wallace before the first class. There are no other textbooks to purchase as all written material is available online. Due to the lab intensive nature of the course, there is a \$90 lab fee. Taught by Dana Cloutier..

COMPUTER SCIENCE – DIGITAL LITERACY: (1st semester) This class designed for 5th-7th graders introduces students to the world of computers for application. The most important aspect of computer science is problem solving, an essential skill for life. Designed specifically for student use, it mimics real-world experiences and encourages creativity. This project based course uses Google's Digital Literacy Curriculum to teach basic computer skills, such as, file management, internet safety, using documents, spreadsheets, and slideshows. Additional skills such as creating hyperlinks, sharing documents, digital collaboration, internet searching and keyboarding skills (through the Typing Club interactive program- a must for anyone who uses a computer) are also taught. **Required:** access to a laptop with internet capability for each class. Copies: \$25.00. *Taught by Denise Mudge.*

COMPUTER SCIENCE – INTRODUCTION TO SCRATCH CODING: (2nd semester) Ideal for 5th to 7th graders. Calling all inspiring innovators! Want to create your own animations, games and interactive stories? In this introduction to Scratch Coding, a block based computer coding language, students create computer projects for students in 5th-7th grade. Curriculum produced by MIT and Lero challenges students to think creatively, problem solve, and work collaboratively. Students are required to have access to a laptop with internet capabilities for each class. **Required:** 3 Ring Binder with Pocket Holders for papers. Grading is done through Rubrics. This is an experiential and design based class. Copies: \$25. *Taught by Denise Mudge.*

PRE-ALGEBRA (2 hour tutorial) This class will meet twice a week. We will meet for 1 hour in person on Thursdays and one hour on-line on Monday, from 12:15 to 1:15. This format will allow for more in-depth interaction with the concepts. The course requires about 45 minutes to an hour of DAILY work outside of class. There will be required summer assignments to get students warmed up for the beginning of the school year. **Prerequisites:** Students are ready for this course if they are comfortable with adding, subtracting, multiplying, and dividing whole numbers, fractions, and decimals. They should also be able to convert fractions to decimals and decimals to fractions, know how to round numbers, have a basic awareness of exponents, and be able to find the perimeter and area of a rectangle and a triangle. If you want to confirm that your student is ready for this course, you can ask for a placement test that will be administered by the instructor. Topics covered in this class include: Variables, Expressions, Integers, Order of operation, Simplifying variable expressions, Solving equations, Multi-step equations, Inequalities, Factors, Greatest common factor, Rules of exponents, Scientific notation, equations and inequalities with rational numbers, ratios and proportions, the percent equation, percent applications, simple interest, relations and function, graphing, linear equations in two variable, slope, graphing a line in the slope-intercept form, the Pythagorean Theorem, distance and mid-point, Circumference and area of circles, basic statistics. Students often learn math as a lot of different, separate things they need to memorize and approach in separate ways. As a result, they quickly reach a point where they can't keep it all straight, feel overwhelmed, and conclude that they are no good at math. The goal of this course is to help students understand the concepts and the connections between the different concepts. This enables them to

broaden their math knowledge and see how they can make connections between what they already know and the new things they are learning. This course is designed for middle school students who have completed their basic elementary math work (7th and 8th graders, although some 6th graders may be ready for this course). We will work through the basic math concepts that will lay a strong foundation for Algebra and high school level science. We will approach the material through a variety of learning approaches which makes the material accessible to all learning styles. **Required Materials:** *Pre-Algebra*, by Larson, Boswell, Kanold and Stiff, published by McDougall Littell, Copyright 2005, ISBN 0618250034. (Can be purchased used through Amazon, Abe Books and other used book sources.) A 3-ring binder with 5 dividers, lined and graph paper. You will also need a calculator that can handle trig. Functions and logarithms (I would highly recommend the Texas Instruments TI-30xs MultiView). Do not purchase a graphing calculator. Materials: \$40 – includes one year subscription to IXL, summer review assignments and practice workbook. *Taught by Sandy Tracy*

ALGEBRA 1/HONORS ALGEBRA 1 (2-hour tutorial) This class will meet twice a week. We will meet for 1 hour on Tuesday and for 1 hour on Thursday. This format will allow for more in-depth interaction with the concepts. The course requires about 45 minutes to an hour of DAILY work outside of class. This course can be taken at an honors level or a standard level. **Topics covered in this class include:** We will start with Chapter 3 of the textbook because Chapter 1 and 2 are Pre-Algebra topics. Required summer assignments will review these earlier topics. Topics covered in this class include polynomial arithmetic, factoring polynomials, transforming formulas, algebraic fractions, negative exponents and scientific notation, functions and lines, equations and graphing, systems of linear equations, inequalities, rational and irrational numbers, and quadratic function **Prerequisites:** Admission into this class requires either successful completion of Pre-Algebra or passing an Algebra readiness test administered by the instructor. Students should have a good command of order of operations, evaluating simple and complex expressions, solving linear equations, problem solving process, signed number arithmetic, positive exponents, and the distributive property. **Required Materials:** *Algebra 1*, by Larson, Boswell, Kanold and Stiff, published by McDougall Littell, Copyright 2007, ISBN 0618594027. (Can be purchased used through Amazon, Abe Books and other used book sources.) **A 3-ring binder** with 5 dividers, lined and graph paper. You will also need a scientific calculator (I highly recommend the Texas Instruments TI-30XS MultiView). Do not purchase a graphing calculator. The use of a phone is not allowed. Material fee: \$40 – includes one year subscription to IXL, summer review assignments and practice workbook. *Taught by Sandy Tracy*

ALGEBRA 2/HONORS ALGEBRA 2 (2 hour tutorial) This class will meet twice a week; choose 1:00 or 3:30). We will meet for 1 hour on Tuesday and for 1 hour on Thursday. This format will allow for more in-depth interaction with the concepts. The course requires about 45 minutes to an hour of DAILY work outside of class. This course can be taken at either an Honors level or a standard level. Topics covered in this class include systems of inequalities, factoring quadratics, quadratic equations and functions, rational expressions, complex fractions, irrational and complex numbers, direct and indirect variation, polynomial equations, systems of equations in 2 or more variables, exponential and logarithmic functions, triangle trigonometry, and trigonometric applications We will start with Chapter 2 of the textbook because Chapter 1 reviews Algebra 1 topics. Required summer assignments will review these earlier topics. **Prerequisites:** Admission into this class requires either successful completion of Algebra 1 taught by this instructor or passing an Algebra readiness test administered by the instructor. **Required Materials:** *Algebra 2*, by Larson, Boswell, Kanold and Stiff, published by McDougall Littell, Copyright 2007, ISBN 0618595414. (Can be purchased used through Amazon, Abe Books and other used book sources.) A 3-ring binder with 5 dividers, lined and graph paper. You will also need a scientific calculator (I highly recommend the Texas Instruments TI-30XS MultiView). Do not purchase a graphing calculator. The use of a phone is not

allowed. Material fee: \$40 – includes one year subscription to IXL, summer review assignments and practice workbook. *Taught by: Sandy Tracy*

UNDERSTANDING THE TIMES: (1½ hour tutorial) Don't let your high school student graduate without this course by Summit Ministries which focuses on comparing six fundamental worldviews dominant in Western Civilization: Marxist Leninism (communism), Secular Humanism, Cosmic Humanism (New Age movement), Islam, Post-Modernism, and Biblical Christianity, all easily discovered in the current culture. Students quickly learn to do that, as well as being grounded in answers for them. Students learn to understand how worldview affects all other disciplines and how to defend their own faith. Those questioning their beliefs are encouraged to ask questions. Try taking this excellent (and free) worldview test yourself and then have your high schooler do it, to perhaps obtain some real insight into the need:

<http://www.secretbattlebook.com/checkup.html> Where apologetics is mostly studying the basics of the Christian faith from the Bible, this course involves studying what the other worldviews believe and how they compare to Christianity, also using the Bible as the final authority. You have heard the statistic that 50% of professing Christian students leave the faith in college? The number is even higher now, but instruction in the biblical worldview dramatically changes the statistic. The lively discussion/application format is very effective in encouraging students to interact about the things that really matter, and it is what the students love most about this class, along with the video lectures by experts in every field we study. Check out the college credit option at <http://understandingthetimes.com/college-credit/>. The material was written for juniors and seniors in high school, but, though challenging, it need not be limited to that age. This class meets for 1½ hours per week. Materials fee includes hard cover textbook, student manual, access to online video lectures, and copy fee. Materials: \$75.00. *Taught by Julie Shorey.*

APOLOGETICS: This course has a dual-purpose: to re-examine the doctrines and theology of our faith that we know so well, and to equip our students to explain and defend them in the real world. We believe that our Christian faith is at the heart of all that we do, and that this faith will come under attack by the world throughout our entire lives. The ability to dig into the truths of Scripture ourselves, and to be able to defend those truths to others, is essential to our calling as disciples of the Messiah. Because GCT is an explicitly Christian organization, we do assume a basic level of Biblical knowledge on the part of our students. However, this course is designed to account for a wide range of theological training, as well as a spectrum of denominational perspectives, so no student will be left in the dark. We are also sensitive to our role in support of, and not as a replacement to, the parents at GCT, as they seek to raise their children in the knowledge of God. This class is by no means meant to be the primary source of spiritual guidance or teaching in the student's life. Our goal is to provide a condensed, academically rigorous overview of orthodox theology, and a lovely training in the defense of those truths. The content of the course centers on the doctrines of God, the Scriptures, Christ, Man, and Salvation, which lie at the center of orthodox Christianity. These topics align with the set of questions published by the National Christian Forensics and Communications Association (NCFCA) for their competitive Apologetics category. We highly encourage students to compete at NCFCA tournaments throughout the year, which offer an excellent opportunity to put into words the things they have learned. However, competition is not mandatory for participation in the class. Required books and materials: Grudem's *Systematic Theology*, a large notebook, and of course, Bibles. Apologetics workbook: \$25.00. *Taught by Aaron Filipe.*

DEBATE: (1½ hour tutorial) How many skills can be learned in debate? Current events, logical thinking, research and organization skills, persuasive speech, effective listening, and the list goes on. This class focuses on preparing students to compete in NCFCA-sanctioned tournaments, and generally has a mix of both new and experienced debaters. Students will learn to form arguments, research background

information, and develop cases. These critical thinking skills are beneficial in all areas of life, and can be especially helpful in other areas of study. Considerable time will be spent examining the annual topic selected by the league, and analyzing it in depth. The main focus of each class time will be on learning the theory and structure of debate, as well as some time spent in practice rounds, drills, and other exercises. In order to facilitate effective learning during the class time, students are expected to do serious work on their own debate cases and skills as homework. Private tutoring can also be arranged with the tutor for those wanting extra help for competition preparation. Competition is a requirement for second semester participation in this class, as the focus is there. If students would like to study debate first semester, participating in class time debates with no formal competition, they may take the class for the first semester only. *Taught by Aaron Filipe.*