**Olive****Tree**

**Book List & Class Descriptions**

**9th-12th Grades**

This is the place to find all the books you need for classes at OliveTree for 2021-2022!
*Books can be purchased from local retailers: Probascos and Salt &Light in Loveland.*

**Please be mindful to purchase book editions as listed**

*OliveTree is registered with Amazon Smile. When you shop, Amazon donates to OliveTree.
Click here to learn more:* [*https://smile.amazon.com/ch/35-2238524*](https://smile.amazon.com/ch/35-2238524)

**BOOKS TO BE PURCHASED ARE LISTED IN BOLD *Italic* TYPE.**

**Please check the Schedule and Enrollment Form
for current year class offerings.**

*\*OliveTree reserves the right to cancel classes if minimum enrollment is not met*

**MATH – Algebra 1; Geometry; Algebra 2; Pre-Calculus**

**ALGEBRA 1**

***Book to purchase: MATH U SEE* Algebra *1 Level Up Base Set*** *(includes all materials for parent and student)*[***https://store.demmelearning.com/algebra-1-level-up-base-set.html***](https://store.demmelearning.com/algebra-1-level-up-base-set.html)

Pre-Algebra is a pre-requisite.

Graphing, simultaneous equations, exponents, polynomials, unit multipliers, and more.

Please ensure your student is ready for Algebra 1 by taking this placement test (copy URL and paste in your browser) <http://mathusee.com/placement/assessments/algebra-1-placement-assessment/> Students who are ready for Algebra 1:

Proficiently add, subtract, multiply, and divide whole numbers, factions, mixed numbers, and decimals; Convert between a fraction, decimal, and percent; Solve one-step equations; Plot points on a number line and coordinate grid; Perform operations with integers; Write an algebraic expression to solve a word problem.

**GEOMETRY
*Book to purchase: MATH U SEE* Geometry *Universal Set*** *(includes instruction materials w/ answers & student pack )*[***https://store.demmelearning.com/geometry-universal-set.html***](https://store.demmelearning.com/geometry-universal-set.html)Algebra 1 is highly recommended as a pre-requisite.Points, lines, planes, angles, circles, triangles, quadrilaterals, Pythagorean Theorem, conic sections, proofs and more. Please ensure your student is ready for Geometry by taking this placement test (copy URL and paste in your browser). <http://mathusee.com/placement/assessments/geometry-placement-assessment>

**ALGEBRA 2
*Book to purchase: MATH U SEE* *Algebra 2 Universal Set*** *(includes instruction materials w/answers & student pack)*[***https://store.demmelearning.com/algebra-2-universal-set.html***](https://store.demmelearning.com/algebra-2-universal-set.html)Algebra 1 is a pre-requisite. Geometry is recommended.

Factoring polynomials, quadratic formula, graphing conic sections and other Algebra 2 topics. Please ensure your student is ready for Algebra 2 by taking this placement test (copy URL and paste in your browser). <http://mathusee.com/placement/assessments/algebra-2-placement-assessment>

**PRE-CALCULUS
*Book to purchase: MATH U SEE* *Pre-Calculus Student Pack*** *(contains Student Workbook and Tests).*[***https://store.demmelearning.com/math-u-see/secondary-math/precalculus***](https://store.demmelearning.com/math-u-see/secondary-math/precalculus)Algebra 2 is a pre-requisite. Trigonometry, identities, polar equations, logarithms, sequences, limits and other topics that prepare students for Calculus. Students will need a protractor, ruler, and scientific calculator that can calculate square roots, trigonometric functions, logarithms, and natural log.

**SCIENCE – Biology; Chemistry; Physics with Labs**

**BIOLOGY**

[***www.bereanbuilders.com***](http://www.bereanbuilders.com/)

***Book to purchase: Apologia Exploring Creation with Biology - 2nd edition ISBN 978-1-932012-54-5***

***Book to purchase: Solutions and Tests ISBN 978-1-932012-55-2***

No pre-requisite. This course features an introduction to the study of living things. The chemistry of life, cell structures and processes, cellular reproduction, genetics, ecosystems, and creation vs. evolution. The five major kingdoms are studied individually. The experiments include dissections with high quality microscopes and dissection kits. This award-winning, college-prep biology course provides the student with a solid background in biology which is presented in a readable, conversational tone, taught from a Christian worldview.

**CHEMISTRY**

[***www.bereanbuilders.com***](http://www.bereanbuilders.com/)

***Book to purchase: Discovering Design with Chemistry (formerly Apologia) ISBN 978-0-9962784-6-1***

***Book to purchase: Answer Key and Tests ISBN 978-0-9962784-7-8***

Pre-requisite: Algebra 1.
This course covers fundamental aspects of chemistry such as the classification of matter, atomic structure, spectroscopy, chemical bonding, molecular geometry, physical change, chemical change, stoichiometry, solutions, ideal gases, acid/base chemistry, reduction/oxidation reactions, thermochemistry, thermodynamics, kinetics, and chemical equilibrium. Weaving together concepts and their mathematical applications, the course teaches students how to think as a chemist, so they can analyze the major changes that occur in matter. Throughout the course, the student is shown how chemistry reveals the amazing design that exists all around us. From the details of atomic structure to the makeup of the very air that we breathe, chemistry shows us the marvelous handiwork of God.
**Student Notebook: Free worksheets on downloads tab
Instructional Video: Free, see introduction to book for access**

**PHYSICS**

[***www.bereanbuilders.com***](http://www.bereanbuilders.com/)

***Book to purchase: Apologia Exploring Creation with Physics -2nd edition ISBN 978-1-932012-42-2***

***Book to purchase: Solutions and Tests ISBN 978-1-932012-43-9***

Pre-requisite: Algebra and an introduction to the definitions of sine, cosine, and tangent.

This course provides an intro to the methods and concepts of general physics, teacher emphasizes experiential understanding of concepts. It provides the student with a background in units, measurement, one and two-dimensional motion, Newton’s laws and their application, gravity, work & energy, momentum, periodic motion, waves, optics, electrostatics, electrodynamics, electrical circuits, and magnetism.

**LITERATURE – Fundamentals; Classic; British; American
All Literature classes include writing elements. Reading and writing are fundamental skills that most high school students are not learning well. These classes prepare your student for college and beyond.**

**FUNDAMENTALS OF LITERATURE (bjupress.com) (offered every year) *Book: BJU Fundamentals of Literature 2nd edition BJU #259960/#514042 ISBN 978-1-62856-436-5 BJU #514042 copyright update only 2018 ISBN 978-1-59166-887-9 BJU #259960 copyright 2009 (same text)***No pre-requisite**.** Designed to be the student’s first high school literature class, Fundamentals of Literature presents the foundational elements for literary analysis. Covering the topics of conflict, character development, point of view, plot, theme, tone.   This course provides excellent practice in examining fiction and non-fiction works under the light of a biblical framework. Weekly assignments involve selected readings and discussion questions as well as writing practice on the various topics listed above.

**CLASSIC LITERATURE/MOVIES AS LITERATURE (offered 2021-2022)
*Book to purchase: Writers INC. A Student Handbook ISBN#9780669529951*
*Books:*** **Teacher will supply *Hamlet,*** *Shakespeare****; Pilgrim’s Progress,*** *Bunyan****; Paradise Lost,*** *Milton*

No pre-requisite but Fundamentals is recommended. Alternating the study of selected classics with the analysis of movies as “story,” students will have the opportunity to study the literary techniques, themes, worldviews, etc. underlying these media genres. By sharpening their understanding of these media categories, students will be able to recognize the subtle messages/worldview approaches being promoted. In addition, a survey of art history including Renaissance, Romanticism, Impressionism, and Expressionism will be covered. In class and at home writing assignments included.

**BRITISH LITERATURE/MOVIES AS LITERATURE (offered 2021-2022)**No pre-requisite but Fundamentals is recommended. This course is designed to give students an overview of the rich British literary history from Beowulf to Tolkien. Using literary analysis, students will explore various genres and key authors from major time periods. Works covered may include: Chaucer, Shakespeare, Milton, Austen, Dickens and Eliot. Many assignments will be excerpts of longer works so that a broader range of literature can be covered. We will study a complete Shakespearian play as well as at least one complete fiction novel. Students will be expected to participate in class discussions on elements such as theme and character. Grades will be based on weekly class discussion and reading response journals. A final analysis paper will be due in the Spring. A list of approved authors and works will be given to the students at the end of the 1st semester. In class and at home writing assignments included.

**Text: Most works can be found online.** Information on websites will be given in the syllabus.
Books to purchase will be updated here this summer.

**AMERICAN LITERATURE *(bjupress.com*) (offered 2022-2023)
*Book to purchase: BJU American Literature (2nd edition) BJU#273714/#515726 ISBN 978-1-60682-102-2******Book to purchase: Writers INC. A Student Handbook ISBN#9780669529951***No pre-requisite but Fundamentals is recommended. This course provides a survey of literature through America’s cultural periods. Students will have a chance to critically assess the original writings using a biblical framework. This course provides an excellent companion study to American History.

**HISTORY – Cultural Geography; World History; Gov/Econ; American History**

**CULTURAL GEOGRAPHY *(bjupress.com) (offered every year)*
*Book to purchase: BJU Cultural Geography 9 -4th edition BJU # 515825 ISBN 978-1-60682-499-3***No pre-requisite. Designed to be the student’s first high school History class (9th grade), Cultural Geography involves a survey of the world with its variety of nations, cultures and physical features. This Cultural Geography curriculum is written to help students become informed citizens and empowered participants in society. The curriculum teaches cultural geography from a biblical perspective and will encourage your students to appreciate the diversity of people, cultures, and landforms. It also aims to develop critical-thinking skills and demonstrates how knowledge of cultural geography is essential to understanding people from different nations and cultures. During the two-semester course, students study the seven continents and the people who live on them.

**WORLD HISTORY (bjupress.com) (offered 2021-2022)
*Books to purchase: BJU World History – 5th edition BJU#714999 ISBN 978-1-62856-344-3***

No pre-requisite but Cultural Geography is recommended. World History guides students through the story of history, starting with creation and continuing to the present. Students will analyze five key themes throughout history from a biblical perspective: justice, power, citizenship, environment, and world religions. As they trace the major patterns in world history, they will see how those themes point more and more clearly to the triumph of the kingdom of God. Quizzes and Presentations for assessments.

**GOVERNMENT & ECONOMICS *(bjupress.com) (offered 2021-2022)***

***Book: BJU Government – 4th edition BJU#513523 Student Text ISBN 978-1-62856-424-2***

***Book: BJU Economics- 3rd edition BJU #517086 Student Text ISBN 978-1-60682-877-9***

No Pre-requisite but Cultural Geography is recommended.
**Government:** Explore God’s original authority structure, His plan for governing mankind, and the Founding Fathers unique composition of our Constitution. Students will study our federal government down through our state and local areas, they will acquire an understanding of the challenges of our modern political system, and their responsibilities as citizens. Students should leave this class with a deep appreciation for the American system of government and why they should be involved.

**Economics:** Teaches basic ideas crucial to understanding economic principles in a free market system. Under a biblical perspective, students will learn about inflation, trade-offs, supply and demand, the problems of debt, the influence of government and politics on the economy. Students will have the ability to understand the causes behind the volatility seen in today’s global economy.

**AMERICAN HISTORY (*bjupress.com) (offered 2022-2023)***

***Book: BJU United States History – 5th edition BJU #505776 ISBN 978-1-62856-207-1***

No pre-requisite but Cultural Geography is recommended.

United States History (5th Edition) Student Text takes the student on a journey beginning with European contact with American Indians and ending with the inauguration of Donald Trump. Along the journey, the course highlights major historical events that have shaped American history, inviting students to discuss the ramifications of these events on society today.

**ELECTIVES – Spanish, Bible, Art, Programming**

**SPANISH 1 *(bjupress.com)*
Book: *BJU Spanish 1, 3rd edition BJU#500231 Student Text ISBN 978-1-60682-937-0***

**Book: *BJU Spanish 1 Activities Manual 3rd edition BJU#500736 ISBN 978-1-60682-970-0***Spanish 1 (3rd Edition) Student Text takes an innovative and engaging approach to help students not only learn about Spanish, but learn to communicate at a novice-high level. All chapters present vocabulary and grammar within the context of the theme. Cultural studies infuse the text from the artwork down to the activities, with a heavy focus on developing a biblical worldview. ***e textbooks available see bju.com***

**SPANISH 2 *(bjupress.com)*
Book: *BJU Spanish 2, 3rd edition BJU#*** ***517730 Student Text ISBN 978-1-62856-618-5*Book: *BJU Spanish 2 Activities Manual 3rd edition BJU#*** ***517748 Student Text ISBN 978-1-62856-620-8***

***e textbooks available see bjupress.com***

Spanish 2 (3rd Edition) is all new this year! Chapters present vocabulary and grammar concepts thematically in the context of the character’s surroundings. Activities are communicative and meaning-based and incorporate substantial review at the beginning. Culture permeates the book, from the storyline to the artwork to the activities. We encourage students to formulate a biblical worldview of history, culture, and religion through the text, artwork, and activities. ***e textbooks available see bju.com***

**NEW TESTAMENT SURVEY
*Book: A Popular Survey of the New Testament, Norm Geisler Student Text ISBN 978-0-8010-1299-0
Book: Survey of the New Testament, Paul Benware Student Text ISBN 0-8024-2092-3***In the tumultuous and bewildering world in which we live, the believer is ever in need of the correction, instruction, and guidance, of God's sure Word. In order to live lives that honor the Savior we love, we need to do our best to understand the Bible. Young people especially need to establish a comprehension of Scripture that can serve as a solid foundation for life. In this course, we will narrow our focus from the Bible as a whole, to the New Testament specifically. Students will be expected to read through the entire New Testament over 2 semesters (34 weeks). In class, we will consider the background, the authorship and readership, the time and place of writing, as well as an investigation of the structure, and an overview of the content of each Book of the New Testament. This is all designed to equip the student with comfort and confidence in utilizing God's Word. The course is not designed to focus on the doctrinal elements or theological arguments. Those matters we reserve for parents and pastors. 2 exams, 2 short (3-page) papers, quizzes, in-class participation.**PYTHON PROGRAMMING
*Laptop Required, No pre-requisites***

In this course you will learn the basic fundamentals of programming and writing computer code through Python 3, one of the most popular programming languages in the world. We will cover the basic fundamentals of programming like assigning variables to input statements using different data types like: strings, numbers, lists, tuples, dictionaries and Booleans. We will learn how to use conditionals, and/or operators, loops, and data validation. Finally, we will use python to manipulate files such as Excel sheets and TXT files. This class is offered Thursdays 1:40-4:00 pm with the first period being instruction and the second period is a practice lab where students can work and ask questions with teacher availability.

This course does not require previous programming experience but by the end of the course you will be writing you own programs and thinking like a programmer. Each student will need to bring a laptop to class to practice skills and will need access to the internet at home to do assignments.

**HIGH SCHOOL ART CLASS
 Required Supplies:**

**1 package of soft vine charcoal, 1-2 sticks of compressed charcoal**

**1 6B extra soft charcoal pencil, kneaded eraser, white eraser**

**3 sakura micron pens (005,03, 08)
several graphite drawing pencils (HB, 2B, 4B, 6B)
small pencil pouch to hold supplies.**

This class will be divided into four sections: Drawing, Painting, Printmaking and

Sculpture. Within these four sections students will learn different skills and

techniques covering various mediums such as charcoal, graphite pencil, pen &

ink, scratchboard, watercolor, acrylic paint, water based printmaking ink,

plaster and clay. Each project will have specific guidelines, but at the same time students are

encouraged to be creative and make it their own! Students will also learn

about important art historical references with each new technique covered.

And of course…projects will be fun and engaging!

My goal as an art educator:

I truly believe that anyone can learn how to draw and paint, that it is a skill that

can be taught and mastered just like reading and math! My goal as an art

educator is to enrich the lives of my students through the joy and freedom of

being creative. My mission is to train and equip each student with the skills

and techniques that will carry them through their artistic journey. I strive to

cultivate an inspiring atmosphere where students feel challenged in advancing

their abilities, yet are encouraged in a nurturing environment. Amanda Gress

**SPEECH CLASS**  is now offered through the Ft. Collins Homeschool Gavel Club. Cost is $13.00 [www.homeschoolgavelclub.wordpress.com](http://www.homeschoolgavelclub.wordpress.com)