

MACH High School Class Descriptions and Book Lists 2021-2022

9th Grade Physical Science (also open to 10th graders who did not have this class in 9th grade)

Teacher: Leslie Smith

Physical science is the systematic study of God's creation and how it works. This course will be broken down into two components: we will study basic chemistry in the fall, including an introduction to matter, the periodic table, atoms, chemical reactions, acids, and bases, etc.; in the spring, our studies will include an introduction to physics in which we'll explore motion and force, waves (sound, light, electromagnetic), electricity, magnetism, among other topics. There will be weekly homework assignments (approximately 30-45 minutes per weekday) with some periodic projects. We will have classroom and at-home labs as well. There will be an additional fee for copies and lab materials, which should not exceed \$15.

Required Textbook:

- *Prentice Hall Physical Science* book, copyright 2009, published by Pearson Education, Inc. ISBN #6860601336 or 9780133668605.

9th Grade Writing & Literature

Teacher: Emily Bucher. *Note: this is a paid class for members. Cost: \$180.

This course teaches reading comprehension, composition, research, vocabulary development, applied grammar, and oral communication. Both fiction and non-fiction works are used with attention to understanding main ideas, supporting details, author's purpose, and literary techniques. Students will be challenged to think critically about their reading and to express their thoughts in composition. They will utilize different styles of writing, including narrative and persuasive, as well as literary analysis. Composition assignments will facilitate the development of mature sentences, the organization of effective paragraphs, and basic resource/research skills necessary for future academic courses. Assessments will include reading comprehension quizzes, grammar quizzes, graded writing assignments, Writer's Notebook participation, and a 6+ page research paper.

Required Book List:

- *Abeka Handbook of Grammar & Composition* by James A. Chapman, third edition, ISBN 43079004 (or any newer edition may also be used)
- *Carry On, Mr. Bowditch* by Jean Lee Latham ISBN: 978-0-618-25074-5
- *The Merchant of Venice* by William Shakespeare ISBN: 0-553-21299-0
- *The Bronze Bow* by Elizabeth George Speare ISBN: 978-0-395-13719-2
- *The Hiding Place* by Corrie ten Boom ISBN 978-0-8007-9405-7

7th-9th Grade Early World History (with an emphasis on the Renaissance and Reformation)

Teacher: Kim Groff

Students will study the lives of 34 men who lived in Europe from 1300-1600 and get a sense of the events that shaped the Christian church. They will also learn of the courage of the men and women who died as martyrs for our Christian faith during this time period. Maps will be used to understand the basic geography of Europe. Tests and quizzes will be given in class. Students will take a mid-term and final test. The class will include projects, reading assignments, comprehension questions, and analyzing the lives and decisions of the people of the time period. Ninth grade students participating in the class will be given extra assignments to help fulfill a high school credit.

Required Book:

- *The Story of the Renaissance and Reformation* by Christine Miller - Published by Nothing New Press
- *Famous Men of the Renaissance and Reformation* by Robert G. Shearer ISBN 9781882514106
- *The Green Leaf Guide to the Famous Men of the Renaissance & Reformation* by Cynthia and Robert Shearer ISBN 9781882514113
- Additional books for reading may be required

10th - 12th Grade Modern American History

Teacher: Amy Brengle *Note: this is a paid class for members (\$180)

This course explores United States history starting after the Civil War and continuing to present day. We will consider the growth of freedom in our country as we study major individuals, events, and ideas. Special focus will be placed on reading and discussing primary and secondary sources that use a Biblical lens to evaluate topics which have historically divided Americans.

Required textbook:

- *The Americans: Student Edition Reconstruction to the 21st Century 2012*, Publisher: Holt McDougal
ISBN: 978-0-547-49117-2

10th -12th Grade English with World Literature Emphasis

Teacher: Emily Bucher *Note: this is a paid class for members (\$180)

This course explores prose and poetry written by authors from all over the world and throughout history. Colorful cultures and fascinating historical facts will augment our study of literary elements and themes in the Abeka *World Literature* book. Students will sharpen their written communication skills and deepen their understanding of literary themes through a variety of writing assignments (e.g. narrative, expository, persuasive, response, creative, and research) and projects including one oral group presentation.

Required Books:

- *Abeka World Literature, 4th edition*, (Grade 10), ISBN: 9781154010510
- *Romeo and Juliet*, by William Shakespeare (any copy)
- *Silas Marner* by George Eliot (any copy)
- *Abeka Handbook of Grammar & Composition* by James A. Chapman, third edition, ISBN 43079004

10th-12th Grade Biology with Lab

Teacher: LaWanda Miller

The goal of this class is to give you an appreciation and understanding for life as God created it! The topics of basic biochemistry, the cell, metabolism, photosynthesis, cellular respiration, DNA/RNA, mitosis, meiosis, genes and heredity, the origins of life (from a creationist point-of-view), and biological classifications will be covered. A unit on human anatomy and physiology can be covered at home, if so desired. (Assignments and answer keys will be provided for this optional unit.) Class time will include lecture, followed by experiments and activities. This course includes a lab component in which students will gain a strong background in the scientific method. Students will also learn valuable recordkeeping skills by maintaining an ongoing lab notebook. Use of the microscope and slide preparations (wet mounts, dry mounts, smear mounts, and gram staining) will be covered. Various dissections will be performed, including the dissection of a fetal pig. On some lab days, class will begin as early as 8:30 am. Two, two-hour classes will be held in addition to the normal 24-scheduled days of co-op (one in December and another in April). Handouts, worksheets, and videos will supplement the textbook. Tests will be provided and taken at home. Field trips outside of class may be taken. A fee of no more than \$25 will be charged at the end of the year to cover the cost of lab supplies, dissection specimens, and copies.

Textbook required:

- *Science Shepherd Biology* (2nd edition, printed in 2013). ISBN: 9780982856840.

Volleyball (7-12th grades)

Skills and Drills will be practiced during the first half of the class, followed by play of the game. Volleyball will not be held on the last day of the Spring semester, and for any other circumstances beyond our control (e.g. times the church may not allow us to use the gym, because of other church functions).

Woodworking/Cooking Class (2nd-9th grade) (Fall semester only)

This class will cover general woodworking skills such as sanding, supervised cutting, drilling, hammering, nailing, and/or painting and staining. The final decision for the woodworking project has not yet been determined. Simpler woodworking options will be provided for the younger ages, and more advanced options will be available for the older students. Options discussed are a bookshelf or clock. During the cooking portion of this class, students will learn skills such as chopping, dicing, frying, and browning. Each student will prep and assemble their own 9x13 dish. Final cooking or baking will be finished at home. Possible meal choices include a casserole/layered dish, a salad meal, Stromboli, spaghetti and meatballs, and a crockpot meal. A list of supplies for this class will be provided closer to the time. There will be an approximate supply fee of about \$30.

Choir/Musical (2nd-9th grade) (Spring semester only)

{Information to come}

Spanish 1 (Grades 8-12)

Teacher: Jennifer Dizon

This Spanish 1 course will cover pronunciation and the use of words in greetings, questions, and answers, and in daily conversation related to days, numbers, places, time, weather, months, action, food, etc. Each week students will have daily independent tasks and exercises to reinforce the lessons. There will also be a weekly Spanish Bible verse. Tests will cover three chapters at a time.

Required Text:

Abeka Spanish 1A Por todo el mundo by Steven A. Guemann

Abeka Por todo el mundo Spanish Year 1 Vocabulary Manual by Steven A. Guemann

(Used copies can be found online. Please note--these books are gray in color with various world flags pictured on them. Also note--a *Spanish 1B* book may come sold in a set with book 1A. 1B will be used the following year in our Spanish 2 course.)