

High School Class Descriptions 2019-2020

World History

In World History we'll be taking a broad overview of history in a one year course. In classroom we will study certain aspects of world history more in depth. The goal is to see how history has impacted our world today all through the lens of the Bible. We'll be using Notgrass World history because it's a complete one year history course. Students will need the volume 1 and 2 history books. Students will also need the test/review packet and I'll add essay questions to some of the tests. Students won't need the literature packet for class. All students need for classroom study is notebook and pencils.

Text book:

Notgrass World History Vol. I (Publication Date: 2014, ISBN: 1609990617)

Notgrass World History Vol. II (Publication Date: 2014, ISBN: 1609990625)

Test/review packet (Publication Date: 2014, ISBN: 160999065X)

Materials: Spiral notebook and pencil

Class fee: \$10

Computer Science (\$100/year)

Class: Fundamentals of Applied Software Engineering

Class goals:

- Enable students to learn software languages and principles on their own
- Equip students to write complete programs and websites that are production-ready
- Give excelling students the knowledge to potentially test out of many college CS intro

courses

Grade requirements:

7th/8th have to take an entrance quiz. No prior computer science knowledge will be needed; the quiz will show if they will be able to keep up. 9th+ can enroll without the entrance quiz

Course information:

This class will cover software engineering from beginner to intermediate levels. Assignments will allow students who want to excel to go as far as they like. Languages I will likely teach are: BASIC, Javascript, python, React framework, some HTML, some CSS, some C#, YAML/JSON, some Markdown. If there is a language you feel should be covered let me know in the poll I send and I will consider it. Some assignments can be done in any language. Concepts will include memory management, object references, object oriented programming, source control, business requirements, SOLID, agile methodologies, testing strategies, cloud computing, and how to figure out engineering problems on your own

Assignments:

There will be a handful of tests and quizzes as well as several small programming assignments and a couple of large ones. I'll be sending around a poll to interested students to see what level I will start on

Equipment/Materials:

- Laptops in class are a must - needs Windows/MacOS/Linux - no Chromebooks
- Students will likely need an email address and the ability to sign up for an Azure iaccount (this is a free cloud account owned by Microsoft)

Algebra I

Pre-Requisite: Pre-Algebra, and prior to the first day of class, students should complete the first chapter.

Expectations: I will be supplementing *your* algebra program by providing instructions, sample problems and answering questions. Homework is expected to be completed and checked before class. Questions and/or concerns should be recorded as they occur. We will discuss these at the beginning of each class.

Overview: We will be using Richard Fisher's No Nonsense Algebra curriculum. This curriculum provides short, concise, self-contained lessons! Each lesson has a corresponding video recorded by the author, Richard Fisher, explaining each concept. I have found these to be very helpful. During class we will preview the lessons for the next week, review any questions or concerns from homework and teach new concepts. The first chapter is a review of pre-algebra skills which are necessary for success in this class. Again, prior to the first day of class, students should complete the first chapter. We will review these skills using the chapter 1 review on the first day of class. Let's have fun with algebra!

Fee: \$10

Materials: No Nonsense Algebra textbook by Richard Fisher
3 or 5 subject notebook
1-2 graphing notebooks

Biology (\$40/lab fee)

Overview: Apologia's Biology course is a Christian-based high school science. Please visit <https://www.apologia.com/cms/3/homeschool-high-school-biology> for details about the course. Co-op class time will be spent conducting the experiments included in the textbook and reviewing more difficult concepts as time allows. Students are expected to do the reading, assigned questions and complete the lab reports at home. **Parents are responsible for checking homework, administering tests, and assigning the final grade.**

Text & Lab Notebook: Required: Apologia's Exploring Creation with Biology (2nd edition) by Jay Wile and Exploring Creation with Biology Student Notebook (contains the lab reports). Highly recommended: The Solutions and Test book for this course.

Grades: At the end of the year, a participation grade will be assigned based on how well the students participated in experiments and class discussion. If the parents choose, they may use the participation grade as a percentage of the final grade, but the final grade is assigned by the parents.

Note: Our main focus in class on Fridays will be completing the experiments. For the students to get the most out of this course, they must do the reading and answer assigned questions before class. This class is taught with the expectation that the material has been covered at home and the students are ready to conduct the experiments during class.

Fees: The class lab fee is \$40.00 which includes all specimens and everything the student needs for the experiments. This fee can be paid on the first day of class and must be paid by the end of September.

If you have any questions, please contact Alison Wall at danali2001@bellsouth.net.

Chemistry (\$350 up front or \$375 in 10 payments)

Text book: Apologia Chemistry, 2nd Edition by Dr. Jay L. Wile
Published by Apologia Educational Ministries, Inc

Grades: 9 - 12

Pre-Requisite: Algebra I

Class Content:

This class will provide a complete honors Chemistry class:

- Guided notes for each lecture
 - Experiment set up for at least 14 modules
Lab notebook provided with standard format assigned
 - Grading of module testing
 - Mid-term test, Final Test
 - Tutoring offered one hour a week
- Valerie Little: vlittlegarden@gmail.com

Physics (\$145.00/year)

Overview: This is a complete high school physics course. Complete details about the text and course can be found at <https://www.apologia.com/physics/118-physics-2nd-edition-textbook-only.html>

Each of the 16 modules will be covered in class by lecture and students will complete the majority of the lab experiments included in the textbook. Each module will take approximately two weeks. Students will be required to complete each module's reading, questions and problems as they are assigned.

Pre-Requisites: Algebra I, Geometry, and basic Trigonometric functions.

Text: (Required) "Exploring Creation with Physics", 2nd edition, by Dr. Jay L. Wile; Published by Apologia Educational Ministries, Inc.

Other Supplies:

Students should have a 3-ring binder for keeping notes, homework and handouts organized. Helpful, but not required: "Multimedia Companion CD for Exploring Creation with Physics, 2nd Edition", also published by Apologia.

Grading: The instructor will provide and grade module and quarterly tests. The instructor will provide the final grade based on tests, homework completion, and class participation.

Fees: The class fee is \$145/year. Fees will cover laboratory supplies, lab notebooks, tests, and other handouts.

If you have any questions please contact Jacki St. John at j2bjst@hotmail.com

Spanish 1 (\$390/year)

Spanish 1 is for 9-12th graders who need a foreign language for high school credit. There will be at least 3 days of homework each week. The class consists of mostly grammar and vocabulary lessons with some conversation using Abeka curriculum. It covers both present and past tenses, and includes adjectives, articles, conjunctions, adverbs, object pronouns and other basic grammar. New concepts will be introduced in small doses, building upon what has already been learned.

Cost: High School classes: \$390 per student for the year (easy payments available; sibling discount available). Students will purchase their own books.

Text:

Abeka Spanish (any year edition). Each student will need these 4 books:

Spanish 1A and 1B textbooks (Por Todo El Mundo), **Sp 1 Vocabulary Manual**, **Sp 1 Student Test**

62375 Spanish 1 - Books A and B textbooks (Por Todo el Mundo)

19925 Spanish 1 Vocabulary Manual

19941 Spanish 1 Student Test Booklet*

(*I will place a group order with Abeka in August for those students needing a student test booklet – please let me know if you need one – cost is \$8 each booklet)

65862 Spanish 1 Teacher Guide (optional; good for absent classes or self-checking assignments)

Test Key and Vocabulary CD are optional. Siblings may share textbooks. I will grade the tests. The *teacher guide* is helpful to have if student is absent or needs additional help for exercises. The *vocabulary CD* is an exceptional study resource, but not required.

Students will be assigned to make verb flash cards with **3X5 index cards**, approx. 100 (or create Quizlet.com account as flash card option to memorize verbs and vocabulary). Bring any size 3-ring notebook/paper (+5 divider tabs) and pen/pencil to class each week. Please do not use a spiral notebook. Notebooks will be graded at the end of the year for organization of material taught in class.

All the textbooks may be found at the Homeschool Gathering Place in Raleigh (used books under Foreign Languages). You may request from previous students those willing to sell their books. Or if you can borrow the book from another student, that's fine. Abeka.com will sell them new for approx. \$70. "Curriculum exchange" at groups.yahoo.com (used curriculum group for Wake county), "Got Books?" Facebook page and homeschoolclassifieds.com (used curriculum nationwide) usually offer some available at affordable prices.