APSci Syllabus

Genius is talent set on fire by courage. Henry Van Dyke¹

We will do our best to light as many fires as possible in this course.

Class Information:

Tutor: Elizabeth Wachtler Term: Fall 2018, Winter/Spring 2019 cell/text: 909-319-4601 or email: wachtler@twc.com Prudentia Christian Co-op

What will you do in APSci?

15 modules physical science topics: comprehension questions, study guides, tests, & lab reports

• an independent scientific research project and experiment

Bring to Class each week:

1. textbook: Exploring Creation with Physical Science, 2nd ed. Apologia ISBN-13:9781932012774

- 2. student notebook: Exploring Creation with Physical Science Student Notebook, 2nd ed. (spiral)
- 3. lab notebook (binder or other notebook used for writing lab summaries)
- 4. completed assignments/homework to turn in

Other Required Materials:

- online access to the class website: wachtler.org
- online access & a free account with Thinkwave.com, a website to access your grades in APSci
- binder or report cover for independent scientific experiment, mostly kept at home
- science project display board, needed in March and April

Class Website

I have an APSci website (wachtler.org) with links, videos, and images directly related to the modules. Some of these are required. **Check this website each week**. The website also has downloadable copies of the syllabus, calendar, and other class handouts.

Independent Scientific Research Project and Experiment

You will research, plan, and carry out an independent scientific experiment this year. There are 5 components: 1) background research report, 2) testable question & experimental plan, 3) executing the science experiment, 4) final lab report, 5) display board with an oral presentation of your work.

Weekly Assignments:

Lab Summaries in a Lab Notebook: After most class labs, write a summary of the lab in your lab notebook, which is a binder or composition book. Summaries include the Title, Purpose, Data, and Summary of the lab and will be graded.

Student Notebooks (SNB)

- 1. On Your Own (OYO) questions: Complete all answers and correct your work with a different color pen. OYO answers are in the textbook after each module.
- 2. **SNB charts & diagrams**: found only in the SNB, based on graphics and info in the textbook.
- 3. **Study Guide (SG) pages:** The SG questions are a review for each module to check your understanding. Complete, check and correct your SG answers with a different color pen, then take the module test. I will email you the answer key for the SG each week after you complete the SG.

¹ Henry Van Dyke. (n.d.). Amer. author, educator, pastor. Retrieved 06/12/2016, BrainyQuote.com http://www.brainyquote.com/quotes/authors/h/henry_van_dyke.html

Tests

Module tests will be sent home in a test envelope every other week. These are "closed book" tests. Bring completed tests to class in the test envelope. Tests not in the test envelope will lose 5 pts.

Lab Reports: Typed Final Drafts

Some experiment labs will require a comprehensive final draft of the lab report that you will type, print, and turn in to me. You will use your SNB for the first draft of most lab reports. Use MLA formatting for all typed reports and staple all pages before turning in your work.

Independent Science Experiment:

In addition to the above textbook-based assignments, students will have additional assignments as they plan, execute, summarize, and present their independent scientific experiment.

Course Requirements & Grading

| Assignment: | | % of Class Grade |
|-------------|--|---------------------------------|
| - | SNB (OYO, charts, etc. and Study Guides) | 20% |
| - | Lab Summaries in Lab Notebook | 25% |
| - | Lab Reports, typed final drafts | 15% |
| - | Tests | 15% |
| - | Independent Science Experiment | 25% |
| | (research report, experiment plan, final lab | report, and board/presentation) |

| 98 - 100 | % A+ |
|------------|------|
| 93 - 97% | Α |
| 90 - 92% | Α- |
| | |
| 87 - 89% | B+ |
| 83 - 86% | В |
| 80 - 82% | B- |
| | |
| 77 - 79% | C+ |
| 73 - 76% | C |
| 70 - 72% | C- |
| | |
| 67 - 69% | D+ |
| 63 - 66% | D D |
| 60 - 62% | D- |
| 59 or belo | ow F |

Grading scale:

Extra Credit

Students may do additional assignments offered at various times during the year for extra credit.

Calculators:

You may use a calculator on homework and tests, but you must always show your math work in written form as well. This means completely write out all equations and corresponding answers. Answers that don't include the equation(s) will not receive credit.

Turning in Work and Absences:

Please turn in all reports and tests at the beginning of each class period. I will collect SNBs at the end of the class period to grade at the end of each module. Work turned in late may lose 5 pts.

I will also ask for a digital version of some reports. Please email your report to: wachtler@twc.com

Email me right away if you are absent or know in advance that you will be absent and we can arrange an alternative schedule for your assignments. Even when you are absent, you are still responsible for the work on our class syllabus and schedule.

Honor Code

Let us honor God with honesty and integrity in this class. Students please sign the APSci Honor Code. Copying answers from answer keys is not allowed and will require you to repeat the assignment.

Why do I teach Science?

I love learning something new. I love to understand things, especially in the realm of science.

Acts 17:10 tells us the Bereans "received the Word with all readiness of mind, and searched the Scriptures daily, whether those things were so." Like them, we can test all that we learn about God's creation to make sure that it is God-honoring and consistent with God's design.

In this class, we will experience beautiful moments when it all fits together and expands our understanding of our Creator. Praise God!