APSci Syllabus

Genius is talent set on fire by courage.
Henry Van Dyke[1]

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

Class Information:
Tutor: Elizabeth Wachtler
cell/text: 909-319-4601 or email: wachtler@twc.com

Term: Fall 2017, Winter/Spring 2018
Prudentia Christian Co-op

What will you do in APSci?
- 15 modules physical science topics: comprehension questions, study guide, 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. completed assignments/homework to turn in

Other Required Materials:
- online access to the class website
- binder or report cover for scientific research project, 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.

Experiment Design Classes:
There will be occasional experiment design classes during lunch on the PCC campus. These classes are not required, but they will be helpful for planning and executing your independent science experiment. If you can't attend, please ask me about what we covered so you can complete your science experiment correctly. Parents are welcome to attend.

Weekly Assignments:

Student Notebooks (SNB)
1. **On Your Own (OYO) questions:** Complete and check your work. OYO answers are in the textbook after each module.
2. **SNB charts & diagrams**: found only in the SNB, based on info in the textbook modules
3. **Study Guide (SG) pages:** Study Guide questions are very similar to the test questions. I will email you the solutions (answers) for the SG each week after you complete the SG. Check and correct your SG answers before taking the module test.
4. **Lab Report pages:** You will use the SNB to record the first draft of lab reports. I won't grade lab reports in your SNB. You will turn in separate typed copies of some lab reports to be graded.
5. **Module Summaries:** Module summaries in the SNB are optional study tools and won't be graded.

[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 the following Monday with a parent signature.

Lab Reports to turn in
Some labs will require a comprehensive lab report that you will type, print, and turn in to me. I will grade these typed lab reports. You will use your SNB for the first draft of most lab reports. I will not grade the lab reports in the SNB.

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.

Grading scale:	
98 – 100%	A+
93 – 97%	A
90 – 92%	A-
87 – 89%	B+
83 – 86%	B
80 – 82%	B-
77 – 79%	C+
73 – 76%	C
70 – 72%	C-
67 – 69%	D+
63 – 66%	D
60 – 62%	D-
59 or below	F

Course Requirements & Grading

Assignment:	% of Class Grade
- Tests	25%
- SNB (OYO, charts, etc. and Study Guides)	25%
- Typed Lab Reports	15%
- Class discussion/cooperation in class labs	10%
- Independent Science Experiment (research report, experiment plan, final lab report, and board/presentation)	25%

Extra Credit
Students may do additional lab reports for extra credit. An extra lab report can be substituted for a low assignment grade.

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 will lose 5 pts.

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

Even if you are absent, you are still responsible for the work on our class syllabus and schedule. All work not turned in by the "due in class" date is subject to a 5 pt./week penalty, unless I know about the absence. Email me if you know in advance that you will be absent and we can arrange an alternative schedule for your assignments.

Honor Code
Let us honor God with honesty and integrity in this class. Students please sign the APSci Honor Code.

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!

♥ Mrs. Wachtler