

Live Classes

Exploring Creation with Physical Science – 4th Ed.

Mr. Blythe, M.A. Apologetics/Theology/Philosophy

Syllabus

2025-2026

Personal Note from Instructor:

As a student embarking on this live science course, you are about to experience an exciting journey of discovery. Science is not just for professionals in lab coats, but it's a way of understanding the world around us that we all engage in naturally.

This live course will cover a wide range of topics, from the tiniest particles like quarks to the vastness of space and rockets. It aims to instill a sense of wonder and appreciation for the intricacies of the natural world, framing it as God's creation.

While the course will require effort and dedication, it's presented both in the text and by the instructor as an interesting and very enjoyable experience. Get ready for awe-inspiring revelations about the universe, from the microscopic level of atoms to the grand scale of the cosmos.

Overall, this course will foster curiosity, critical thinking, and a deeper understanding of the scientific principles that govern our world, all while maintaining a perspective of reverence for creation.

Our foundation on which this course rests can be summarized like this:

 In order to study how the universe operates, we need to know something about why it is the way it is. The two are different, but not totally unrelated. If the universe is merely a mindless accident, why would we expect it to be orderly, or obey mathematical laws? Why should I expect my senses to reliably inform my mind, if both are simply the results of mutations that conveyed some sort of survival value in the past? There would be no reason to think that science is even possible in such a universe. On the other hand, the biblical worldview makes sense of science. So the way in which we do science (and even the possibility of doing science at all) requires us to know something about how the universe came to be.

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Recommended Grade Level:

8th Grade or equivalent (can also be used as a 9th grade course)

Prerequisites:

None (7th grade basic math is assumed and needed)

Live Lecture Date & Time:

Tuesdays 1:00-2:30 pm ET

NOTE: The instructor does not require attendance of the live lectures but highly recommends students attend as many of the live lectures as possible to take advantage of live Q&A. Lectures are recorded and posted on the course Canvas page under the associated week and module. If you miss a lecture, please watch the recording. You can also use the recording for review as you prepare for the online exam.

Description:

This course, Exploring Creation with Physical Science, 4th Ed. is designed to be the last science course a student takes before high school biology. Thus, we generally recommend it be taken in 8th grade. However, students may use it for their 9th-grade coursework. The text discusses topics such as atomic structure, the periodic table, chemical bonds, reactions and energy, motion, forces, energy, waves and sound, light, electricity and magnetism, Earth's structure, weathering, and atmosphere. The author also addresses the environmentalist movement. The course contains multiple experiments, all of which can be performed at home using everyday household items. These experiments will be an excellent way of aiding and cementing the student's understanding of the concepts. Students will also be given a thorough introduction to formal laboratory reports, which will help them develop their skills in technical writing.

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Required Class Materials:

1. The Exploring Creation with Physical Science, 4th edition, Advantage Set, which includes the following:

• Exploring Creation with Physical Science, 4th Edition, textbook. Dincher, Vicki. (Note: Older editions of Apologia's Exploring Creation with Physical Science will not work with this class).

• Exploring Creation with Physical Science, 4th Edition, Course Guide & Answer Key, Dincher, Vicki

• Exploring Creation with Physical Science Student Notebook, 4thEdition, Dincher, Vicki 2.

2. Lab equipment—The Lab Supply List in the back of your text lists the items you will need to perform the experiments in each module. Please look at this list ahead of time to make sure that you have all the supplies needed before each Module. The experiments mostly use everyday household items, so there is no need to purchase laboratory equipment for this course.

3. Basic calculator

4. (Optional) Colored pencils—to use for drawings of set-up in lab notebook, etc.

Recommended Class Materials:

(see above)

Course Topics:

A full list can be found here:

 <u>https://www.apologia.com/shop/physical-science-textbook/</u> (click "Preview Samples"

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Assignment Structure:

Basic Structure: We will complete one module every two weeks. The exam for that module will be due on the Wednesday following the second week of each module. Exams will consist of a combination of questions formatted as multiple choice, true/false, matching, calculations, etc. All tests are to be taken closed book/closed notes and without the help of outside sources (unless previously cleared with me by the parent for students with an IEP or equivalent). All exams will be taken through our AutoGrade+ system. Students will have 1 chance to retake an Exam. It is the responsibility of the parent(s) to ensure students are not utilizing outside help while taking the tests. Proctoring is recommended. Students are allowed to use a calculator and a periodic table (when needed), and a 3 x 5-inch notecard as a crib sheet for formulas only on the exam. The 3 x 5-inch notecard may have any formula from the book written on it. The crib sheet cannot contain any additional notes from the module or information about scientific units!

Laboratory Notebook: As students read the modules in the textbook, assigned experiments and lab reports should be completed (though only 2 practice reports in the form of a tutorial will be turned in to me formally. We will go over expectations thoroughly in class). Completion of the lab includes both performing the experiment and writing an informal lab report in the laboratory notebook kept by the student (Exploring Creation with Physical Science, 4th edition Student Notebook). An Informal Lab Report Format can be found on your Canvas course page. At the end of each quarter, parents will check the student laboratory notebooks for completion. I will email instructions for this process when the time comes for a Notebook Check to be turned in. **NOTE**: The lack of availability of experimental supplies will be taken into account if you live in an area of the world where certain equipment/supplies cannot be obtained. Parents should Email me with these extenuating circumstances as they arise. Formal Laboratory Reports: In addition to the informal lab report (simplified report to be kept in the Student Notebook as explained above), students will be required to complete a formal laboratory report using MLA format. In this tutorial, students are provided with video instruction, written instruction, as well as an example for each section of the lab report. This assignment will also be covered thoroughly in class before students are expected to complete it. My purpose is to was apologia.

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them into the world of lab reports! Daily Notebook: Students should keep a daily notebook that includes the following work from each given module:

• Work and answers to the On Your Own (OYO) guestions • Work and answers to the Study Guide Questions

• (Optional but recommended) Work and answers to the Module Test found in the Solutions and Tests Manual that comes with your Text. Please Note: You may use these tests to study for MY module exams, which will be taken within our student portal. I refer to them from time to time as "Practice Tests," though they are not labeled as such. If students correct their answers in different colored ink, this will help when studying!

• (Optional but helpful for some) Notes from reading the module

• (Optional but helpful for some) Notes from attending lecture Even if students are not note-takers, they should always have their notebooks on hand to take notes during class. Important information for tests may be covered during this time!

Notebook Checks: At the end of every 3 modules, parents will check their student's notebooks for completion, not the accuracy of the answers. Students are highly encouraged to check their own accuracy by referring to the Course Guide & Answer Key which comes with their text. I will email instructions for Notebook Checks at the time when these assignments are due (all are percentage grades, NOT letter grades.).

Extra Credit: The instructor reserves the right to offer or not offer extra credit opportunities in the form of additional exam questions, homework assignments, etc.

Grading:

All grading is based on the numerical percentage system. Homeschool families all have a different criterion for a letter grade. Therefore, families will take our numerical grades and convert accordingly for their home transcripts.



Due Dates and Late Policy:

All due dates are labeled on the course calendar found on your Canvas Course page. Students will be reminded of due dates at the beginning of each lecture. Students are responsible for keeping track of all scheduled due dates and are responsible for any changes announced during lectures and/or on Canvas.

Exams are due by 11:59 pm on the Wednesday following the completion of a module. Exams can be accessed anytime but I do not recommend accessing them until students have attended or watched the recording of the second lecture of each module. This way, students will not miss anything covered in class as they are responsible for all lecture material. A late penalty of 10% will be applied for exams which are turned in up to a week late and another 5% late penalty will be added thereafter. I do not approve extension requests made by students. Any request for extensions must be made by a parent via email for situations which are beyond the student's control. If an extension is requested, please explain the situation in the email. If the extension is approved, the late penalty will be waived.

Student Conduct:

Academic Dishonesty

Academic dishonesty is any type of cheating that occurs on any exercise

related to this course. It can include plagiarism, fabrication, deception,

cheating, bribery, sabotage, professional misconduct, and impersonation.

Any type of cheating will not be tolerated!

Cheating includes but is not limited to copying homework, falsifying reasons

for missing class, copying other students' exams/homework/answers,

impersonating a parent, having someone else login to a Canvas/Zoom

account to complete material on a student's behalf, or plagiarizing material

someone else has written and claiming it as your own.

Any plagiarism will receive 0 points and the parents will be notified.

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Class Behavior

- Treat my classroom as if we were in a physical classroom together.
- Do not talk or type while I am actively lecturing.
- Please, do not multitask during lecture.
- If you must leave early, please slip out "quietly" without making a big announcement! You may Email me to let me know your circumstances.
- If you join the meeting late, please do not disrupt the lecture with messages.
- Come to class prepared
- Make sure you have read as much of the module in the textbook prior to class.

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- Bring your textbook, notebook, pen/pencil, and calculator (Physical Science) to class.
- Please use but do not abuse the emotes "Reactions" on Zoom.
- Polite conversations only! BE CAREFUL WHAT YOU SAY!
- Chat privileges will be lost if chat is not appropriate.

Instructor Availability for Questions:

Communication is during the live class and via email at MrBlythe@apologia.com