



apologia.

LIVE CLASSES

Exploring Creation with Marine Biology

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Syllabus

2024-2025

Description:

In this course, you will learn about God's amazing Creation! God is by nature a revealer of Himself that He might be known. One of the ways that He has revealed Himself is through His Creation. So, it is our desire in this course, that in addition to all the technical aspects of science that we will learn, each student will encounter the glory of our Creator in His Creation.

This course is designed for 10-12th graders. Following the Apologia Ministries text of the same name, the course is designed to be an upper level high-school course. If completed as assigned, the student should receive 1 credit.

Prerequisites:

High School Biology

Course Materials:

- Exploring Creation with Marine Biology, 2nd Ed. – Basic Set
 - Included in the Basic Set:
 - Exploring Creation with Marine Biology Textbook, 2nd Ed. by Sherri Seligson
 - Exploring Creation with Marine Biology Solutions & Tests Manual, 2nd Ed.
- Marine Biology Dissection Set
- Lab Supplies—listed in the book
- Microscope—Due to the cost of a microscope, we do not insist on one for our Biology classes. However, viewing specimens on a microscopic level brings Biology to life for students, not to mention it being so very

helpful in gaining an understanding of the design and beauty of creation! Though I do not require it, I ask that you make every effort to obtain a microscope and slides, whether borrowing or buying used or new. Some helpful resources for used microscopes might be homeschool groups, neighbors, schools, community colleges, or even medical labs in your area that might be upgrading, eBay, Amazon (used), etc.

- [Marine Biology Prepared Slide Set](#)
- **Optional:** Biology Instructional DVD—please note that Mrs. Price will use clips from this DVD throughout the year, so this purchase is not necessary.

Assignment Structure:

Grading Categories

- 35% Tests/Quizzes
- 25% Lab Reports
- 5% Formal Lab Reports
- 35% Homework (Reading, OYN, Study Guide)

Homework—Reading, On Your Own, Study Guide

The homework that is assigned is directly relevant to the topics that the student will be tested on. Homework will not be collected or graded; however, I will ask parents to record the completion of the homework, and an overall homework grade will be part of your course average. The intention, in part, is to prepare the student for a more self-paced college learning environment. The homework will also be assigned as preparation for each class session.

With only one class period each week, much of the coursework will be outside of the instruction time. Students should spend at least 45 minutes to an hour on class assignments at least four days a week. Completing the On Your Own and Study Guide questions is NOT optional.

I will send emails reminding parents of homework logins when due dates approach. Parents are to log in to their child's Reading/OYO/SG homework assignments and mark them as complete using their child's Canvas account. Parents may give this responsibility to the student, but from this point forward, I will assume that the parent knows and is following up on logging in/reading/OYO/SG homework. The key is to check their class modules tab in Canvas a couple of times a week.

The student is expected to self-check their OYO questions and SG questions. The answers to the OYO questions are at the end of each module. The answers to the SG are in the answer key. If the student self checks these assignments, they will glean a greater knowledge and understanding of the material. If there are any questions on these assignments, I would expect the student to connect with me prior to the due or test date.

Tests— Tests will be graded online by the instructor.

To prep for any test, the student is expected to complete the OYO questions, the SG, and the labs. I am also okay if the parent wants to give the student the already answered Module Summary to study from, but I would ask that you **do not give them the test to study from.**

Labs—Students will turn in requested labs online by attaching a picture of their student journal pages, a lab report, or showing them completing the actual lab. I will give them plenty of direction on how to do this.

Lab grades (or tests) cannot be waived. My class syllabus is built around not only reading material but also labs, and I must grade labs as part of my online class. If you feel your student cannot complete the labs before the due dates, you might consider moving to a recorded/non-graded class, OR you can ignore those grades when configuring their final grade. You are the parent in charge of your homeschool and can assign any grade you choose regardless of the suggested ones I will give.

If your student is attending a co-op, tutorial, or other option where they complete labs, that is great! Make sure they take pictures and complete a report that they can send to me when requested. They must be taking that class concurrently with this course. This means labs completed the school year before or earlier do not count.

Formal Labs—Students will learn how to write a Formal Lab Report and be asked to submit pictures or pieces of their written work from a few selected labs for a grade. We will cover format and expectations many times during class. A rubric explaining the guidelines can be found in the assignment.

Many people struggle with the ethics of completing dissections in science courses. However, dissections are an integral part of a biology-focused class with labs. The following are comments from several Apologia staff members and a former student.

“When I dissected the crayfish, I found it fascinating how everything inside is connected and how intricately everything is designed. When I held it in my hand and looked at all the internal organs and really thought about

what I'd just read, about all the functions each one specifically performs, it just really made me think of how amazing our Creator truly is. How can two little strings inside a little organism successfully send readable messages to a tiny mass of tissue? How can that little mass of tissue interpret those messages into specific movements fit for the situation the organism is in? How does a crayfish know that its chelipeds are expendable and allow for them to be ripped off when in danger if need be? Everything made me marvel at our whole world and everything in it, the complexity and efficiency of the natural order. I've known evolution is false for as long as I can remember, but during this module it just became so much more clear to me that it literally is not an option."

-ALC Biology Student

"Dissections may actually contribute significantly to students developing a deeper appreciation for life. With the dissection, you get to see the organs in all dimensions, you get to look at it any way you want, and what's better is that you get to touch it. This teaches students to appreciate what every single organ does for the body. Students who never see the inside of a real animal may regard organisms (including themselves) as a virtual reality as thin as a photo or as dimensionless as the computer screen."

-Larry Blythe, Apologia Online Academy Director

"There is an amazing awareness of God's power of creation as we observe the various parts of living organisms. As you identify that the heart is made of tough and muscular material and how it is centrally located in the body versus the softer kidneys or the other organs and their placement, you begin to ask yourself, "How did these cells 'know' to form this as they

divided? How do heart cells know to be heart cells, and how do liver cells know to be liver cells? What is driving this complexity?" This experience drives us to a better understanding of the power of our Creator.

Also, it prepares us in many ways for adulthood. Watching a video of a dissection removes us from deep observation. We look at the images and may just think everything is "gross." But when you are doing a dissection for yourself, you are more aware of what living beings look like on the inside. You are learning more than you realize. As a parent, I cannot tell you how many times it was helpful to me to know and understand what makes up our bodies. Through stitches, broken bones, other injuries, and sicknesses, I have a greater understanding of how to care for my children and to be there for them as they are scared with blood running down their forehead or with swelling ankles."

-Sherri Seligson, author of *Exploring Creation with Marine Biology* and
DVD Instructor

Due Dates and Late Policy:

Deadlines for ALL on-time work are posted online during that semester. A "0" will be given for work not completed. The lowest test and lab score (not including the formal report) will be dropped. Late deductions for work turned in after the deadline are 3-5 points for late tests and 1-2 points for late labs. This means that even if you let me know you'll be late on an assignment, late points will still be deducted unless requested by the parent due to an illness or family emergency.

Test Retakes- In order to maintain fairness among students who have not already seen the test, retaking a test means you must take the late

point deduction and no extra credit points.

Co-Ops- If your student is doing their labs in a co-op setting with others outside your family, please let me know so I can adjust due dates to accommodate.

Class Canvas Portal:

Students will access the course through the Canvas course portal:
<https://apologia.instructure.com/login/canvas>.

Weekly Live Lecture:

Mondays, 10:00-11:30 A.M. EST

Live Lecture Attendance Policy:

Going on vacation? My assignments are listed on Canvas no later than a month out. These will be tweaked from time to time, so if you plan to go out of town, know that as long as you tell me 1-2 weeks ahead, you will only be responsible for the work already listed at that time. I encourage you to get ahead, especially because a vacation is usually in the works way ahead of time, giving you plenty of time to finish homework before it is late.

Sick or have a family emergency? Let me know (if appropriate) so we can pray in class for you! You will be given extra time after you get back to turn in any homework and have it count as “on time.”

Academic Dishonesty:

All tests are closed book and will be taken online through Canvas. It is the parent's responsibility to proctor tests. I will explain to students in class how to take online tests.

Help and Questions Outside of Live Class:

I am ready to help anytime Monday-Friday until 5 pm ET. Weekends and evenings are family time, so I will be limited in my availability to answer anything then. I strongly encourage you to make sure you also set aside time NOT to school each weekend to refresh your souls! I know many students work on schoolwork on the weekend, and I am okay with that if the family agrees to it. But again, my due dates are set, and I will not be available after 5 pm or on weekends to answer emails/phone calls.

You can contact me at MrsPrice@Apologia.com.