



GRACE & TRUTH
CLASSICAL CHRISTIAN EDUCATION

2025 Academic Year
Course Descriptions

Sciences

In-Person Science Classes

Students read the textbook at home taking two weeks to complete each module. They do “Comprehension Checks” and look up the answers. They prepare their “Study Guides.” Every second Friday we go over the study guides in class to make sure the students are ready to write the test at home on the following Monday.

On the alternating weeks we do experiments together in class. The students record the process and results of their lab experiments and turn in lab reports to the facilitators. Facilitators will collect test grades from parents.

You can get a description of the content of each science class by reading the description of the corresponding textbook. Below are the descriptions for two of our video instruction science subjects. The only difference for in-person classes is that the parent will not have to oversee all of the experiments or mark the lab reports and the semester exams will be done in class.

The commitment is one hour per day for a high school Lab Science Credit.

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Video Instruction Science Classes

Biology

Discovering Design with Biology from Berean Builders is a comprehensive laboratory-based high school biology course, ideal for a college/university-bound student. With clear instruction and 40 hands-on experiments, covering household dissection, and microscope labs, this is a thorough introduction to how living organisms are designed and classified, how they interact with one another, and how they interact with their physical environment. Throughout the course, students will see that life is the result of design and that organisms have been given the ability to adapt to their surroundings. The students will also learn to identify the problems associated with the modern evolutionary synthesis. Students are pointed to God as the creator and sustainer of life!

A biology student should expect to spend approximately 1 hour per day Monday-Friday. Each week he will read half of a module and answer the "Comprehension Check" questions and chapter review questions. He can also view the two Berean Builders recorded lessons made available for each chapter on canvas if he needs help understanding a difficult concept.

Parents must invigilate the tests which are written at the end of each of the 16 modules and the four quarterly exams. It is also their responsibility to source specimens and equipment for lab work, supervise labs and mark lab reports. You are welcome to contact the in-person class facilitator for tips on where to source lab supplies.

Textbooks can be purchased through [Good Neighbours Bookstore](#).

The author, Dr Jay E. Wile, provides further links for the class:

<https://bereanbuilders.com/ecommerce/online-content/discovering-design-with-biology/>

Credit: 1 Lab Science credit only if parents oversee live conducting of the experiments at home and mark the lab reports. If you only watch videos of the experiments, it does not count as a lab science. (Grade 9-12 Biology in one year.)

Additional Information:

Concepts covered include the chemical processes for life, the structures of RNA and DNA, cell design, and photosynthesis, cellular respiration, and cellular reproduction processes. After a thorough survey of the different kinds of organisms found in nature: archaea, bacteria, protists, fungi, invertebrates, vertebrates, and plants, your student will then learn about ecosystems and the biogeochemical cycles that keep environments hospitable to life. Labs include extracting DNA from fruit, examining the effects of temperature and pH on enzymes, exploring osmosis and diffusion, building a pedigree, culturing bacteria, growing, and examining fungi, identifying the stages of mitosis, studying live bacteria that were cultured by the student, identifying budding in yeast, and analysing the microscopic structure of plants and animals. One of the highlights of the course are the dissection experiments which include a crayfish, a fish, an earthworm, and others if specimens can be obtained. Not for the faint of heart!



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Video Instruction Science Classes

Chemistry

In Discovering Design with Chemistry students will get a solid introduction to the basic concepts and applications of chemistry from a Christian worldview. Weaving together concepts and their mathematical applications, the course teaches students how to think as a chemist so they can analyze the major changes that occur in matter.

Students can work independently on the reading, comprehension checks, and review questions. There are also two videos available for each chapter, where the content of the chapter is presented by Dr. Wile. These can be viewed for reinforcement.

There are 16 chapters, and each chapter is covered in 2 weeks. The daily commitment is 1 hour.

Parents must invigilate the tests which are written at the end of each of the 16 modules and the four quarterly exams. It is also their responsibility to source specimens and equipment for lab work, supervise labs and mark lab reports. You are welcome to contact the in-person class facilitator for tips on where to source lab supplies.

Throughout the course, the student is shown how chemistry reveals the amazing design that exists all around us. From the details of atomic structure to the makeup of the very air that we breathe, chemistry shows us the marvellous handiwork of God.

Textbook: Discovering Design with Chemistry

<https://bereanbuilders.com/ecommerce/product/discovering-design-with-chemistry/>

Can be purchased through the [Good Neighbours Bookstore](#)