



Secondary Science

Overview

We're looking for a teacher with the ability to teach a variety of middle school and/or high school science classes, and possibly 1-2 Math classes. There is some flexibility about the specific assignment, based on the strengths of the teacher we hire. Our complete set of secondary Math and Science classes is as follows:

Grade	Science	Math
7	Earth Science	Math 7
8	Life Science	Math 8
9	Biology or Physical Science	Algebra 1
10	Biology or Physical Science	Geometry
11	Chemistry	Algebra 2 or Pre-Calculus
12	Physics	Pre-Calculus or AP Calculus AB

Qualifications

- 4-year degree in Science, Chemistry, Physics, Mathematics, Secondary Education or related field
- Teacher certification and 2 years experience preferred
- Evangelical Christian testimony with active local church experience
- Sense of calling to serve in a developing nation
- Willingness to make a three (or more) year commitment
- Full fluency and expertise in English; conversational Spanish preferred but not required

Science Curriculum

We have developed our own school-level learning standards for science at all grade levels. For most science classes, we are using Prentice Hall student and teacher editions. In addition to the resources that accompany the teacher's edition of the textbook, we have very well-developed lesson plans, supplemental resources, several written lab procedures and some lab equipment available to guide the students through formal lab experiments and studies. Descriptions of specific classes are provided below. In 9th-10th grades, we alternate between

Biology and Physical Science in order to reduce the number of different classes for which the teacher is planning during a given school year.

Earth Science 7: This standard middle school science course is taught to students in seventh grade (approximately 25 students). Beginning with an introduction on a Biblical framework for studying science, the course includes units of study on astronomy and the Earth: lithosphere (plate tectonics; earthquakes and volcanoes; rocks and minerals; weathering, erosion, and deposition), hydrosphere, atmosphere, climate, and geological history. The primary text for the course is Glencoe Earth Science (2013). A wealth of resource materials from the previous teacher includes PowerPoint presentations, hands-on activities, and materials to foster student engagement in the study of science.

Life Science 8: In Genesis we read about how God created the world and all living things. This course will focus on the study of living organisms. Students will learn about various topics and concepts in life science. These concepts will center around the five living kingdoms: Monera, Protista, Fungi, Plantae, and Animalia. Students will study the scientific method and use it throughout the year to make observations about living things. The class will see how all of the kingdoms interact with each other and how we, as Christians, should interact with the world He has given us.

Biology 9-10: This course is taught to all 9th-10th grade students in even years (e.g. 2022-2023; two sections, approximately 25 students per class). Biology is the study of life. The main topics covered in this course are cells, genetics, microbiology, botany, zoology, and human anatomy and physiology.

Physical Science 9-10: Designed for ninth and tenth graders, this course is taught in odd years (e.g. 2023-2024; two sections, approximately 25 students per class). Built on the Biblical framework for studying science which is developed in middle school, this course features units of study on the scientific method, electricity and magnetism, motion, forces, work and energy, sound and light waves, and introductory units in chemistry (matter, atomic theory, chemical reactions and solutions; acids, bases, and salts). The primary text for the course is Glencoe Physical Science (2012). Resources for the class include thoroughly prepared lesson plans and materials for hands-on lab activities and experiments.

Chemistry 11: All juniors are required to take this class (one section of approximately 25 students). The study of chemistry includes an overview of the Periodic Table, chemical reactions, stoichiometry, states of matter, and acids and bases. In addition to the daily class, a weekly lab period offers time for lab activities. The curriculum is Pearson Hall Chemistry (2012), and the teacher edition includes a wealth of lesson plans, supplemental activities and other resources.

Physics 12: Most seniors are required to take this class (20-25 students). The study of physics includes an overview of motion in one and two dimensions, vectors and scalars, dynamics, circular motion, work and energy, momentum, periodic motion, and light and reflection. In addition to the daily class, a weekly lab period offers time for lab activities. The curriculum is

Houghton Mifflin Harcourt Physics (2017), and the teacher edition includes a wealth of lesson plans, supplemental activities and other resources.

Math Curriculum

We have adopted Common Core standards for all math classes, and are in a process of transition to OpenUp for most of our high school math curriculum. Standards and course overviews are available using the following links:

- [Open Up 6-8 Mathematics](#)
- [Open Up High School Math](#)