Course offerings and class schedules change each year to meet the needs of our enrolled families. We use Apologia textbooks for most of our science courses. Sample textbook chapters (modules) are available at www.Apologia.com.

Monthly Classes Students attend one day a month (September through April) to do lots of FUN science experiments together. We provide you with a reading schedule and additional engaging activities students may do at home to further explore the concepts investigated during class.



Science ABCs (For 6 to 8 year olds)

We have tons of fun with teacher-developed activities and experiments beginning with every letter of the alphabet! Students are introduced to many fields of science: Biology, Chemistry, Physics, Earth Sciences, etc. This class runs on a three-year cycle, with new experiments every year. A student could enjoy this class three years in a row! This class meets once a month, 9 AM - noon. (This class does not use a textbook.)

Earth Sciences (For 8 to 12 year olds)

Students explore Astronomy, Geology, and Meteorology. We build a scale model of the Solar System that is ½ mile long! Students learn to identify moon phases, eclipses, and circumpolar constellations. Our Geology unit includes rock collecting, minerals, fossils, core sampling, and topographic maps. In our Weather unit, we learn about the water cycle, cloud formation, and what to do during storms. Very little writing is done in this class. It meets once a month, 9 AM - 2 PM.

Apologia textbook: <u>Exploring Creation with Astronomy</u> by Jeannie Fulbright (either 1st or 2nd Edition)

Master books: <u>The Geology Book</u> by Dr. John D. Morris; The Weather Book by Michael Oard





Zoology 3 (For 8 to 12 year olds)

Students learn about animals in jungles, deserts, forests, and farms. We examine predator/prey relationships, discover how animals hide using camouflage, identify animal tracks, dissect owl pellets, etc. Zoology 1 and 2 are not prerequisites for Zoology 3. However, it is helpful to read chapter 1 of Zoology 1 online for an introduction to classification. More writing is done in this class than in earlier classes. It meets once a month, 9 AM - 2 PM.

Apologia textbook and associated notebooking journal for: <u>Exploring Creation</u> with Zoology 3: Land Animals of the Sixth Day

Weekly Classes Each class meets two hours per week (August through May). We perform textbook activities as well as many additional experiments and do relevant projects. Compound and dissecting microscopes, preserved specimens, chemicals, etc. are provided. Students learn to use these correctly in a fully equipped science lab environment and enjoy live animals, too!



Chemistry and Physics (Generally for 6th or 7th graders) This course provides an excellent transition from elementary to middle school science. Students engage in exciting hands-on activities and experiments using the scientific method. They are introduced to study skills (writing lab summaries, organizing notes, taking tests, etc.) in preparation for future classes like General Science. Apologia textbook and associated notebooking journal for: Exploring Creation with Chemistry and Physics

General Science (Generally for 7th or 8th graders) Students explore a wide range of topics including the scientific method, astronomy, geology, meteorology, atoms, molecules, motion, forces, light, sound, simple machines, life science, oceanography, and ecology. This course is quite a step up from earlier classes, requiring a significant amount of reading. The textbook is written in a "conversational" tone, as if the author is chatting with the student. Apologia textbook, student notebook, and solutions/tests manual for the *NEW 3rd Edition* (3 book set) of Exploring Creation with General Science





Physical Science (Generally for 8th or 9th graders, taken the same year as Pre-Algebra) Students learn about the atmosphere, the hydrosphere, weather, the structure of the earth, Newton's Laws of motion, atomic structure, electricity, magnetism, and astrophysics. High school credit may be earned for this course if a student has a final average of at least 85%. Apologia textbook, solutions manual, and a separate test booklet for: Exploring Creation with Physical Science, 2nd Edition

Biology (Generally taken the same year as Algebra 1) Students explore the five-kingdom classification scheme, cellular biology, Mendelian genetics, dissection, and ecosystems. Long-term projects include an insect collection, tree leaf collection, and an owl pellet skeleton reconstruction. The textbook does not cover human anatomy and physiology, so the <u>Human Anatomy Coloring Book</u> by Margaret Matt is also used. Apologia textbook & solutions manual for: <u>Exploring Creation with Biology</u>, 2nd <u>Edition</u>





Chemistry (Prerequisite: Successful completion of Algebra 1)
Students learn significant figures, stoichiometry, acids and bases, atomic structure, Lewis structures, the gas laws, equilibrium, etc. Students do NOT need to buy their books. Great Oak Academy has Chemistry textbooks and solutions manuals for students to borrow. Apologia textbook and solutions manual for: Exploring Creation with Chemistry, 2nd Edition (not 3rd Edition)