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 <u>www.Apologia.com</u>.

**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.)

## Botany (For 8 to 12 year olds)

Students explore the process of classifying plants, the development of plants from seeds, the reproduction processes in plants, the way plants make their food, and how plants get their water and nutrients and distribute them throughout the body of the plant. We build lighted plant huts so students can bring home plants to grow and experiment with throughout the year. This class meets once a month, 9 AM - 2 PM. Apologia textbook and associated notebooking journal for <u>NEW 2<sup>nd</sup> Edition</u> - Exploring Creation with <u>Botany</u> by Jeannie Fulbright





## Anatomy (For 8 to 12 year olds)

This is an upper elementary level course that gives glory to God as students discover all that goes on in their bodies from their heads to the nails on their toes! Beginning with a brief history of medicine and a peek into cells and DNA, students investigate various aspects of their bodies including the skeleton, muscles, digestive system, respiratory system, genetics, and more! A good deal 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</u> <u>Creation with Human Anatomy and Physiology</u> by Jeannie Fulbright **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 6<sup>th</sup> 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 are used.

**General Science** (Generally for 7<sup>th</sup> graders) Students explore a wide range of topics including the history of science, the scientific method, astronomy, geology, paleontology, atoms, molecules, motion, simple machines, life science, oceanography, and ecology. This course is a step up from earlier classes, requiring a significant amount of reading. Apologia textbook, spiral student notebook, and solutions/tests manual for the <u>NEW 3<sup>rd</sup> Edition</u> (3 BOOK SET) of <u>Exploring Creation with General Science</u> are used.





Physical Science (Generally for 8<sup>th</sup> graders, the same year as Pre-Algebra) Students learn about states of matter, atomic structure, chemical reactions, Newton's Laws of motion, energy, electricity, magnetism, light, sound, the atmosphere, the hydrosphere, weather, the structure of the earth, and conducting research. Apologia textbook, spiral student notebook, and solutions/tests manual for the <u>NEW 3<sup>rd</sup> Edition</u> (3 BOOK SET) of Exploring Creation with Physical Science are used. (Available May 2020)

**Biology** (Generally the same year as Algebra 1) Students explore the classification of living things, cellular biology, Mendelian genetics, dissection, and ecosystems. Long-term projects include an insect collection, tree leaf collection, and an owl pellet skeleton reconstruction. Apologia textbook, spiral student notebook, & solutions/tests manual for the **NEW 3<sup>rd</sup> Edition** (3 BOOK SET) of Exploring Creation with Biology are used. (Available May 2020)





Marine Biology (Prerequisite: Completion of high school level Biology) Students learn about the oceans and how a multitude of marine organisms develop, interact with one another, and adapt to their environment. A significant number of dissections are performed. Students and their families can go on a field trip to explore the beach, salt marsh, and maritime forest. Apologia textbook, solutions/tests manual for the <u>NEW 2<sup>nd</sup></u> <u>Edition</u> of Exploring Creation with Marine Biology and The Marine Biology Coloring Book, 2<sup>nd</sup> Edition by Thomas M. Niesen are used.

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

