



DEERSTREAM

High School Chemistry at Deerstream

This course is a two semester (1 credit) introductory course to general chemistry for high school students. Topics covered include properties of matter and how it behaves and interacts, the structure of the atom, periodicity, chemical bonding, the nature of chemical reactions, stoichiometry, chemical equilibrium, states of matter and elementary thermodynamics. This course includes a laboratory component to reinforce concepts. Grading is based on tests, quizzes, and labs. Class time is devoted to lecture, problem solving, and laboratory exercises. Algebra 1 is strongly recommended as a prerequisite to this course.

Curriculum: *Discovering Design with Chemistry*

Schedule: Chemistry will meet on Wednesday mornings from 9:15 AM-12:15 PM at the Chapel Hill Bible Church from September 13-May 8 (minus scheduled breaks) for lecture, discussion, and labs.

Attendance and Pacing: Each class will cover a large amount of material, so attendance is crucial for student success. Barring exceptional circumstances, students who miss 5 or more sessions over the course of the year will not be assigned a final grade. Students who miss class are expected to make up missed work.

Student Expectations: Chemistry is a high school level class, and students must be able to function with maturity in their academics as well as in organization, class participation, and work completion. In class, they will be expected to attend carefully to instruction, participate actively, and take notes as needed. Students are expected to complete 4-5 hours of work at home throughout the week. They will be responsible to come to class prepared with background knowledge and completed work as assigned.

Honors Option: Students have the option to take this course as an honors course. This will involve additional and/or different assignments that require students to delve deeper into the material.

Parent Expectations: Parents agree to provide supervision as needed throughout the course. Some students will require more assistance than others. If needed, parents should be prepared to begin the year with a high level of involvement that may decrease as the year progresses.

Prerequisites and Placement: Students must be 14 by August 31 to take this course. Chemistry students should be reading and writing at a 9th grade level or higher or parents must be able and willing to arrange for appropriate accommodations. Students should be able to maintain an organized notebook and keep track of assignments. **Algebra 1 is strongly recommended as a prerequisite for this course.**

Grades and High School Credit: Biology is a one credit high school level class, so formal assessments will be conducted and students will receive grades that take into account homework, classwork, projects, quizzes, and tests.

Instructor: *Paula Wiese has been teaching physical science, biology, and chemistry in the co-op setting for eight years. She has a BS in Biology from the College of William & Mary as well as a doctorate in Pharmacy from the University of Illinois at Chicago. She practiced as a registered pharmacist in the ICU setting and in retail before surrendering to educate her children at home. Paula and her husband of thirty-three years have three children. Their older two graduated with a homeschool education and earned scholarships to cover four years of college tuition. Their oldest is now in an English PhD program. Their 11th grader is taking courses full time at Wake Tech Community College. Paula has a passion for inspiring students to discover scientific wonders from the atomic level up to the visible level. Her other interests include sewing, cooking, music, exploring nature, and blogging about homeschool adventures.*