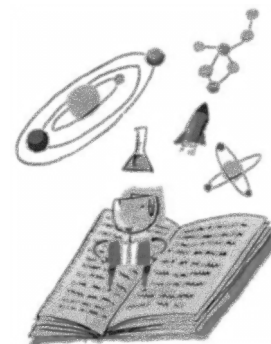




General Science for the Elementary Teacher
Abilene Christian University
Fall 2011



Chem 203
Lecture: MWF 9:00-9:50 AM

SC 175
Lab: W 1:00-2:50 PM
Or W 3:00 – 4:50

Dr. Autumn Sutherlin, Associate Professor of Biochemistry
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Office Hours: MWF 10:00 – 11:00, T 1:00-5:00

ACU Mission: "To educate students for Christian service and leadership throughout the world."

Department Mission: "To prepare students for careers in chemistry, biochemistry, chemical education, and health professions by displaying high professional standards and by modeling Christian values, leadership, and service."

Course Description: Presents the fundamental principles of chemistry, physics, geology, astronomy, meteorology, and biology on a practical basis for elementary teachers. The course includes experiments and demonstrations that are pertinent to the teaching of science at the elementary level.

Audience: Education majors only.

Required materials: There is no assigned textbook for this class, but we will use multiple electronic resources. All needed documents with appropriate links will be posted on the course blackboard that you can access through your ACU account. *Please bring a flash drive with you to class so that you take an electronic copy of notes with you as you leave class.* An approximate examination schedule is listed below and may be adjusted by the instructor.

Attendance Policy: Attendance in lecture and lab is VERY IMPORTANT. Attendance will be taken during each class meeting. To encourage regular attendance, your FINAL GRADE will be adjusted for absences according to the following scale:

0-3 absences	+1 %
3-6 absences	-1 %
6-8 absences	-2 %
more than 9 absences	Automatic drop from the class.

Course Objectives:

1. The student will acquire fundamental knowledge in the subject matter areas covered in elementary school science.
2. The student will participate in "hands-on" science activities that can be used in the elementary school classroom.
3. The student will learn how to use small groups in science activities to develop science processing skills.
4. The student will be able to locate and use a variety of resources to teach science in the elementary school.
5. The students will be able to apply the scientific process in discovering the solution to certain scientific problems.
6. The student will gain experience in teaching science through "guided discovery" techniques.
7. The student will gain a greater appreciation of God's creation – the physical world.

Course Requirements:

Homework: Homework assignments will be made periodically and will be due on the assigned date regardless of whether you attend class on the date the assignment is given or the date the assignment is due. They will be accepted late (one class period after the due date) for a maximum of 80% of the points possible.

Laboratory: Each enrolled student is enrolled in the 9 AM MWF lecture section and is also enrolled in either the 1:00-2:50 PM or 3:00-4:50 PM Wednesday laboratory sections. During the laboratory session students will conduct assigned experiments that support the content being taught in lecture. An assigned laboratory report form will be submitted at the conclusion of each lab session. If the student misses a laboratory because of an official school trip or a verifiable illness, he/she has one week to make up the lab. The required make up work will be a 4-page paper written on a science topic assigned by the instructor. A grade of zero will be given for a lab that is not made up within a week of the absence.

Exams: Five major examinations will be given at approximately three-week intervals. The fifth examination will be given during the regularly scheduled Final Exam time. **In general make-up exams are not given.** If you are extremely ill on the scheduled date of an examination, you must contact the instructor on the date of the missed exam to explain your absence and be prepared to submit a written statement from a physician or nurse documenting your illness. If you will miss a scheduled exam for a school-sponsored trip, you must bring the required signed dean's notice one week before the anticipated absence as per ACU policies. If you follow these guidelines, arrangements will be made for you to take the missed exam. If you do not follow these guidelines you will be assigned a grade of "0" for the exam.

Grading:**Summary of Activities:**

5 Major Exams	70%
Laboratory Work	20%
Homework &	
In Class Assignments	<u>10%</u>
Total	100%

Grade Distribution:

A	90 – 100 %
B	80 – 89.5%
C	70 – 79.5%
D	60 – 69.5%
F	59.5% and below

Academic Integrity: Violations of academic integrity and other forms of cheating, as defined in ACU's Academic Integrity Policy, involve the intention to deceive or mislead or misrepresent, and therefore are a form of lying and represent actions contrary to the behavioral norms that flow from the nature of God. Violations will be addressed as described in the Policy. While the university enforces the Policy, the most powerful motive for integrity and truthfulness comes from one's desire to imitate God's nature in our lives. Every member of the faculty, staff and student body is responsible for protecting the integrity of learning, scholarship and research. The full Policy is available for review at the Provost's office web site (<http://www.acu.edu/campusoffices/provost>) and the following offices: provost, college deans, dean of campus life, director of student judicial affairs, director of residential life education and academic departments.

The first instance of cheating will result in a 0 for the assignment. A second incident will result in an F in the course.

Dress Code: Lecture: Students should conform to the dress code as outlined in the Student Handbook. Students wearing inappropriate attire will be asked to leave class.
Lab: Students should wear long pants or a long skirt to protect their legs and shoes that completely cover their feet. (No sandals.)

Tentative Dates for the Major Examinations

Fri.	2/10/2012	Light Energy and Color, Sound Energy
Fri.	2/24/2012	Heat Energy and Simple Machines
Fri.	3/23/2012	Magnetic Interactions and Electrical Energy
Fri.	4/20/2012	Astronomy, Earth Science and Weather
Wed.	5/9/2012 8 AM	Basic Chemistry