

CHEMISTRY 134, GENERAL CHEMISTRY II – SPRING 2012

SYLLABUS AND COURSE POLICIES

Section: 134-03, T-Th 9:30-10:50 am, Foster Science Room 117

Instructor: Dr. Perry Reeves

• email: reevesp@acu.edu

• Campus: Foster Science, SC-256B, 674-2003

• Home: 676-0875 (before 9 pm)

Office hours:

Mon

Tue

Wed

Thu

Fri

2 - 4

8 - 9, 2 - 4

10 - 11

8 - 9

10 - 11

Prerequisites: Chem 133 and 131 with a grade of "C" or higher, concurrent enrollment in Chemistry 132 (General Chemistry Lab II). You must pass Chem 134 and Chem 132 with a grade of "C" or higher before enrolling in Chem 221/223 (Organic Chemistry).

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

Dept. 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: The goals of this course are to help the student 1) to understand and describe matter's structure and behavior and 2) to develop analytical and critical thinking skills, including the ability to solve both numerical and conceptual problems.

Required Materials: •K.W. Whitten, R.E. Davis, M.L. Peck, and G.G. Stanley, *Chemistry*, 9th ed., bundled with OWL and eBook, Brooks/Cole, Belmont, California (2010). (Bundle ISBN 0-495-78498-2)
•A scientific calculator

Grading: 70% * 5 Major Exams – The four highest exam scores will be counted as 15% of the course average and the lowest exam score will be counted as 10% in computing the course average. In general, quizzes and exams may not be taken early or made up; you will receive a grade of "0" for a missed test.

10% * Homework and Quizzes – There will be regular homework and there may be in-class quizzes. For homework we will use the Online Web-based Learning (OWL) system bundled with your text. If you bought your text without OWL, you will need to purchase a copy of OWL online at owl.cengage.com. Homework will not be accepted late and quizzes cannot be "made-up" **but** the two lowest scores (homework & quizzes combined) will be dropped.

20% * Final Exam – The final will be comprehensive and cannot be dropped.

•A 10-point scale will be used (A = 90-100, B = 80-89, C = 70-79, D = 60-69).

Academic Honesty is the expected behavior. A student found copying from another student's test or quiz or found using notes either hard copy or programmed into a calculator may be dropped from the class with an "F". Homework is due on the assigned due date regardless of class attendance. No late homework will be accepted. In general, quizzes and exams may not be taken early or made up; you will receive a grade of "0" for a missed test. This means that you should not take unnecessary absences, but "save" the dropped grades for true emergencies (extreme illness, school related trips or absolutely necessary personal absences)

Class Format: The majority of class will be spent in lecture and demonstrations. Occasionally time may be spent working problem sets independently or in a group. Class discussion and questions are

always welcomed, but no class participation grade will be given. Students are expected to take accurate notes, to read the assigned materials and to complete the suggested problems and are encouraged to ask for clarification on any material covered in class. The laboratory class associated with this course is a separate course. Students are encouraged and welcomed to visit the instructor during office hours.

Attendance: A sign-in roll will be circulated each class meeting. **Students with 6 or more absences** (excused & unexcused combined) may be dropped from the course by the instructor. Absences will be excused for illness with accompanying doctor's note, death in the family, school sanctioned trips, or other reasons approved by the instructor. In general, excused absences are those which are "legitimately unavoidable". For a school-sponsored trip, please bring the Dean's signed form a week before the trip as per ACU policy. If you follow the ACU policy of notification, we will make arrangements for making up missed work before your absence. If you are extremely ill or have another emergency and cannot attend class, please call or e-mail ASAP to let me know about your absence.

The study of science is the study of God's creation. Every calculation and observation is a glimpse into the creative mind of the Master of the universe. It is with awe that we approach any study of the Almighty and His works and our response is worship.

Course Content: The following schedule may be adjusted by the instructor. Study guides with assigned problems will be distributed for each chapter and quiz dates will be announced in class. You are responsible for the material covered in class when you are absent and so should contact the instructor immediately to get any missed materials.

Absence from Test. It is expected that students will take each test at the assigned time. If you are not present for the exam, the following scenarios must be followed:

In case of illness. If you are ill and unable to take the exam, **you must contact (by telephone or email) the professor the day of the exam to explain your absence.** If you can verify your illness, a date for taking the test will be arranged. Generally, the exam must be taken BEFORE the next class period (except in case of an extended illness).

In case of an unexpected event such as over-sleeping, car accident, etc. If you experience an unexpected event on the way to the exam, you must contact (by telephone or email) the professor before 12:00 AM on the day of the exam. **You will be allowed to take the exam that afternoon!**

Failure to follow these procedures will mean that the student will NOT be allowed to take the exam and a "0" will be recorded for that exam.

Text Chapter	Unit Topics/Chapter Topics	Planned Exam Date
	I. Liquids, Solids, and Solutions	Thurs., Feb 2
13	Liquids and Solids	
14	Solutions	
	II. Thermodynamics and Kinetics	Tues., Feb 28
15	Chemical Thermodynamics	
16	Chemical Kinetics	
	III. Equilibrium I	Tues., Mar 27
17	Chemical Equilibrium	
18	Ionic Equilibria I: Acids and Bases	
	IV. Equilibrium II	Thurs., April 19
19	Ionic Equilibria II: Buffers and Titration Curves	
20	Ionic Equilibria III: The Solubility Product Principle	
	V. Electrochemistry	Thurs., May 3
21	Electrochemistry	
	Final Exam (Comprehensive)	ACS standardized exam TBA