

Course Syllabus
General Chemistry II - CHM 139.01 & 139.02 [CHEM 1312]
Department of Chemistry, College of Arts and Sciences
Spring 2008

Location of Class Meeting: C139.01 (8:00-8:50 MWF, CFS-121)
C139.02 (10:00-10:50 MWF, CFS-103)

Instructor: Dr. Paul A. Loeffler

Instructor Contact Information:

a. chm_pal@shsu.edu b. Room: CFS-304

Office Hours (To be announced when the professor's assignment is finalized.)
Mon. – Thur. 11:00-11:50, and Mon 1:00 – 1:50

Help Session: (To be announced.) Tentatively, Mon., 3:00 in CFS-121

Course Description

- This is the second semester of general chemistry for science majors.
- Prerequisite course(s): mastery of high school algebra; CHM 138 and MTH 170 with a C or better
- Approach/method of instruction: lecture to provide guidance and direction, web assisted lectures to provide focused activities but primarily individual study to accomplish the course objectives
- Types of exams: The exams will consist of five parts: vocabulary (define a term), nomenclature (provide a formula or chemical name), reactions (predict the products of reactions and balance an equation), short answer or multiple choice (facile assessment of concepts) and long answer, word problems (problems like those in the text).

Course Objectives

- The student will gain factual knowledge (terminology, classifications, methods, trends)
- The student will learn fundamental principles, generalizations and theories.
- The student will learn to apply course material
(to improve thinking, problem solving and decision making)

Required Textbook (your new, soon-to-be, intimate friend)

- Chemistry: *The Central Science by Brown*, by LeMay and Bursten Tenth Ed., Prentice Hall

Required Supplies

- A TI-30 series calculator, scientific notation and exponentiation/lograthims required. Alphanumeric calculators are not allowed during exams; the TI-30 is the only calculator to be used.
- A three-ring note book for lecture outlines, web assignments and notes.
- A bound notebook for worked homework problems.

Attendance Policy

An accurate attendance record will be maintained for the semester. Five percent of the course grade will be associated with attendance. If a student has three or fewer absences then he/she will receive an "A grade" for the five percent toward the course grade (the maximum.) Six absences or more will correspond to an "F grade" or zero credit for attendance.

Assignments

Many homework will be posted on Blackboard. It is the student's responsibility to complete these assignments to his or her satisfaction. Blackboard homework will be graded on-line for immediate feedback. Other assignments relating to the test will be made on Blackboard or during class. No participation points are associated with these assignments, as value is directly related to performance points acquired on quizzes and examinations. Note: If you can't work it at home then you won't be able to work it on an exam! "Quizzes", class work, and homework constitute ten percent of the course grade. These exercises are sampled for grading as a representation of student effort and ability. Generally 50% correct is required for a grade of F or higher.

Exams

Progress in the course will be reported by three midterm exams and a comprehensive final exam.

Grading Plan

- The final course grade's weighted distribution will be calculated and the grading scale that will be used is as follows:

Attendance:	5%
Homework/Quizzes	10%
Midterm Exams:	68%
Comprehensive Final Exam:	17%
- Failure to complete course requirements will result in a course grade of "F."
- The grading scale for the course employs a "curved" scale using the familiar "GPA" scale as a more precise numeric replacement for a letter grade such as A+ through F-. Note that the scale is truncated at each end with equal graduations for each corresponding letter. This results in a grade distribution for the course grade as follows:
 4.00-4.99 = A; 3.00-3.99 = B; 2.00-2.99 = C; 1.00-1.99 = D; 0.01-0.99 = F; 0.0 = F-
 The grade distribution and cut-offs are determined by assigning the mean score for the top 10% of the class as a middle "A grade" or 4.50 and half of this mean score as a minimally passing grade of D- or 1.00. Individual student scores are determined by interpolation or extrapolation using these two reference points. No grades exist beyond the range of scaled scores between 4.99 (A+) and 0.00 (F-.) Please anticipate that examination performance in the 40% range will result in a 0.0 grade, an F- grade which means a "hopeless" failure in performance.
 Assessment of performance and of student progress during the semester is best acquired with a simply average of examination grades or a weighted average of estimates on all components. Exam performance constitutes 85% of the course grade!
- There are no make-up exams. The comprehensive portion of the Final Exam will count as the make-up exam and its grade will be substituted for the 0.0 score automatically recorded for the missed exam. Please note this reference is to only one missed exam!

Academic Dishonesty

Any answer that is not your own or a product of your own thinking is an inappropriate answer and it is academically dishonest to represent it as your own. It is like evaluating stealing; if it isn't yours then it doesn't belong to you, so don't take it and don't use it.

Any response that has been changed to acquire a "higher grade" is also an inappropriate answer. Presenting an inappropriate or a corrected answer is academically dishonest. It is like evaluating lying; if it is not represented accurately and truthfully, then it is a lie.

Students who bring materials or items to class that are disallowed during examination periods will have displayed academically dishonest behavior. Examples include bringing "cheat sheets" and

“extra notes” or alphanumeric calculators and text-messaging-capable cellular phones to class. If it doesn't belong; don't bring it to class.

It is expected that if a student acts in a manner that is not above reproach, then he or she shall bring this to the attention of the instructor. If a student has knowledge of a fellow classmate whose behavior is inappropriate then the student shall bring this to the attention of the instructor.

Students who have been academically dishonest will receive an "F" on the referenced graded material if self-disclosure occurred or will receive an "F" as a course grade and be subject to university disciplinary action if the instructor or other students discover and disclose the inexcusable breach of academic integrity.

Study Tips

The exams will consist of five parts: vocabulary (define a term), nomenclature (provide a formula or chemical name), reactions (predict the products of reactions and balance an equation), short answer or multiple choice (facile assessment of concepts) and long answer (problems like those in the text).

Read your textbook, not just once but several times. Read a chapter section one time smoothly for overview and then return for a slow, detailed analysis. Read interactively, engaging with the book by making margin notes and redrawing figures and graphs. Find words in the text that you do not know and learn their definitions; keep a glossary of these terms for constant review. Learn the symbols and formulas as promptly as possible; review them frequently. Without these words with their rich meanings and the symbols with their detailed information, you cannot think Chemistry. If you can't think Chemistry, you can't understand Chemistry and you can't do Chemistry. It's that simple; a false start here means you fail! Learn to read like a scientist.

Learn to recognize classes of substance reactants and practice predicting chemical interactions. Translate formulas into names and use names to generate appropriate reaction products and these product names to create formula equations then balanced chemical equations. First you must know the types of substance reactions; learn these classifications. Know when to deal with chemical change on the atomic, ionic and molecular level. Know how to classify these species reactions. This is a big change from CHM 138. For additional help go to your text, other freshman texts located in the library or to study guides and, if available, to the publisher's on-line practice material to find practice multiple choice exercises and open response questions. Practice, practice practice.

Work problems! Start with the in-chapter sample exercises and practice exercises. Master these first as the corresponding concepts are being covered in the lecture. After mastering these, work the on-line Blackboard homework. Then, work all your end-of-chapter homework problems in a workbook and keep this record for your review. Work your problems slowly and systematically. Never expect to "recall" the answer. Approach a problem as a journey not a destination and enjoy the trip! Set up each problem in an orderly manner displaying discipline and patience. Remember, it is important to work ALL of the in-chapter sample problems and practice exercises before addressing the end-of-chapter problems. Never work a problem with the assistance of the textbook or your notes; you are being academically dishonest. And the crime you commit is self-inflicted. You only cheat yourself!

Schedule regular study periods exclusively which are two hours each day for directed study and concentrated practice in Chemistry. Arrange for additional study times during the weekends preceding each exam. Keep your understanding and mastery of the course material aligned with the lecture calendar; do not get behind! This is mainly a challenge of time-on-task.