Chemistry 141 – Course Syllabus
Fall 2005
Oxford College of Emory University

Class Meets MWF, 11:45-12:35, Room 223 Pierce

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Office Hours: Tuesday (12:00-1:00), Thursday (4:00-5:00), or by appointment

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What is a Liberal Arts Education?

An interdisciplinary education including courses in humanities, natural sciences, and social sciences.

Why Pursue a Liberal Arts Education?

"The purpose of a liberal arts education is to open the mind, to correct it, to refine it, to enable it to know, and to digest, master, rule, and use its knowledge, to give it power over its own faculties, application, flexibility, method, critical exactness, sagacity, resource, address, and eloquent expression…"

-John Henry Newman

Course Description

Chemistry 141 is the first course in a two-semester sequence for General Chemistry. These classes are prerequisites for students majoring in chemistry as well as other sciences such as physics, biology, and engineering. They are also required for students who plan on attending medical school, dental school, veterinary school, pharmacy school, or other allied health programs. The topics covered in CHEM 141 include atomic and molecular structure, chemical bonding, stoichiometry, gases, liquids, solids, and properties of solutions.

Course Goals

The general goal of CHEM 141 is to provide an introduction to the study of matter and the various changes it can undergo. In addition, this course will aim to develop the students' analytical, critical thinking, and problem solving skills.

Materials and Resources

Textbook: Chemistry, 8th edition, Raymond Chang
Study guide and student solutions manual (accompaniment to Chang text)
Laboratory manual (sold by the Chemistry Department)
Carbon-copy lab notebook
Safety Glasses
Learnlink Class Conference (Oxford College→Class Conferences→
Oxford Chemistry→141 Eichler)

Problem Sets

Problem sets will be posted on Learnlink as we progress through the semester. They will not be collected for a grade, however, you are strongly encouraged to do these exercises as we complete each chapter. Working on these in small groups is permitted and highly recommended.

Attendance

Your attendance at lectures (or lack thereof) will not be included in the calculation of your grade for the lecture portion of CHEM 141. However, it is noted that previous studies have shown that increased attendance tends to result in better student performance. It is also noted that 3 consecutive absences by a student will be reported to the Office of Academic Affairs.

Grading

Your lecture grade will be determined by your performance on 5 exams. Each exam is worth 100 points.

465-500 = A	(93-100%)
450-464 = A-	(90-92%)
435-449 = B+	(87-89%)
415-434 = B	(83-86%)
400-414 = B-	(80-82%)
385-399 = C+	(77-79%)
365-384 = C	(73-76%)
350-364 = C-	(70-72%)
335-349 = D+	(67-69%)
300-334 = D	(60-66%)
Below 300 = F	

The final exam will consist of 5 parts. Parts I-IV will correlate, respectively, to each mid-term exam and will be optional. Part V will cover any material discussed after Exam IV and will be required. Mid-term exam grades can be replaced with the grade earned on the corresponding part of the final exam.

Your grade from the lab component of the course will be combined with your grade from the lecture component to give your overall grade for CHEM 141. Your grade in lab will be compared to the average grade from your lab section. This is done to adjust for the different grading styles that might be used in the different lab sections. Your lab grade, in comparison to the average in your section, will impact your final grade in CHEM 141 in the following manner:

3.0 pts. higher than the average of your lab section, or more:	+ 3 pts. to lecture avg.
1.1 pts. higher than the avg. of your lab to 2.9 points higher:	+ 2 pts. to lecture avg.
1.0 pts. higher than the avg. of your lab to 8.0 point lower:	+ 1 pts. to lecture avg.
8.1 pts. lower than the avg. of your lab to 9.9 points lower:	- 1 pts. to lecture avg.
10.0 pts. lower than the avg. of your lab to 11.9 points lower:	- 2 pts. to lecture avg.
12.0 pts. lower than the avg. of your lab to 13.9 points lower:	- 3 pts. to lecture avg.
14.0 pts. lower than the avg. of your lab to 15.9 points lower:	- 4 pts. to lecture avg.
16.0 pts. lower than the avg. of your lab, or more:	- 5 pts. to lecture avg.

Laboratory

Your lab instructor will explain the laboratory procedures and grading system to you. All efforts will be made to make sure there is a correlation between what is covered in lecture and what is being done in the laboratory.

How to Do Well in CHEM 141

-show up to lecture
-read the chapter from Chang that is going to be discussed in lecture BEFORE going to lecture
-review your notes within 30 minutes to 1 hour after you have left lecture
-re-read the chapter from Chang, or at least the parts that were not well understood the first time
-do the recommended problem sets and then check your answers
-gather in small groups and discuss topics from lecture or the problem sets
-seek further help from your classmates, the chemistry SI program, or your instructor when necessary

Honor Code

It is assumed that all Oxford College students will adhere to the highest standards of academic honesty and will uphold the Oxford College Honor Code.

Specific things to keep in mind for CHEM 141:

-you are expected to do your own work when taking an exam
-only a non-programmable calculator, pencil, or other pre-approved documents are permitted in the exam
-no cell phones are allowed in class during an exam period
-all work handed in for lab must be done as an individual unless otherwise stated by the lab instructor

It is my duty, according to the Honor Code, to report any incidences of misconduct to the Honor Court. Anyone who is found guilty of violating the Honor Code will receive a grade of F for the course. It is strongly recommended that each student carefully read through the Oxford College Student Honor Code.

Tentative Schedule:

Week 1: Course introduction, Begin Chapter 1
Week 2: Finish Chapter 1
Week 3: Chapter 2
Exam I: September 19
Week 4: Chapter 3
Week 5: Chapter 3 and 4
Week 6: Chapter 4
Exam II: October 7
Week 7: Chapter 5
Week 8: Chapter 5 and 6
Week 9: Chapter 6

Exam III: October 31
Week 10: Chapter 7
Week 11: Chapter 7 and 8
Week 12: Chapter 9
Exam IV: November 21
Week 14: Chapter 10
Week 15: Chapter 11
Week 16: Review
Final Exam: December 16 (2:00-5:00 PM, Pierce 223)