

Chemistry 100 – Course Syllabus
Fall 2005
Oxford College of Emory University

Class Meets MWF, 10:40-11:30, Room 223 Pierce

Instructor: Jack F. Eichler, PhD

Office: 202 Pierce

Office Phone: (770) 784-8340

Email: jack.eichler@emory.edu

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

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 100 is the first course in a two-semester sequence for General Chemistry. These classes fulfill the introductory chemistry requirement for pre-nursing students. They can also be taken by liberal arts majors to complete their laboratory science requirement. The topics covered in CHEM 100 include matter, energy, gases, solutions, and acids/base chemistry. If you have taken and passed CHEM 141, you cannot receive credit for CHEM 100.

Course Goals

The general goal of CHEM 100 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: Introduction to General, Organic, and Biochemistry, 7th edition,
Bettelheim/Brown/March

Study guide and student solutions manual (accompaniment to Bettelheim text)

Laboratory manual (sold by the Chemistry Department)

Carbon-copy lab notebook

Safety Glasses

Learnlink Class Conference (Oxford College→Class Conferences→
Oxford Chemistry→100 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 100. 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 4 exams and one research proposal. Each 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 4 parts. Parts I-IV will correlate, respectively, to each mid-term exam. Mid-term exam grades can be replaced with the grade earned on the corresponding part of the final exam.

More detailed information describing the requirements for the research proposal will be given to you at a later time.

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 100. The lecture grade will comprise 80% of your total grade and the lab grade will comprise 20%.

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 100

- show up to lecture
- read the chapter from Bettelheim 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 Bettelheim, 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 100:

- you are expected to do your own work when taking an exam
- only a non-programmable calculator, pencil, and 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: Chapter 1 and 2

Week 3: Chapter 2

Exam I: September 16

Week 4: Chapter 3

Week 5: Chapter 4

Exam II: October 3

Week 6: Chapter 5

Week 7: Chapter 5

Week 8: Chapter 6

Exam III: October 24

Week 9: Chapter 7

Week 10: Chapter 7 and 8

Week 11: Chapter 8

Exam IV: November 11

Week 12: Research Proposals

Week 13: Research Proposals

Week 14: Research Proposals

Written Research Proposals Due November 30

Week 15: Research Proposal Presentations

Week 16: Review

Final Exam: December 19 (9:00 AM-12:00 PM, Pierce 223)