

Chemistry 100 TPSL – Course Syllabus
Fall 2006
Oxford College of Emory University

Class Meets MWF, 12:50-1:40 pm, Room 201 Pierce

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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, social sciences, and physical education

Why Pursue a Liberal Arts Education?

This course aims to use chemistry as a springboard into a liberal arts education by helping YOU develop your human capacities, that is the “qualities, capacities, domains, and/or dispositions native to us as human beings that allow education to occur in the first place.”* Marshall Gregory, Ice Professor of English, Liberal Education, and Pedagogy at Butler University, breaks down these capacities into eight categories:

- 1) Language
- 2) Reason
- 3) Imagination
- 4) Introspection
- 5) Aesthetic Responsiveness
- 6) Moral and Ethical Deliberation
- 7) Sociability
- 8) Physicality

One may see the goal of a liberal arts education as the advanced development of all of these human capacities. By doing so, YOU will be better equipped to live an “autonomous, socially responsible, intellectually perspicuous, and morally defensible life.”*

*Marshall Gregory, “Forgetting, Learning, and Living: A Pedagogical Theory of How Education Makes a Difference Even Though We Forget Most of What We Learn” 2006.

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 non-science majors to complete their laboratory science general education requirement. The topics covered in CHEM 100 include matter, energy, gases, solutions, and acids/base chemistry (this course is equivalent to CHEM 100Z). If you have taken and passed CHEM 100Z or 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 and to demonstrate how/why the study of chemistry is relevant to YOUR life. In the course of completing this goal, the various concepts of chemistry that are discussed will aid in developing your human capacities and contribute to your liberal arts education. *In the process of completing a water quality study for the city of Covington, students should more clearly see the importance and utility of the basic chemistry concepts discussed in this course, and be better able to accomplish the above goals.*

Materials and Resources

- Textbook: General, Organic, and Biochemistry, 5th edition, Denniston/Topping/Caret
- Online Problem Sets:
<http://highered.mcgraw-hill.com/classware/infoCenter.do?isbn=0072828471>
- Student study guide and solutions manual (accompaniment to Denniston text)
- Carbon-copy lab notebook
- Safety Glasses
- Learnlink Class Conference (Oxford College→Class Conferences→Oxford Chemistry→100Z Eichler)

Attendance

Since case studies and other group activities will often be completed during in class, attendance is required. You will be allowed to miss three class periods during the course of the semester, regardless of the reason for absence (late arrival to class is considered an absence). However, every absence after the third will result in the loss of 3 points from your final grade. For example:

You end up with a 91/A- in the course. However, you missed 5 class periods during the semester. Since you had 2 absences over the limit, you will lose 6 points from your grade, resulting in an 85/B.

Grading

Your grade will be broken down into the following categories:

Problem sets	5%
Exam 1 (chapters 1 and 2)	10%
Exam 2 (chapters 3 and 4)	10%
Exam 3 (chapters 5 and 6)	10%
Exam 4 (chapters 7 and 8)	10%
Case Studies/Workshops	15%
Final Exam (cumulative)	20%*
Laboratory Exercises	20%**

*If your final exam grade is higher, it can be used to replace any of your midterm exam grades.

**The description of your laboratory grade will be included in your lab syllabus.

Problem sets: These will be assigned on the Learnlink Class Conference and will be completed on the ARIS online class content system. You will receive a login/password to access this system upon purchase of the Denniston textbook. If you purchase a used version of this text, you will need to consult the instructor about obtaining a login/password. Problem sets will be graded on a pass-fail basis. If the problem sets are completed by the posted due date, a grade of 100 will be assigned. If the problem sets are not completed by the posted due date, you will receive a grade of 0. It is noted that some of the problem sets will be based on assigned readings.

Case Studies/Workshops

Grades for case studies and workshops will be based on short, written reports (requirements for these may vary; details of these assignments will be given at the time of the assignment).

Note: Your lowest case study/workshop grade will be dropped. If you miss one assignment due to absence, that grade will be dropped. Additional missed case studies/workshops due to absence CANNOT be made up and will result in a grade of 0 (if you miss class during a case study or workshop, you cannot hand in a written report).

Letter grades will be assigned according as follows:

A	(93-100%)
A-	(90-92%)
B+	(87-89%)
B	(83-86%)
B-	(80-82%)
C+	(77-79%)
C	(73-76%)
C-	(70-72%)
D+	(67-69%)
D	(60-66%)

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
- any idea or thought used in a laboratory assignment must be properly referenced
- even though you may collect d in groups, you are not to collaborate with other students when completing lab report sheets/formal summaries

It is my duty, according to the Honor Code, to report any incidences of misconduct to the Honor Council. Anyone who is found guilty of violating the Honor Code may 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

Week 4: Chapter 3

Week 5: Chapter 3

Week 6: Chapter 3 and 4

Week 7: Chapter 4

Exam II

Week 8: Chapter 5

Week 9: Chapter 5 and 6

Week 10: Chapter 6

Exam III

Week 11: Chapter 7

Week 12: Chapter 7

Week 13: Thanksgiving

Week 14: Chapter 8

Week 15: Chapter 8

Exam IV

Week 16: Review

Final Exam: Thursday, December 14 (2:00 PM-5:00 PM)