

SOUTHERN METHODIST UNIVERSITY

Course Information

Course: CHEM 1301
Course Title: CHEMISTRY FOR LIBERAL ARTS
Class Number: 1143
Section: 002
Credit Hours: 3
Semester: May Term 2014

Instructor: Helen Babbili

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Office hours: M - F (1:00 PM – 2:00 PM)

Class Meeting Times and Locations

M – F: 9:00 AM – 1:00 PM; Fondren Science Building Room 0133 (Lecture) Room 25 (lab)

Required Materials:

1. Text Book: *Chemistry in Context: Applying Chemistry to Society* by Middlecamp, Mury, Anderson, Bentley, Cann, Ellis, and Purvis-Roberts 8th Edition, McGraw Hill
2. Lab Manual: *Chemistry in Context Laboratory Manual* 8th Edition, McGraw Hill
3. Calculator: A simple scientific calculator will be sufficient
4. Safety glasses (will be provided)

Course Overview:

This course is an introductory course in chemistry specifically designed for non-science majors. The course is intended to develop a scientific way of critical and analytical thinking, and to help students understand how chemistry is relevant to their daily lives and the world they live in. The course reflects a variety of current societal and technological issues and the chemistry principles embedded in them. Environmental pollution, Global warming, Energy, Acid rain, Water we drink, Nutrition are examples of such issues.

Student Learning Outcomes:

The main Student learning outcomes of this course are:

- Students will be able to demonstrate basic facility with the methods and approaches of scientific inquiry and problem solving.
- Students will be able to explain how the concepts and findings of science or technology in general or of chemistry in particular shape our world.
- Students will be able to apply chemical principles with their application to the real world and to explore the many ways in which chemistry affects their lives.
- Students will be able to acquaint themselves with scientific methods and scientific understanding, so that they will be able to read about science and technology with some degree of critical judgment. This is especially important because many of the scientific problems discussed are complex and controversial.
- Students will be able to use the chemical knowledge and critical thinking ability to understand the risk perception, to better assess the risks and benefits in choices that they, as informed citizens, will be making.

- Students will be able to describe that through ‘Green Chemistry’ better, safer, and more environmentally friendly processes and products are being or can be developed.
- Students will do experiments in the laboratory that are designed to illustrate the chemical principles learned in the lecture class with broader societal implications. Hands-on experience with experimentation, data collection, analyzing the data, and drawing conclusions will help students describe the scientific method and the role that science plays in addressing societal issues. All experiments include a set of questions that will allow students summarize and consolidate what they have learned and/or to extend the results to new situations.

Disability Accommodations:

Disability Accommodations: Students needing academic accommodations for a disability must first be registered with Disability Accommodations & Success Strategies (DASS) to verify the disability and to establish eligibility for accommodations. Students may call 214-768-1470 or visit <http://www.smu.edu/alec/dass.asp> to begin the process. Once registered, students should then schedule an appointment with the professor to make appropriate arrangements. (See University Policy No. 2.4)

Attendance Policy:

Students are expected to attend all lecture classes. There is a high correlation between good grades and regular class attendance. Lab attendance is mandatory. You must have a grade for the lab portion of the course in order to receive an overall course grade. An absence for a lab will result in a zero. Make up labs will be offered only to students with an excused absence.

Last Day to Drop a Course: Tuesday, May 27, 2014

Religious Observances: Religiously observant students wishing to be absent on a religious holiday that require missing class should notify their professor at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9)

Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity will be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the professor prior to any missed scheduled examination or other missed assignment for making up the work. (See University Undergraduate Catalogue)

Other excused absences such as personal family crises, etc. must be confirmed by the Office of the Dean of Students.

Academic Integrity:

As with all courses at Southern Methodist University, the Honor System is endorsed in this course. If you are in violation of the Honor Code, you will be punished accordingly as mentioned in the Student Code of Conduct.

Date	Lecture Topic	Laboratory	Exams
15-May	CH 1		
16-May	CH 2		
19-May	CH 3	Exp 1: What's in a Breath?	
20-May	CH 3 / CH 4	Exp 8: Molecular Shapes	
21-May	CH 4 / CH 5		Exam 1 (1 - 3)
22-May	CH 5 / CH 6	Exp 10: Molar Ratios in Chemical Reactions	
23-May	CH 6 / CH 7		
26-May	HOLIDAY		
27-May	CH 8	Exp 19: Reactions of Acids with common Substances	Exam 2 (CH 4 - 7)
28-May	CH 8 / CH 10		
29-May	CH 11		
30-May		Exp 30: Fats in Foods (potato chips)	Final Exam (comprehensive)

- Lecture sessions meet for 4 hours (with breaks) unless a lab or lecture exam is scheduled on the same day.
- When a lab is scheduled, lecture and lab meet for 2 hours each (lab first followed by lecture)
- Exams 1 and 2 are 1-hour long.
- Final exam is 2-hour long.

Topics and Practice Problems / Homework:

Topics covered for each chapter and practice/ homework problems will be posted under course documents on Blackboard. The homework will not be collected or graded. However, doing homework will help students to do well in this course.

CLASSROOM POLICIES:

- Students are expected to attend all lecture and laboratory sessions.
- Silence cell phones or anything else that might disturb the class. Disruptive students will be asked to leave.
- The “Code of Student Conduct” as outlined in the college catalog concerning classroom behavior and cheating will be strictly enforced.
- Grades are considered final at the end of the class period the papers are returned. The Instructor is not responsible for papers not picked up.
- No calculators will be provided or shared on the exam day.
- If you feel your exam is being copied please ask to be moved. Should testing anomalies occur, all parties will receive a zero (0) on that exam.

Lab Policies and Lab Reports

1. You are expected to take good care of all the equipment/materials provided to you in the lab. It is your responsibility to keep the work area clean. Failure to follow the rules in the lab may result in expelling a student from lab.
2. Although you work with a partner in the lab, each student must turn in an individual lab report.

3. No Late work will be accepted

Lab reports consist of the following:

1. Data sheets: All the experiments have data tables or blank spaces for you to record data and/or observations. Enter your data directly on these pages and hand them in as part of your lab report. **Show calculations where required.**
2. Answers to the questions at the end of the experiment.

Evaluation and Grading:

Two one-hour lecture exams (Exam 1 and 2)	40%
Final Exam (2 hours, comprehensive)	40%
<u>Laboratory</u>	<u>20%</u>
Total	100%

The grading scale used to assign your final grade will be:

93% - 100%	A
90% - 92%	A-
89% - 87%	B+
86% - 83%	B
82% - 80%	B-
79% - 77%	C+
76% - 73%	C
72% - 70%	C
69% - 67%	D+
66% - 63%	D
62% - 60%	D-
Below 60%	F

Missed Exams:

- If you miss an exam for a written, excused reason, a make-up exam will be given. The make-up may be written or oral, or a combination of the two.
- If you miss the exam for an unexcused absence, a zero will be given.