

**Syllabus
Chemistry 138
Summer I 2008**

Course:	Section 01	Time: 10:00-11:50 Daily	Room: CFS 103
Instructor:	Dr. Richard E. Norman	norman@shsu.edu	Office: CFS 317 A
Office Hours:	Daily 9:00-9:50; stop by or other times by appointment		Phone: 294-1532 (dept)
Webpage:	Under construction		294-1527 (direct)

Text: Brown, LeMay and Bursten *Chemistry The Central Science*, 10th Edition
 Hill *Student's Guide* Wilson *Solutions to Red Exercises*

Prerequisites: No previous knowledge of chemistry is expected or assumed. However, proficiency in algebra IS expected and assumed. The math prerequisite is a minimum grade of C in MTH 163, 170, 199 or 284, or a minimum Math score of 270 on THEA (or 23 ACT or 560 SAT).

Attendance: Attendance is required. I am required to take attendance. I will do this by assigning seats. If you are absent, it is your responsibility to obtain the lecture material that you missed. Occasionally, changes in schedule may be announced in class. These changes apply to you even if you were absent. Students who miss few classes tend to do better than students who miss repeatedly. However, class attendance will not specifically be used to evaluate student performance. Two absences = 10% of class.

Course Summary: This is the first semester of general chemistry. This course is designed for science majors and minors including the following areas: chemistry, biology, physics, environmental science, geology, nutrition, and several preprofessional programs (PDT, PEN, PMD, PMT, POD, PPH, PPT, PPA, PPD, PVT). CHM 138 may also be a prerequisite for another course in your major or minor field. Chemistry is the study of matter and its changes. The material is naturally cumulative. The course will cover Chapters 1-9 of the textbook, and will emphasize atomic and molecular structure.

Objectives: Learn and master: dimensional analysis, details of ionic structure and nomenclature, stoichiometry, solution calculations, electronic structure, and more!

Calculator: The only calculator that you will be allowed to use on exams is a TI-30X.

Grading: There will be 4 tests and a **comprehensive** final. Each test will be worth 100 points, and the final will be worth 200 points (for a total of 600 points). Grades will be based on the performance of a mythical "top student". This is the sum of the highest scores earned by any student on the exams. In the event that class size drops to 20 or less, I may decide that the "top student" is perfect. 87.5% of the "top student's score" (TSS) will be the A cutoff, 75% TSS will be the B cutoff, 62.5% TSS will be the C cutoff, and 50% TSS will be the D cutoff. I reserve the right to lower the cutoffs (but I will **NOT** raise them).

Anticipated date	Exam	Points	Class meets every Friday.
June 9, Monday	1st Exam	100 pts	
June 16, Monday	2nd Exam	100 pts	
June 23, Monday	3rd Exam	100 pts	
June 27, Friday	4th Exam	100 pts	Last Day June 30
July 1, Tuesday	Final	200 pts	10:00-12:00
Total		600 pts	

Make-up examinations will **not** be given. Only the instructor can excuse a student from an examination. If you are excused from an examination, a score for the exam you missed will be calculated based on your average class ranking on all of the other examinations (including the final).

Cheating: Cheating will not be tolerated. For a first offense, a zero will be given for the entire exam (even if it is the final). A second offense earns an F in the course. While I make no attempt to provide a complete list of the various ways or types of cheating, the use of notes, looking at another student's paper, the use of a cell phone, all during an examination, are examples of cheating.

There are several issues that should be included in all syllabi. Beyond what I provide here, additional details may be found at <http://www.shsu.edu/syllabus>. **Academic Dishonesty:** Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. **Classroom Rules of Conduct:** Students are expected to assist in maintaining a classroom environment that is conducive to learning. Students are expected to treat faculty and students with respect. Students are to turn off all cell phones while in the classroom. Under no circumstances are cell phones or any electronic devices (other than those explicitly allowed by the instructor) to be used or seen during exams. Students may tape record lectures provided they do not disturb other students in the process. **Student Absences on Religious Holy Days:** Students are allowed to miss class and other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Students remain responsible for all work. **Students with Disabilities Policy:** It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should visit with the Office of Services for Students with Disabilities located in the Counseling Center. **Visitors in the Classroom:** Only registered students may attend class. Exceptions can be made on a case-by-case basis by the instructor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office.

The following is a statement from the normal (i.e. regular semester) syllabus:

Words of Wisdom: I encourage you to form small study groups to discuss the homework and material for this course. While homework will not be graded, it will have a dramatic effect on your learning. Whether you are giving or getting help in your group, you benefit from the interaction.

Chemistry is a subject that many people find difficult. Learning chemistry requires a considerable time commitment. This course may occupy as much of your time as possibly two other typical courses. Be prepared to spend time on studying chemistry **each day**. Don't plan on doing all of your studying on the night before, or even several nights before the exam! **Study regularly.** Chemistry is inherently comprehensive. All of the subjects build on what has gone before. If you fail to keep up, you will find yourself hopelessly buried and behind. Catch-up is a losing game.

The importance of doing problems cannot be overemphasized! This is the only way to learn the subject. The more problems you solve, the better prepared you will be for the exams. And while we are talking about working problems, be sure that you do not misuse the Solutions Manual. The proper way to tackle the problems is to work at them, struggle with them, and **ONLY after you have arrived at a solution** should you refer to the answers. It is too easy and sometimes too tempting to look at the problem, immediately look at the answer, and then try to tell yourself that you understand how to do the problem. This is always a disaster!

Trying to keep up in the summer is a huge problem. Don't let yourself get behind!

Work as many problems as it takes to understand the material. If that is more than the suggested problems, there are certainly others in the textbook. If that is less than the suggested problems, that is fine. The goal is understanding.

Suggested Problems:

Chapter 1: 1,5,9-29(odd),33-41(odd),45,47,49,60,63

Chapter 2: 1,3,5,15-29,35-67(odd),95,97

Chapter 3: 1,4,7-13(odd),21,33-49(odd),53,57-65(odd),69-79(odd),86,101

Chapter 4: 1-11(odd),15,17,21,23,29-43(odd),47-53(odd),61-87(odd),98

Chapter 5: 1,4,6,11,17,25,33-39(odd),45,49-57(odd),61,63,67-77(odd)

Chapter 6: 2,8,13,15,21,23,43,49-63(odd),67,71,73,77,80,90

Chapter 7: 7,17,21-47(odd),57,59,63,65,69,88

Chapter 8: 5,11,15-21(odd),25,31-39(odd),45,49,51,53,61,65,84

Chapter 9: 3,6,9-25(odd),29-39(odd),43,47-57(odd),61,63,67,69,71,76,79,82,96