



Chemistry 1212K (Dr GAQUERE and Dr KHAN, SUMMER, 2007)

Welcome to Chemistry 1212 K!

Chemistry encompasses a wide array of phenomena. Photosynthesis, combustion of fuels, and reactions in the atmosphere are a few examples. Interestingly, the human body may be considered a laboratory with a large number of reactions in progress simultaneously. Fortunately, diverse chemical phenomena are systematically studied using the concepts of structure, energetics, kinetics and equilibria. These concepts are a central theme in Chemistry 1212 K.

Four words summarize a tried and tested strategy for learning the most in this course. *Take your homework seriously.* Homework assignments will be given regularly during the semester. Approximately 60 % of questions on the examinations will closely resemble these assignments.

General Information

Instructors	Farooq A. Khan Phone (678) 839 – 6027 Office: 2-117 TLC email: fkhan@westga.edu	Anne C. Gaquere Phone (678)839-6026 Office: 2-119 TLC email: agaquere@westga.edu
Class time	T, R 10:00 am – 12:15 pm; 1:30 - 3:45 pm	
Textbook	Chemistry: The molecular Nature of Matter and Change by Martin Silberberg, 4 th edition	
Office Hours	For the month of June (Gaquere) MTWRF: 9.30am-10am, MW: 12pm-2pm, T,R: 12.15pm-1.15pm, 3.45pm-4.15pm, F:12pm-12.30pm.	
	For the month of July (Khan) M, T, W 12:00 noon – 3:00 pm; Fridays 2:00 – 3:00 pm	

Attendance Required. If a student misses four or more activities during the course, he or she may be awarded a grade of F for the course.

Learning Outcomes

Students are expected to acquire a basic understanding of the following topics: intermolecular forces, solutions, kinetics, equilibria, thermodynamics and electrochemistry. They are also expected to acquire an awareness of the role of Chemistry in everyday life. Students will also learn to apply the scientific method in laboratory activities, collect and analyze scientific data and formulate appropriate conclusions from data analyses and communicate their findings.

A Word about Expectations

The studio approach, that you also saw in CHEM 1211K, relies greatly upon self-study, teamwork, and hard work. Using technology such as the World Wide Web, much time will be freed up during the session time to put what you learn into practice. This, of course, is what we all strive to do when teaching chemistry. A trade-off to this is that more emphasis will be placed upon you, the student, to do more independent learning outside of class.

During the course of the class, it may seem to you that your instructors are doing more facilitating than teaching. They will take this as a compliment since the best learning occurs when the student takes risks and develops a strong intellectual independence. This does not mean that they will abandon you, it just means there will be times when you may leave class not understanding something and it will be up to you to learn it on your own. Group study is a method your instructors want to promote strongly in helping you succeed in the course. Teaching to, and learning from peers is a very effective way to study material. It is their sincere hope that this change in pedagogy will result in a higher quality and more enjoyable chemistry experience.

Quizzes and Examinations

In class examinations will be given on the following Thursdays:

June 14

June 28

July 12

In class quizzes (25 minutes each) will be given on the following Fridays:

June 7

June 21

July 5

July 19

The final examination will be given on July 26 during 3:00 – 5:00 pm.

It is based on all the topics covered during the semester. It consists of multiple-choice questions, and is prepared by the American Chemical Society.

No make up quizzes or exams will be given. In case of an illness or a dire emergency, a student may be excused from one in class exam or one quiz, provided the instructor is contacted prior to the examination or quiz. If excused, the score for the missed examination or quiz will be the average of all in class examinations and quizzes.

Workshop Chemistry

Workshops (CHEM 1001) are an important part of CHEM 1211K. In workshops, the large class is broken down into smaller groups. In addition to regularly scheduled studio sessions, you **must attend** a workshop that meets once a week outside of class to discuss chemistry problems and improve your understanding of the material.

Workshops are something like study groups, with two prominent differences.

1. Each week's workshop will go over a set of assigned questions. There will be a workbook available in the bookstore which contains material for each workshop, week by week.
2. Each workshop will be led by a student leader who has had the course previously and who has been trained for undertaking this responsibility. The leader will act more as a facilitator than as a tutor. The purpose of workshops is to build confidence in your own ability to do chemistry problem-solving. Each workshop will be scheduled for a two-hour block of time. Although

some workshops will not last the whole two hours, you should plan on putting this amount of time into each workshop if you elect to participate.

Why should you want to commit to two more hours spent on chemistry each week in addition to your time in class? Here are some good reasons.

- You should plan, on average, to spend at least six hours a week outside of lecture and lab studying chemistry. The workshop can be two of them.
- Working with other students and with a leader can be more productive than doing all your studying alone. In the structured workshop setting other students can help you see something you missed and as you explain an idea to someone else it becomes more clear in your own mind. Workshops at other institutions have found that students participating average significantly better on chemistry tests than those not attending workshops.
- **It directly affects your grade.** The workshop portion of your grade will be based on:
 1. Attendance. Don't arrive late; don't leave early.
 2. Participation in group efforts to solve problems.
 3. Preparation. Practice problems should have been solved, or at least attempted, before the relevant workshop.
 4. Attitude. This style of grading is very unique. Please keep in mind that you are not judged on actual right answers, but the effort you put forth.

Grades

Your grade will be calculated based on the following components:

In-class examinations (3 @ 100 points each)	300 points
Quizzes (4 @25 points each)	100 points
ACS Final	100 points
Activities	100 points
Laboratory Final	80 points
Workshops	120 points
TOTAL	800 points

Letter grades

Score	Grade
90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
0% - 60%	F

General Policies

The use of laptop computers and cell phones is not permitted in the classroom. The consumption of food and beverages is strictly prohibited in the classroom, since it is also a chemical laboratory. Violators may be asked to leave the class, and may receive a zero for the quiz or activity for the day.

Policy on Cheating

Occurrences of cheating are rare. However, cheating by one individual raises questions about fairness for the rest of the class, and indeed, endangers the honor code that governs our examination system. It is after considerable thought and agonizing that I have arrived at the following formula. If an individual cheats on a quiz, examination or lab report for the first time, he/she will obtain a score of zero for that particular quiz or examination or lab report. If an individual is caught cheating a second time during the semester, he/she will receive a grade of F for the entire course.