

Chemistry 105aL Spring 2010

9am lecture

<http://www.scf.usc.edu/~chem105a>

	<u>Lecturer</u>	<u>Lab Coordinator</u>	<u>Course Coordinator</u>	<u>WebQuiz Coordinator</u>
	Dr. Thomas Bertolini	Dr. Michael Quinlan	Dr. Elizabeth Erickson	Dr. Bruno Herreros
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Office hours	M 1:30-3, W 2:30-4 and by appt	TuTh 9-11	MTuW 1:30-3, Th 1-2 and by appt	N/A

Lectures: 9 am MWF in SGM 124

Textbooks: *Chemistry* (7th edition) by Zumdahl (required). The *Solutions Manual* is optional.
Laboratory Manual by USC General Chemistry Program (required, purchase in the USC bookstore, bring to Lab Orientation)
Math Survival Guide by Appling (optional, suggested)

Calculator: The only calculator permitted during Chem 105a/105b exams is the Casio FX-260 Solar. No other models or brands of calculators are allowed. Do not ask your TA, the course staff or the professor if alternative calculators are permitted.

Grading:	Clickers		50 points
	Web Quizzes (graded online)	10 @ 10 points	100 points
	One-hour exams (total of four)	4 @ 100 points	400 points
	Laboratory	1 @ 210 points	210 points
	Final Exam	1 @ 200 points	200 points
		Total:	~960 points

All labs must be performed and all reports must be submitted to receive a passing grade.
Any student earning less than 50% of the course points (<480 points) will fail the course.

Midterm grade An approximate letter grade will be assigned by the end of the seventh week, usually based on your performance in your first two exams, to give you an idea of your status in the course. The letter grade you receive at mid-term is no guarantee of your final grade. Final grades will be assigned using guidelines established in previous semesters, but there is no strict grading curve.

Exams: There will be four 1-hour exams given during the scheduled quiz sessions on certain Tuesdays (see page 3) at 3:30 p.m. in SGM 123. The material covered on each exam will be announced in lectures prior to that exam. Bring an ID, Casio FX-260 Solar calculator, pens, and a watch (if desired). All other electronic devices such as cell phones are prohibited and cannot be used for any purpose during the exam, *including keeping time*. Exams should be written in non-erasable ink (no pencil, no white-out). The one-hour time period will be strictly enforced. **No one will be allowed to enter the exam room late or to leave early.** An answer key for each exam will be posted after the exam on the Chem 105a web page. Graded exams will be returned to you by your T.A. during your scheduled lab or during your T.A.'s office hours. It is important that **you learn your T.A.'s full name and write it on all papers you turn in.** If you find a substantial grading error, please follow the procedure on regrading outlined below. The exams are given only at the scheduled time. **There are no makeup exams. You cannot take exams at any other time.**

Final Exam: A comprehensive two-hour final exam will be given **8 - 10 a.m. Friday, May 7th 2010**. This is the *only* time during which the final exam may be taken. The final will not be given to you earlier or later. There are no make-ups. Absences on the final exam do not automatically qualify for a grade of incomplete. If you cannot take the final during this designated time, you should not take this course.

Absences: **No makeup exams will be given.** Absences will be excused based on official University policy (verifiable illness or necessity). Speak with Dr. Erickson directly by telephone on the morning of the absence in the case of illness. In the case of non-illness necessity, bring written verification to Dr. Erickson prior to the absence. All excuses will be verified. Students with excused absences will be given special consideration at the end of the semester. You cannot miss more than one exam. All *unexcused* absences will result in a score of zero for that exam.

For lab absences, see Dr. Quinlan.

Internet: All homework assignments for this semester will be made available via the class web page. This will be the central source for all class information. **Make sure to check the content of the web page frequently.**

Point to <http://www-scf.usc.edu/~chem105a> to access it. You may reach the instructors and lab/course coordinators on the Internet by e-mail.

Assignments: Chapters 1-11 will be covered this semester. You are responsible for any announcements made in lecture and all material presented, whether or not it is in the textbook, and whether or not you are in class.

Homework: Homework sets will be posted on the website on a chapter-by-chapter basis. The problems will support the material of that lecture. They will be neither collected nor graded, but you are expected to do the homework problems regularly because they serve as a rough guide to the types of problems that you may encounter in the exams. The solutions to these problems are in the Solution Guide. Answers for any questions not in the student answer book or special problems will be posted on the web (click the "Assignment" button on the homepage). However, you should try to solve the problems without looking at the key. You will not be able to pass the course if you cannot solve the problems. Only look at the key after you are convinced you do not know how to do the problem, or to check your answers.

Clickers: There will be clicker questions asked throughout class this entire semester. These questions are to help your understanding of the material and keep the class more participatory. You can purchase the clickers (personal response devices) from the bookstore. A 5-point bonus will be given to students who register them on the course website by 11:59 pm (January 19).

Web Quizzes: There will be a 10 question web quiz assigned each week this semester. A total of 14 web quizzes will be assigned throughout the semester. Only the highest 10 web quiz scores will count toward your grade. **No late web quizzes will be accepted, regardless of the reason.** Any questions you have regarding the questions found on the web quizzes should be directed to Dr. Bertolini. Any other questions regarding the web site should be directed to Dr. Bruno Herreros directly by e-mail.

Laboratory: The **mandatory lab orientation** lecture will be given during the Tuesday quiz session on January 12 in SGM 123 at 3:30. Laboratory Manuals are available for purchase at the University Bookstore for \$20.00.

The laboratory curriculum starts with the lab orientation lecture. Attendance at this lecture and at the first scheduled lab meeting is mandatory for all new as well as returning students. If you cannot attend both at your assigned times, you will not be permitted to continue in the laboratory portion of the course.

Safety goggles and a lab apron are required by every person in the lab at all times. All persons in the lab are required to wear long pants, shirt with sleeves, socks and closed-toe shoes. Lab begins with Check-in during the week of Tuesday January 19 at your scheduled lab time.

Be properly dressed and bring with you to check in:

- Goggles, Laboratory notebook, Lab apron, Lock for drawer (all available in USC Bookstore)
- Laboratory Manual

Lab Exams: There will be two 60-minute cumulative lab exams during the semester held during the Tuesday quiz period (March 09 and April 27) at 3:30 in SGM 123. Questions typically cover the procedure, safety issues, relevant chemical formulas and chemical equations, observations, calculations and data analysis (bring a calculator). The lab exams are closed book, multiple-choice format using scantron forms that we provide. Bring #2 pencils.

Old exams: Old exams from Chem 105a will be posted for inspection on the class web page. You will need appropriate software (e.g., Adobe Acrobat) to view these. Use them to test yourself after you've studied; do not rely on them to be the only thing you do to study.

Office Hours: You are strongly encouraged to see *any* T.A. during their office hours, not just your own T.A. Office hours for all T.A.'s will be posted in SGM 223 (the Chemistry Study Center) and on the class web page. The Study Center will be open Monday through Friday, 10 a.m. to 5 p.m.

Supplemental Instruction (SI): The College has initiated a free Supplemental Instruction Program that we encourage you to use. The SI instructors hold weekly sessions where you can go over the course material and problems. They also make up mock exams on which to test yourself before the midterms and finals. The SI leaders attend all of the lectures and are very familiar with the lecture material. See your SI leader for further details. The SI website is <http://www.usc.edu/dept/LAS/si/>

Academic Integrity Rules regarding academic integrity and general student conducts will be strictly enforced. For details of the University Student Conduct Code and possible sanctions for academic integrity violations, see <http://www.usc.edu/dept/publications/SCAMPUS/governance>.

Important Dates to Remember

January 11 (M)	First Day of Classes
January 12 (Tu)	Mandatory Lab Orientation Lecture
January 18 (M)	Martin Luther King Day
January 20 (W)	Labs begin with check-in Be properly attired -- goggles and apron.
January 29 (F)	Last day to drop <u>without</u> a "W"
February 09 (Tu)	First Hour Exam
February 15 (M)	Presidents Day
March 02 (Tu)	Second Hour Exam
March 09 (Tu)	Lab Exam #1, exp 1-6
March 10 (W)	Midterm Grade Assigned
March 15-19	Spring Recess
March 30 (Tu)	Third Hour Exam
April 09 (F)	Last day to drop <u>with</u> a "W"
April 20 (Tu)	Fourth Hour Exam
April 27 (Tu)	Lab Exam #2, exp 7-11
April 30 (F)	Last Day of Class

Fri, May 07 **Final Exam 8:00 - 10:00 a.m.**

This is the only time during which the final exam may be taken.

There are no make-ups or other times.

If you cannot take the final during this designated time, you should not take this course.

Frequently Asked Questions:

How many hours should I spend on Chemistry to know the material?

Most students will require between 2-3 hours of home study for each hour of lecture. **Do not get behind.**

We strongly suggest reading the material in the textbook and attempting some of the end of the chapter problems before the lecture. This study method will greatly aid in your understanding of the lecture. After the lecture, review your notes and practice problems on a nightly basis.

This was the most difficult Gen Ed course I have ever taken. What happened?

This is NOT a General Ed course. It was not designed to be a General Ed course even though it does give General Ed credit. It is designed for science and engineering majors.

Do you have any suggestions that may help in problem solving?

Write words that say what you are doing.

An important objective in this class is that you gain experience in both problem solving and critical thinking. Both of these skills are crucial not only to this class but also for success in the "real world".

We suggest that you practice practice practice! Keep the solution manual closed and use study groups and office hours instead. Do all of the suggested problems and find similar questions at the end of the chapter to try as well.

How should I study for an exam?

- Carefully read the book and lecture notes to be sure that you understand the logic.
- Do the homework problems in the chapter, covering the solution so you don't see it. Work the problem completely by yourself to get the final answer. Compare with the solutions. If your answer differs from the solution, find out what you did wrong and why. Follow the same procedure for assigned Homework problems.
- Test yourself with web quizzes, but keep in mind that they do not represent all the types of problems you will get on the exams.
- If you don't understand something, ask!

- e) Practice on old exams from the Chem 105a website, remembering that chapter orders may differ each year.
- f) Attend the professor's review sessions (usually held in the late afternoon the day before the exam).

What can I expect to be asked on an exam?

The material will be similar to examples done in class, the assigned homework sets, and the questions on the old exams, but the problem might be turned around or inverted, or additional pieces of data might be supplied which are not needed to solve the problem. One exam problem might require two concepts or steps.

The exams will be written to test your understanding of the material covered in the lecture. While exam questions may be similar to questions seen in the lecture, homework, or quizzes, they will also differ enough to make sure we are testing you on your critical thinking and problem solving skills rather than your memory. (You will need to memorize some material (e.g., nomenclature) that will be made clear in lecture.) If you can successfully do the quizzes and the suggested problems without any help from the solution manual, you will likely do well on the exams.

There may be questions on material covered in the lectures that are not in the textbook, so make sure not to miss too many classes!

I think I should have gotten more partial credit on the problem! Why didn't I?

Partial credit is at the discretion of the instructor and the grader. Typically, partial credit is given if you have set up the problem correctly but made a calculation error or didn't have time to complete the problem. Therefore, it is important to show all your work on the exams in a clear and logical manner. Partial credit is not given for seemingly random or incorrect attempts. We insist that the graders are consistent so everyone is treated the same.

For analytical problems (i.e., questions involving calculations), students are expected to show some work. Usually, just a straight numerical answer without any logic will result in very little credit.

I am used to doing problems in pencil, so I get nervous when I have to write my exams in pen. What can I do?

Do your homework in pen so that you get used to working your problems without being able to erase them. (Erasable pens are not allowed on exams either.) Exams written in pencil will be graded at the discretion of the course professor but will NOT be considered for regrading.

My score on every exam was above the average. When you gave us the letter grade in class for each exam score I thought I had a B, but I got a C+ for the course. What happened?

The final letter grade takes into consideration web quizzes, lab quizzes, and the laboratory scores in addition to exams. The grade breaks given in class indicate only approximate exam grade ranges (without plusses and minuses) and are intended only to give you a rough idea where you stand. For both reasons, these approximations can be too lenient or too severe. You want to be well above a grade break given for an individual exam to ensure that grade in the course.

The class average is a C/C+. Probably your scores were only slightly above the class average. To earn a B or B-, the scores must be more than just slightly above the class average.

With a great deal of effort on my part, I was able to increase my exam grade from a C to an A and yet I received only a B as the overall grade. I heard that scores that show improvement count more than those that remain constant. Why wasn't my improvement taken into consideration?

Individual exam letter grades are assigned only to give a rough measure of your standing within the class, and should not be used to calculate the final letter grade. i.e., A+A+B+B will not always equal an "A" overall. Your improvement (C+C+A+A) was taken into consideration. That is why you received a grade of B and not C, and you were just too far away from an A.

I just remembered that I had a crisis [my dog died] the morning of exam #2 and I didn't do so well on that exam. I think it unfairly affected my performance and caused me not to get an A in the course. Can I get this exam dropped and have my total score recalculated?

All special circumstances (personal, religious, and medical) should have already been brought to the attention of the course professor at the time of their occurrence by the affected student and were considered at the time of overall course grade assignment. There is a statute of limitations on any changes.

If I have a low grade, can I take a make up exam or do special assignments?

NO! There are no make up exams and no special work. All you can do is to do better next time.

What happens if I miss an exam?

If you miss one exam and you have a written excuse (verified, of course), we will put a score in that place by using an approved formula. There are no make up exams. You cannot miss more than one exam.

POLICY ON REGRADING OF EXAMS

Reasons for submitting an exam for regrading:

1. Addition error yielding incorrect total score.
2. Lack of inclusion of score from one of the problems graded.
3. Correct answer marked incorrect.

How to submit an exam for regrading consideration:

1. Obtain a cover sheet for your exam from SGM 223, next to Dr. Erickson's inner office door.
2. Complete the cover sheet, stating clearly why you are submitting your paper for regrading considerations. Be sure to sign the form where indicated, acknowledging that you have not written on nor altered the exam in any way. Your exam will not be regraded unless the cover sheet is signed.

Important: Please do not jeopardize your integrity by being tempted to change an answer after your exam has been graded. We periodically photocopy complete sets of exams. If you submit an altered exam or regrading, you will receive an "F" for the entire course and you will be reported to the Office of Student Conduct for an academic integrity violation.

3. Put the exam with the cover attached under Dr. Erickson's door, SGM 224 or 225.
Do not submit it to a T.A.
4. The deadline for submitting your exam paper for regrading consideration is
2 p.m. two weeks from the day you sat for the exam (**except only 1 week for exam 4):

Chem 105a		
Exam #	Exam Date	Regrade Deadline: 2pm, 1-2 weeks after exam
1	Feb 09	Feb 23
2	Mar 02	Mar 30 <small>** (adjusted for Spring Break)</small>
3	Mar 30	Apr 13
4	Apr 20	Tuesday Apr 27 <small>** (only 1 week after exam 4)</small>

Note from the Frequently Asked Questions:

I think that the answer on the exam key is incorrect and that my answer is correct. How do I get my points back?

The regrade request form is only to be used for correcting grading errors. If you feel that your professor's exam key has a problem, you are encouraged to contact your professor directly, as soon as possible.