

COURSE SYLLABUS**Lecture:** MWF 11:00-11:50**Instructor Information:**

Dr. Christine Rich

Room 307 Chemistry

852-7814

Christine.rich@louisville.edu

Office hours: Monday 2 pm or by appointment

Location: Davidson 111**Text Information:***Chemistry: The Molecular Nature of Matter & Change*, 4th edition

by Silberberg

Solutions Manual is optional

RECITATION SCHEDULE

<u>Section</u>	<u>Meets</u>	<u>Location</u>	<u>TA</u>
02A	W 12-12:50	BR 100B	Dave Egerton
02B	Th 8-8:50	CB LL16	Laura Haysley
02C	Th 11-11:50	DO 006	Laura Haysley
02D	W 2-2:50	CB LL16	Dave Egerton
02E	TH 9-9:50	DO 202	Laura Haysley
02F	F 9-9:50	CB LL16	Dave Egerton

IMPORTANT DATES

Exam 1: Wed, Sept 13

Exam 2: Fri, Oct 13

Exam 3: Mon, Nov 6

Exam 4 & Final: Sat, Dec 9th at 11:30 am
(combined section final; location TBA)

Final Day to Withdraw: October 12 (not to be a pessimist)

Introduction

Chemistry 201 is the first of a 2-semester course that introduces the concepts and principles of general chemistry for students with an interest in science-related and/or engineering careers. This course also fulfills the University General Education requirement for a lecture in Natural Sciences. We will cover most, though not all, of the material found in Chapters 1-11. Topics will include components of matter, stoichiometry, reactions, gases, solution chemistry, thermochemistry, atomic structure, periodicity, and molecular structure and bonding. Although there is no chemistry prerequisite for this course, a minimum math ACT score of 25 or completion of Math 111 or EAC 100 is required.

The course consists of the main lecture (3 times per week) and the recitation sections (each section meets once a week). The 3 hourly exams are given during the main lecture times. The recitation sections are smaller group classes and are intended to be more interactive. Recitations are conducted by Graduate Teaching Assistants (TAs). They will work with you in this more informal setting to answer questions, work through suggested problems, and to administer periodic quizzes.

Here's the bottom line: it's my job to teach you the material, it's the TA's job to provide additional support, and it's your job to devote the time and effort to learn the material. But my real goal is to get you excited --even intellectually stimulated--about the field of chemistry. Hopefully some of my love for chemistry will rub off on you!

Course Materials, Supplemental Sources & Help

The required text is *Chemistry: The Molecular Nature of Matter and Change* by Silberberg (4th edition). This course can be challenging but this text does a very good job of explaining the main concepts. In recognition of the difficulty level of the course, there are a number of avenues to assist you. First, I am available to answer questions in my office or by email. Often you can drop by and catch me in my office if you have a quick question. You can also see me during my office hours or make an appointment. Second, your TA will hold regular recitations and also hold office hours. Assistance is also available through the REACH program's Supplemental Instruction Program. SI group meeting times will be announced early in the semester. REACH also provides tutoring services (go to www.reach.louisville.edu/index.htm for more info). These are all "free" in that you already pay for them through your tuition so take advantage! There are also supplemental materials available for purchase, lending, or on reserve in Ekstrom Library that may help:

1. The *Instructor's Solutions Manual*, which contains the answers to all the problems in the textbook.
2. *Student Solutions Manual*, which contains the answers to selected problems.
3. Other gen chem texts that may help clarify any problem areas. I have a large selection in my office that I will gladly let students borrow.
4. My old exams will be posted ---unfortunately, these are really old since I haven't taught this course for a few years. But they should give you a feel for the types of questions I ask.

**Be sure to bring a calculator to every lecture, exam, and recitation. Your calculator should be able to perform all standard math functions and do scientific notation. There is one important restriction imposed by all 201 Senior Instructors: you may not use any calculator capable of alphabetic memory on any exam. If it has a memory that can hold all 26 alphabet letters, then it is banned even if the memory has been erased.

Course Grading & Attendance

Your grade will be based *entirely* on your performance on the hourly exams, recitation quiz grades, and the final exam. No part of your grade per se depends on attendance...although for most students there is a close correlation between attendance and performance. Each hourly exam is worth 100 points (300 pts total); recitation quizzes are worth 100 pts (best 5 of 6 quizzes each worth 20 pts), and a final exam worth 200 points. That's a total of 600 points. Dates for the exam are shown on the syllabus and on the course schedule. Quiz dates will be decided by your TA and will be announced and distributed in writing at recitation.

A listing of suggested homework problems is shown on the schedule. These problems are for YOU; they will not be collected or graded. Take time to work out the problems (on paper, not just in your head) until you are sure you can do each in a

reasonable period of time. This will definitely help you on exam days since one of the most frequent complaints is that not enough time is given to finish the exam. I've also been known to include suggested problems on the hourly exams.

If classes are canceled or delayed on the day of an exam, the exam will be given during the next lecture period. **There are no make-up exams.** A missed hourly exam will count as a zero and will be calculated into the course grade as such. If you have an athletic event or other University-sanctioned event on an exam day, you should notify me at least one week in advance of the exam date. If you miss an exam due to illness or an emergency, you must present a doctor's note or other piece of evidence in order to be excused. **A missed final exam is an automatic F for the course.**

Letter grades are awarded based upon the point scale shown below. If you earned the stated number of points, you are guaranteed that your letter grade will be no lower than that shown below.

<u>Letter grade</u>	<u>percentage</u>	<u>total points</u>
A	87.5-100	525-600
B	75.0-87.4	450-524
C	62.5-74.9	375-449
D	50.0-62.4	300-377
F	<50.0	<300

Final Hint: This course requires work! Many freshmen are caught by surprise on the first exam. Even those who say they did quite well in high school chemistry find this course particularly demanding. It is very easy to fall behind in this class, but it's also very dangerous to do so. It is your responsibility to maintain pace to the best of your ability and to seek help when needed.

Schedule

The following is a tentative schedule for the semester. The College asks that I include this statement: "The Senior Instructor reserves the right to revise the schedule if he/she deems it prudent in order to meet learning outcomes." Translation: I reserve the right to fall behind or zoom ahead depending on how well you guys seem to be digesting the material. Exam dates, however, are firm. I will clarify what material you are responsible for prior to the exam

<u>Date</u>	<u>Chapter</u>	<u>Suggested Problems</u>
Aug 21	Chap 1	Chap 1: 1, 2a,b, 8,26,28,34,38,40,43,50,54,58,59,
Aug 23	Chap 1	60,66,71a,73,76,84,86,92
Aug 25	Chap 2	Chap 2: 1,4,18,20,26,37,38,39,41,45,47,54,57, 58
Aug 28	Chap 2	68,72,76,82,84,88,96,102,104, 106a,b,112,113,115,
Aug 30	Chap 2	126,128,136,147,150,152
Sept 6	Chap 3	Chap 3: 1,2,7,10,11,12,14,16,18,21,23,25,33,35,37,
Sept 8	Chap 3	39,41,43,46,50,51,52,55a,c,56,61,63,65,68,69,71,73
Sept 11	Chap 3	77,81,82,85,89,92,94,95,96,98,100,102,106,108,112
		118,131,132,148
Sept 13		EXAM 1

Sept 15	Chap 3/4	Chap 4: 3,4,5,6,9,13,14,16,18,21,28,32,33,35,40
Sept 18	Chap 4	45,49,50,52,60,62,64,66,68,69,74 (either method),
Sept 20	Chap 4	76,77,101,105,108,109,115,124,129
Sept 22	Chap 4	
Sept 25	Chap 5	Chap 5: 2,6,8,10,16,19,20,22,24,28,30,33,38,39,42
Sept 27	Chap 5	44,49,51,54,57,62,66,67,69,71,77,85,88,90,94,98,
Sept 29	Chap 5	102,105,118,132
Oct 2	Chap 5	
Oct 4	Chap 6	Chap 6: 8,10,15,18,19,33,34,35,37,38,39,42,48,50,51
Oct 6	Chap 6	52,54,63,66,73,75,76,77,81,87,89,95,96,97,102,106
Oct 9	<i>Fall Break ---squeak out at least some time to veg out</i>	
Oct 11	Chap 6	
Oct 13		EXAM 2
Oct 16	Chap 7	Chap 7: 2,7,9,11,16,20,23,25,27,29,31,39,40,41,48,
Oct 18	Chap 7	49,51,53,55,57,59,66,68,73,75,77,79,81
Oct 20	Chap 7	
Oct 23	Chap 7/8	
Oct 25	Chap 8	Chap 8: 5,8,9,11,12,14,16,21,23,24,25,26,27,28,31
Oct 27	Chap 8	35,37,39,44,46,48,50,53,55,57,59,64,68,75,77,78,80
Oct 30	Chap 8	81,82,86,88,89,106
Nov 1	Chap 8	
Nov 3	Chap 8	
Nov 6		EXAM 3
Nov 8	Chap 9	Chap 9: 1,4,6,7,8,10,11,14,16,17,20,22,26,28,35,36
Nov 10	Chap 9	37,39,48,52,57,59,61,62,63,65,67,71,80,85
Nov 13	Chap 9/10	
Nov 15	Chap 10	Chap 10: 1,2,3,5,9,10,13,14,15,18,20,22,26,28,31,
Nov 17	Chap 10	33,34,35,36,37,38,39,40,42,43,46,49,55,57,62,63
Nov 20	Chap 10/11	65,73
Nov 27	Chap 11	
Nov 29	Chap 11	Chap 11: 2a,b,3,5b,7,8,11,15,20,21,26,28,31,32
Dec 4	Chap 11	34,35,36,37,38a,c,d,42,48,try 54
Dec 9		FINAL EXAM at 11:30 am