

FALL 2007
CH 101-002 MWF 11-11:50 AM
107 Shelby Hall

Tentative Lecture/Exam Schedule

Week	Weekday	Date	Chapter	Week	Date	Chapter
1	Monday			10	Oct. 22	6
	Wednesday	Aug. 22	1		Oct. 24	7
	Friday	Aug. 24	1		Oct. 26	7
2	Monday	Aug. 27	1	11	Oct. 29	7
	Wednesday	Aug. 29	2		Oct. 31	7
	Friday	Aug. 31	2		Nov. 2	8
3	SEPTEMBER 3 LABOR DAY			12	Nov. 5	8
	Wednesday	Sept. 5	2		Nov. 7	8
	Friday	Sept. 7	2		Nov. 9	8
4	Monday	Sept. 10	3	13	Nov. 12	9
	Wednesday	Sept. 12	3		Nov. 14	9 Exam 3
	Friday	Sept. 14	3		Nov. 16	9
5	Monday	Sept. 17	3	14	Nov. 19	9
	Wednesday	Sept. 19	4 Exam 1		THANKSGIVING	
	Friday	Sept. 21	4			
6	Monday	Sept. 24	4	15	Nov. 26	10
	Wednesday	Sept. 26	4		Nov. 28	10
	Friday	Sept. 28	4		Nov. 30	10
7	Monday	Oct. 1	5	16	Dec. 3	10
	Wednesday	Oct. 3	5		Dec. 5	10
	Friday	Oct. 5	5		Dec. 7	review
8	Monday	Oct. 8	5	FINAL Monday, Dec. 10th 8:00 AM – 10:30 AM		
	Wednesday	Oct. 10	6			
OCTOBER 12 FALL BREAK						
9	Monday	Oct. 15	6	Exams 1 – 3 will be given on Wednesdays from 5:00 - 6:20 PM in 107 Shelby Hall		
	Wednesday	Oct. 17	6 Exam 2			
	Friday	Oct. 19	6			

**CHEMISTRY 101-002 FALL 2007
MWF 11-11:50 AM 107 Shelby Hall**

I. INSTRUCTOR

Dr. Martin Bakker
E-mail: bakker@bama.ua.edu
Phone: 8-9116
Office: 118 Shelby Hall Office Hours: M 3-5 PM

II. OBJECTIVE

The objective of this course is to introduce students to the basic facts and principles of chemistry. Some of the topics included are: chemical formulas, reaction stoichiometry, atomic structure, chemical periodicity, molecular structure, covalent bonding theories, molecular orbitals, gas laws, and kinetic molecular theory. Prerequisite: placement in MATH 112.

III. TEXT

The text is "Chemistry: A Molecular Approach" by Nivaldo J. Tro, 1st edition. The book has been customized for The University of Alabama by removing chapters not to be covered and putting on a soft cover thereby reducing the cost and weight. It is recommended that each student should have access to the student solutions manual, which provides solutions to new problems at the end of each chapter. The solutions manual is available in bookstores.

IV. LABORATORY MANUAL

The lab manual is "General Chemistry Lab CH 101/102, University of Alabama, Chemistry Department". Chemistry is a "hands-on" science. The experiments have been designed to assist the student in learning fundamental chemical principles. The experiments will serve as an introduction to the basic laboratory operations and skills needed in the practice of chemistry. Each student **must** purchase a lab manual and enroll in a lab section. Other safety rules will be explained during your first laboratory.

Laboratory sections will start meeting the first full week of the semester or the week of August 27th. **More than two (2) absences in laboratory will result in failure of the entire course (grade F).**

V. COURSE GRADES

<u>Exam 1</u>	<u>Exam 2</u>	<u>Exam 3</u>	<u>HW</u>	<u>Quizzes</u>	<u>InClass</u>	<u>Lab</u>	<u>Final</u>	<u>TOTAL</u>
100	100	100	100	50	50	150	150	700 points
(Drop lowest exam score)								

Grading Scale

A = 90 – 100 B = 80 - 89 C = 70 - 79 D = 60 - 69 F < 60

+/-'s will given at the instructor's discretion.

A. Exams

You must bring your ACT card, driver's license, or other photographic identification to all exams in order to receive a grade. Students are strongly encouraged to take all regularly scheduled exams. However, should you have to miss one of these exams it will become your drop grade. If you miss a second exam and can provide a written, reasonable excuse, you will be permitted to use your score (calculated as a percent) on the final exam as a makeup score for the test you missed. In essence this would make your final exam worth 250 points. This is really not a very good option– so every effort should be made to take these exams as scheduled. **No make-up exams will be given.** No programmable calculators, language translators, pagers, cell phones or similar electronic devices are allowed. You must use Casio FX-260 (Virginia State model) or similar calculator for examinations; this calculator is available at the Supe Store for ~\$10.00.

B. Quizzes

Quizzes will be given most every non-test week. Electronic quizzes will be given either in the Wednesday evening recitation sessions or in the lecture classes using the CPS response units. The response units may be purchase in the SUPE Store (in the Ferguson Center) for ca. fifteen dollars. It is your responsibility to make sure that your response unit is working, including its batteries, and you must bring it to every class meeting and recitation session. Your lowest two to three quiz scores will be dropped, and the remainder will be used towards a maximum of 50 points; however, all quizzes will count toward your attendance points. **No make-up quizzes will be given.**

C. Homework

Homework assignments will be submitted on the Web using MasteringChemistry. The due dates are listed on the Web site. MasteringChemistry access can be purchased with the textbook at the Supe Store or on the Internet. The course code for this section is CH101002Fall2007Bakker.

D. Attendance/InClass

It is the near-universal experience in college chemistry that students who attend class faithfully make higher grades than those who do not. A recent study in the Department of Chemistry found that every student who earned a grade of D or F had a large number of absences. This is, in part, because some of the problems presented in class show up on exams and on assigned homework problems. Thus, you are strongly advised against missing class. The following sentence is quoted

from the 2006-2008 Undergraduate Catalog: **“Students are expected to attend all classes for which they are registered.”** Accordingly: **attendance will be taken during class with the EInstruction Classroom Performance System.** This requires that you purchase a radio frequency response pad (clicker) from the bookstore and bring it to **every** class period. You may be required to purchase a pad for other courses at the University as well. **If so you only need to purchase one pad. It can be used for all your courses.** During class the clickers will also be used to check student understanding of course materials. Answering these questions will form 50% of the attendance/InClass grade. Correct answers form the remaining 50% of the attendance/InClass.

VI. EXTRA HELP

Learning Skills Center - The Learning Skills Center is located in 124 Osband Hall, and is loaded with helpful materials. Please visit the center to determine if the available materials might be useful in your study of chemistry. There is a WEB site associated with the course. You have an access code pre-packaged with your text that allows you to log on and use the site.

Review Sessions - Depending on demand, review sessions may be scheduled prior to exams.

Office Hours - The course instructor has designated office hours, during which they expect to help any students who want extra instruction. Do not overlook this resource. Office hours are M 3-5 PM.

VII. RECITATION/EXAM PERIOD (5 – 6:20 PM Wednesday, 107 Shelby)

This time will be used for exams, with the remaining dates being used for quiz/recitation sessions. These sessions will be used primarily for solving end of chapter problems and general review. There is a strong probability that some of the problems worked in the recitation section will appear on exams.

VIII. ACADEMIC MISCONDUCT

All acts of dishonesty in any work constitute academic misconduct. The Academic Misconduct Disciplinary Policy will be followed in the event of academic misconduct.

Using a CPS response pad for someone else registered in the course is an act of academic misconduct and will be treated according to University policies.

IX. DISABILITY ACCOMMODATIONS

To request disability accommodations, please contact the Office of Disability Services at 348-4285. After initial arrangements are made with that office, contact your professor.

X. IMPORTANT DATES

August 29	Last day to withdraw from the University (all classes) for 100% credit but registration charge held
August 29	Last day to register or add a course
October 3	Midterm grades due for freshmen
October 31	Last day to drop a course(s) from the schedule (but retain at least one class) with a grade of "W"

Suggested End-of-Chapter Problems

<u>Chapter</u>	<u>Title</u>	<u>Problems</u>
1	Matter, Measurement and Problem Solving	33, 37, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 65, 67, 71, 73, 75, 77, 79, 83, 87, 93
2	Atoms and Elements	31, 35, 37, 41, 43, 45, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 79, 81, 83, 85, 87, 89, 109
3	Molecules, Compounds and Chemical Equations	23, 25, 27, 29, 31, 33, 35, 37, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 69, 71, 73, 77, 79, 81, 85, 87, 89, 93, 95, 99
4	Chemical Quantities and Aqueous Reactions	25, 27, 29, 33, 37, 39, 41, 45, 47, 49, 51, 53, 55, 59, 63, 65, 67, 69, 71, 75, 77, 79, 83, 85, 87
5	Gases	29, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 57, 61, 63, 67, 71, 75, 79, 81, 83, 85, 87, 89, 91
6	Thermochemistry	33, 35, 37, 39, 45, 47, 53, 55, 57, 59, 61, 63, 67, 69, 71, 73, 75, 107, 117
7	The Quantum-Mechanical Model of the Atom	37, 39, 41, 43, 47, 51, 53, 55, 57, 59, 63, 65, 67, 71, 93
8	Periodic Properties of the Elements	41, 43, 45, 47, 49, 51, 53, 55, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 121
9	Chemical Bonding I: Lewis Theory	37, 39, 41, 43, 45, 51, 53, 55, 57, 59, 61, 65, 67, 69, 71, 73, 75, 77, 79, 81, 95
10	Chemical Bonding II: Molecular Shapes, Valence Bond Theory And Molecular Orbital Theory	29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 67, 69, 71, 73, 75, 77, 79, 81, 89, 91, 99, 101