

## Chemistry 1110, Fall Semester 2005

Instructor: Dr. Thomas G. Richmond, HEB 2404, 801-581-7487, Richmond@chem.utah.edu  
Office Hours: Stop by anytime, make an appointment, or MWF, 9:00 – 11:30 AM  
Secretary: Ms. Lori Walk, HEB 2108, 801-581-5074 (LWALK@chem.utah.edu)

Text: McMurry & Castellion, Fund. of General, Organic and Biological Chemistry(4<sup>th</sup>ed.)  
Lecture: MWF, 9:40-10:30 AM , HEB 2008

Laboratory and Discussion Sections are required and listed in the course schedule.

Lab Manual: "Are You Willing to Experiment? A Laboratory Guide for Elementary Chemistry," is also available in the bookstore.

You will need a calculator (that you know how to use!) capable of handling scientific notation and log/exponential functions.

The two semester sequence Chemistry 1110 & 1120 is intended as a broad introduction to chemistry primarily for students in nursing and the allied health fields. Note that Math 1010 (Intermediate Algebra) or equivalent is a recommended prerequisite for this course. This semester consists of an introduction to general chemistry with an emphasis on the language of chemistry and quantitative problem solving and will close with some organic chemistry. Chemistry 1120 (offered spring and summer semesters) continues with organic chemistry and concludes with an introduction to biochemistry. Discussion sections meet every week and labs will start the week of August 29.

The final course grade will be based on the following:

Exam 1	Wednesday, September 21	Chapters 1 – 4	70 points	
Exam 2	Monday, October 24	Chapters 5 – 7	70 points	
Exam 3	Monday, November 21	Chapters 8 – 10	70 points	
Exam 4	Wednesday, December 7	Chapters 1 – 13	70 points	
Lab	A >90%, B >80%, C >70%	Total Possible*	280 points	

ANY INSTANCE OF ACADEMIC DISHONESTY WILL RESULT IN A GRADE OF E FOR THE COURSE

**\*There will be no early, late or make-up exams given in this course.** I will estimate your score based on other exams for an excused absence from an exam. Lab points will *not* be explicitly added to exam points to determine the final grade. However, to pass the course you must complete the labs. For a grade of C you must earn more than 70% of the lab points, to qualify for a grade of B you must earn 80% of the lab points, and to qualify for an A you must earn more than 90% of the lab points.

You will need safety goggles and a combination lock to check into lab. The discussion period will focus on problem solving and also provides an opportunity to discuss that week's lab work. It is particularly important that you read the background material in the laboratory manual prior to your lab period since some course material will be introduced in the laboratory before it is covered in lecture. Thus you will have the opportunity to discover for yourself new principles of chemistry!

Please contact Professor Richmond during the first week of class if special accommodations are needed to meet the expectations of the course. Information and documentation for students with disabilities may be obtained from the Center for Disability Services, Room 162, Olpin Union, 801-581-5020.

## CHEMISTRY 1110 – Fall 2005

Date	Laboratory Assignment	CHEM 1110 Lecture Material
W, August 24	Labs and Discussion Sections	1: Matter & Life
F, August 26	Do NOT meet this week.	2: Measurements in Chemistry
M, August 29	Lab 1: Density & Basic Lab Skills	3: Atoms and the Periodic Table
W, August 31		
F, September 2	<b>Last Day to Drop Classes (9/2)</b>	
<b>M, September 5</b>	Lab 2: Wet/Dry Ice/Energy (T→M)	<b>No Lecture – Labor Day</b>
W, September 7		
F, September 9		4: Ionic Compounds
M, September 12	Lab 3: Chemical Formulas (T→M)	
W, September 14		
F, September 16		
M, September 19	Only Monday Lab this week.	5: Molecular Compounds
<b>W, September 21</b>	Discussion Sections Still Meet	<b>Exam 1 (Chap 1-4), Wednesday, Sept. 21</b>
F, September 23		
M, September 26	Lab 4: Precipitates and Chemical Equations	
W, September 28		
F, September 30		6: Chemical Reactions: Classification/Mass
M, October 3	Lab Holiday – Discussion Sections Still Meet	
W, October 5		
<b>F, October 7</b>		<b>No Lecture – Fall Break</b>
M, October 10		
W, October 12	Lab 5: Kinetics and Catalysis	7: Chemical Reacts.: Energy, Rates & Equilib.
F, October 14		
M, October 17	Lab 6: J-tube	
W, October 19		
<b>F, October 21</b>	<b>Last Day to Withdraw (W) 10/21</b>	8: Gases, Liquids & Solids
<b>M, October 24</b>		<b>Exam 2 (Chap 5-7), Friday, October 21</b>
W, October 26	Lab 7: Concentration and Dilution	
F, October 28		9: Solutions
M, October 31		
W, November 2	Lab 8: Solutions, Titration and Molarity	
F, November 4		
M, November 7		10: Acids and Bases
W, November 9	Lab 9: Iron-Thiocyanate Equilibria	
F, November 11		
M, November 14	Lab 10: Buffers and Hydrolysis	
W, November 16		11: Nuclear Chemistry
F, November 18		
<b>M, November 21</b>	<i>Lab Holiday</i> (Discussion Sections Still Meet)	<b>Exam 3 (Chap 8-11), Monday, November 21</b>
W, November 23		12: Intro to Organic Chem: Alkanes
F, November 25		No Lecture – Thanksgiving
M, November 28	Lab 11: Organic Chemistry Functional Groups/Check-out	
W, December 30		13: Alkenes, Alkynes, and Aromatics
F, December 2		
M, December 5	<i>Lab Holiday</i> (Discussion Sections Still Meet)	
<b>W, December 7</b>		<b>EXAM 4 (Chap 1-13) – Wednesday, Dec. 7</b>