Chemistry 210 – General Chemistry II **Fall 2005, 10am MWF (HA 108)**

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Office hours: M & W 12-2pm, F 9-11am
Other times may be arranged if necessary.

Required Material: "Chemistry: Structure and Dynamics" 2nd Ed., Spencer, Bodner, Rickard
Laboratory notebook with carbon-copy pages (MSUM bookstore)
Experiments for General Chemistry Lab II (Chem Dept)
Safety Goggles (Chem Dept)

CHEM 210 General Chemistry II [B1] (4)
General chemistry principles: kinetics, chemical equilibrium, acid-base chemistry, solubility equilibrium, thermodynamics, oxidation-reduction, electrochemisty, coordination chemistry, and nuclear chemistry. Lab included. Prerequisite: CHEM 200

Class E-Mail List: chem210jb@mnstate.edu
An email listserv has been created for this class. It will be used for class announcements and is where I will respond to all email questions. If you have questions, you can either email them to the list or to me directly. *All course-content questions emailed to me will be answered to the list with the questioner's identity removed.* To subscribe to the list, send an email to "majordomo@mnstate.edu" with "subscribe chem210jb" in the body. This should be done as soon as practical from the email account you are most likely to check on a regular basis.

Class Web Site: http://www.mnstate.edu/bodwin/
A website for this course is being developed/constructed which contains information relevant to the class including all handouts. Any feedback regarding additional content or links that would be useful on the Chem 210 website is welcome.

Course Format:
This course will blend lecture and small group work. Topics will be introduced with lecture followed by problem sets that will challenge groups to apply the concepts. At the end of each group work period, each group will submit their answers to selected problems for grading.

Grading:		
	Group assignments	100pts
	Exams	5 x 100pts = 500pts
	Lab	250pts
	Final Exam	150pts
	Total	1000pts

Tentative grade assignments are: A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69% (+/- grades may be used.) These cutoffs *may* be lowered at the instructor's discretion, but they will not be raised.

Regular and punctual attendance is expected and will be recorded. Late arrival on exam days is not acceptable as it disturbs those who arrive on time; therefore, no exams will be distributed after the test period has begun. If you anticipate that this will be a problem, let me know BEFORE the exam. There will be no make-up exams. Exams will be closed book and a calculator may be required. The Final Exam will be cumulative. Anyone who does not take the final exam will receive a grade of "F" for the course regardless of previous performance.

Lab Grading: Notebook carbons must be turned in BEFORE you leave lab each day. If you do not turn in your carbons, you will not receive credit for the material covered in lab. You will be working with a partner in the lab, and you are welcome to work together on data analysis, but each student will be required to submit individual lab reports. Copied work will result in a grade of zero ***for the class*** and may lead to expulsion from the University. Lab reports are due at the beginning of the lab period 1 week after completion of the experiment (you may hand them in sooner if you prefer). Hand-In assignments will be distributed at the end of the lab period and are due at the beginning of the following lab period. Late lab reports or hand-ins will not be accepted.

Pre-Lab Exercises	10 x 4pts = 40pts
Notebook carbons	12 x 2pts = 24pts
Lab Reports	4 x 15pts = 60pts
Hand-Ins	7 x 10pts = 70pts
Safe Practices	11pts
Practicum	45pts
Total	250pts

Academic Honesty
Cheating will not be tolerated and will be reported to the Dean of your College and the Vice President for Academic Affairs. It may also be reported to the Student Conduct Committee for further disciplinary action. For a full description of the MSUM Academic Honesty Policy, please see the Student Handbook. {http://www.mnstate.edu/sthandbook/POLICY/index.htm}

Disability Access Statement: Students with disabilities who believe they may need an accommodation in this class are encouraged to contact Greg Toutges, Coordinator of Disability Services at 477-2652 (phone) or 477-2047 (TTY), CMU 222 as soon as possible to ensure that accommodations are implemented in a timely fashion.

Tentative Course Schedule

Day, Date	Topic	Text Book	Experiment
Aug. 22	States of Matter	6,8,9	
Aug. 24	States of Matter	6,8,9	Data Collection and Analysis
Aug. 26	States of Matter	6,8,9	
Aug. 29	States of Matter	6,8,9	
Aug. 31	States of Matter	6,8,9	Molar Mass from Freezing Point Depression
Sept. 2	Exam 1		
Sept. 7	Kinetics	14	Quantitative Interpretation of Color
Sept. 9	Kinetics	14	
Sept. 12	Kinetics	14	
Sept. 14	Kinetics	14	Rate and Activation Energy of the Iodination of Acetone
Sept. 16	Kinetics	14	
Sept. 19	Kinetics	14	
Sept. 21	Exam 2		Rate and Activation Energy of the Iodination of Acetone(2)
Sept. 23	Equilibrium	10	
Sept. 26	Equilibrium	10	
Sept. 28	Equilibrium	10	Calcium Iodate
Sept. 30	Equilibrium	10	
Oct. 3	Equilibrium	10	
Oct. 5	Equilibrium	10	Iron(III) Nitrate and Potassium Thiocyanate
Oct. 7	Exam 3		
Oct. 10	Acids & Bases	11	
Oct. 12	Acids & Bases	11	Acetic Acid in Water
Oct. 17	Acids & Bases	11	
Oct. 19	Acids & Bases	11	Titrations, Indicators and Buffers
Oct. 21	Acids & Bases	11	
Oct. 24	Acids & Bases	11	
Oct. 26	Exam 4		Unknown Titrations
Oct. 28	Redox	12	
Oct. 31	Redox	12	
Nov. 2	Redox	12	Redox Reactions and Voltaic Cells
Nov. 4	Redox	12	
Nov. 7	Redox	12	
Nov. 9	Redox	12	Qualitative Analysis
Nov. 11	Exam 5		
Nov. 14	Thermodynamics	13	
Nov. 16	Thermodynamics	13	Qualitative Analysis(2)
Nov. 18	Thermodynamics	13	
Nov. 21	Thermodynamics	13	
Nov. 28	Thermodynamics	13	
Nov. 30	Thermodynamics	13	Practicum
Dec. 2	Exam 6		
Dec. 5	Nuclear Chemistry		
Dec. 7	Nuclear Chemistry		
Dec. 12	Final Exam, noon		