Chemistry 155 **Honors General Chemistry** Winter 2008

Lecture: MWF 2:30-3:20 in BAG 261
Section AA: Quiz Section Th 11:30-12:20 KNE 210 TA: Lisa Park
Laboratory T 11:30-2:30 BAG 233
Section AB: Quiz Section Th 2:30-3:20 PAR 108 TA: Lisa Park/Michael White
Laboratory T 2:30-5:20 BAG 233
Section AC: Quiz Section Th 1:30-2:20 SMI 102 TA: Michael White
Laboratory T 5:30-8:20 BAG 233

Instructor:	Assistant Professor David Ginger, Office Bagley Hall 213 ginger[at]chem.washington… ***Address ALL subject related questions to the discussion forum below so your peers may contribute to, and benefit from, the discussion*** (put CHEM155 in the subject of any email directed to me)
Office Hours:	Prof.: David Ginger Fri. 3:30-4:30 (Bag 213) *and by appointment* Lisa Park: Chemistry Study Center Mon. 1:30-2:30, Fri. 1:30-2:30 Michael White: Chemistry Study Center Mon. 11:00-12:00, Weds. 10:00-11:00
Text:	D. W. Oxtoby *et al.* Principles of Modern Chemistry (5th Ed)
TAs:	Lisa Park, lisapark[at]u.washington… Michael White, mwhite3[at]u.washinton… ***Address ALL subject related questions to the discussion forum***
Discussion Forum:	https://catalysttools.washington.edu/gopost/board/dginger/3926/
Course Website:	http://faculty.washington.edu/dginger/CHEM155_W2008/index.html

Prerequisite: Chem 145 with a minimum grade of 2.0 or permission of the instructor. Students are responsible for the material through Chapter 9 of Oxtoby, and for basic Excel spreadsheet usage. Students (especially those who didn't take 145) should review Chem 145 Lab Experiment #0 (Excel Lab) by the end of the first week of the quarter. That lab can be found at: http://depts.washington.edu/chemcrs/bulkdisk/chem145HA_aut05/lab_handout_Experiment_0.pdf

Midterm Exams: There will be two midterm exams given during either lecture or lab periods (TBA). Please follow the course announcements closely both in class and online.

Final Exam: is Tuesday, March 18th, 2:30-4:20 pm, in Bagley 261.

Homework: Problem sets should be downloaded from the course website above. They will USUALLY be due at the START of class on Monday. NO late papers will be accepted except in the event of serious medical emergency (i.e. you made a trip to the ER instead of to class). The final homework grade will be computed after dropping the lowest homework score. Use your "free drop" as you see fit (save it for an illness, off week, or late bus).

Laboratory: Please purchase the lab manual from the UW Bookstore. There are five experiments: solubility product, titration, electrochemistry, kinetics, and emission. Each of the experiments requires a lab report and Excel-based data analysis. The labs reports are due at the beginning your next lab session (except for the last one which is due at your last discussion session).

OVER —

Plagiarism: You are encouraged to work together on the homework assignments and you may be sharing laboratory data. HOWEVER you must come to your own conclusions and write up your assignments independently. Anything you turn in must be your own words (unless attributed, with a full citation and quotation). Please feel free to verbally discuss your results with your classmates and TAs, but do not directly share text or analysis (*e.g.*, graphs) beyond raw data. Sharing text, graphics, or complete solutions, is plagiarism, whether or not occasional words have been changed. Plagiarism cases will result in an X final grade and cases will be referred to the UW academic misconduct committee. These are important guidelines for a career in science (or any other field).

Disabled Students: If you would like to request academic accommodations due to a disability, please contact Disabled Student Services, 448 Schmitz, 543-8924 (V/TDD). If you have a letter from Disabled Student Services indicating you have a disability that requires academic accommodations, please meet with Prof. Ginger as soon as possible to discuss your needs.

Questions, complaints, comments, suggestions, etc.: *Please* raise any issues that come up -- the more communication the better -- with the Professor or the TAs, in person (at office hours, in, before, or after class), via email, or via a note in his/her mailbox. Notes can be signed or anonymous. However, please do not use the course discussion board for complaints, comments or suggestions.

Honors Expectations: Honors classes require far more time and effort than their "regular" counterparts. You should enroll in an honors course because you want to be challenged, and because you want to cover more material in more depth than in the regular sections.

Cell Phones, Computers, and Personal Electronics

Personal electronics including computers, laptops, cell phones, PDAs, iPODs, MP3 players, and WiFi enabled devices are not to be used during lecture, lab, or exam periods without the permission of the instructor. If your phone rings during class or lab you should leave to answer it and should not return to the classroom/lab until the next week. Any use of an electronic device during an exam period (other than a standard graphing calculator without wireless communication capability) will result in a grade of zero for that exam.

Preparing for Class:

Class sessions will be more useful if you 1) read the text prior to lecture and 2) attempt the homework throughout the week (even if we haven't fully covered that topic yet).

GRADING

There will be two exams plus a final exam. Grading will be based on the total number of points obtained on the exams and the homework. Unannounced 'pop quizzes' may be given during lecture and will each count as one homework grade. The lowest homework/quiz score will be dropped before computing the average. Note: On exams, quizzes and homework, no partial credit will be awarded for "really wrong" answers unless the error is recognized and noted. (In other words, you MUST think about if your answers make sense rather than just using formulas!).

Homework/ Lecture Quizzes	100 Points
Quiz Section Quizzes	40 Points
Midterm I	150
Midterm II	150
Final	300
Lab reports (5)	200
Total	940 points

Extra Credit—Bonus points up to 10% of the total hw score will be added to the final homework score for correct, thoughtful replies to other students questions on the discussion board and for finding a major error in a problem answer or derivation (not just 3.14159 instead of 3.14 for pi, or a dropped – sign on one side of an equation). The awarding of any and all extra credit will rest with the non-negotiable judgement of the professor and TA/grader.

Homework format and grading

For each assignment, please show your work, turn in your questions *in order*, and either highlight or put a box around the question number and final answer(s). You may not receive full credit if the TA has difficulty finding your answers (remember, he or she has 72 papers to grade. Homework is graded to encourage you to do it, but not to check if every answer is correct, which is your responsibility). See the rubric below. Remember partial credit will not be awarded if you should have been able to notice that your answer was "way off."

Homework Grading Rubric: 10 points total

5 points - *Do you appear to have done the homework in a thoughtful manner? (Copying an answer out of an answer key could be plagiarism and is not counted as "a thoughtful manner.")*

4 points - *A couple of randomly chosen homework problem will be graded for content.*

1 point - Neatness. *Are the questions all in order? Are the answers and the question numbers boxed or highlighted? This point should be easy to get.*

Lab report format and grading for each report will be discussed in lab or in lecture. The text portions of the lab reports should be typed. They will be graded on clarity as well as content, because presenting results clearly and accurately is a critical skill for in any career (scientific, medical, or otherwise). Clarity includes the quality of the graphs, properly labeled graph axes, the quality of the written English language, and legibility of handwriting (if any). No points awarded for plastic report binders however.

Chem 155 Winter 2008 *Tentative* Schedule:

Week of Jan 7:
M: Ch 10: Acids/Bases/Equilibria
W: Ch 10.
Th: Discussion sections
F: Ch 10.

Week of Jan 14:
M: Ch 11: *Homework #1 due in class.*
T: Lab #1: Solubility Product
W: Ch 11: Solubility and Precipiation
Th: Discussion sections
F: Ch 11

Week of Jan 21:
(M: no class – MLK Holiday)
T: Lab #2: *Acid-Base Titration*
Lab report #1 due
W: Ch 11. *Homework #2 due in class.*
Th: Discussion sections
F: Ch 12: Electrochemistry

Week of Jan 28:
M: Ch 12. *Homework #3 due in class.*
T: Lab #3: Electrochemistry
Lab report #2 due.
W: Ch 12
Th: Discussion section
F: Ch 12

Week of Feb 4:
M: Ch 12. *Homework #4 due in class.*
T: **Midterm Exam I** (in lab period *maybe*)
W: Ch 13: Chemical Kinetics
Th: Discussion section
F: Ch 13

Week of Feb 11:
M: Ch 13. *Homework #5 due in class.*
T: Lab #4: Kinetics *Lab report #3 due*
W: Ch 13
Th: Discussion Section
F: Ch 14: Nuclear Chemistry

Week of Feb 18:
M: No class – President's Day
T: --- no lab ---
W: Ch 14. *Homework #6 due in class.*
Th: Discussion Sections
F: Ch 15: QM and Atomic Structure

Week of Feb 25:
M: Ch 15. *Homework #7 due in class.*
T: **Midterm Exam II** (in lab period *maybe*)
W: Ch. 15
Th: Discussion Sections
F: Ch 15

Week of Mar 3:
M: Ch 15. *Homework #8 due in class.*
T: Lab #5: Emission *Lab report #4 due*
W: Ch 16: QM and Molecular Structure
Th: Discussion Section
F: Ch 16

Week of March 10:
M: Ch 16. *Homework #9 due in class.*
T: --- no lab ---
W: Ch 17: Molecules and Light
Th: Discussion Sections
Lab report #5 and Seminar report due
F: Ch 17
Homework #10 is not to be turned in

Final Exam:
Tuesday, March 18, 2:30-4:20 pm