CH 302 Exam 1 Procedures: Format and Administration

Exam format:
1. A major CH302 exam covering Chapters 8 through the beginning of 10 will be administered Tuesday, February 13 during normal class hours. The exam will be worth 180 points. Only problems similar in content and difficulty to those from quizzes and worksheets will be included on the exam. Many of the problems are more challenging than the quiz questions.

2. Test structure: The exam will consist of 30 questions with each question worth 6 points. Questions are in a multiple-choice format . Look at the February 8 random musings for an exact breakdown of problem types.

3. In addition to the problems, you will be provided a bubble sheet, a table of the elements, and a list of useful equations and constants. Plenty of space for working problems is provided on the exam. Do not bring your own scratch paper.

Exam Administration: READ THIS CAREFULLY. IF YOU DO NOT FOLLOW PROCEDURES, YOU MAY NOT BE ALLOWED TO TAKE THE EXAM. The supreme rule for my exams: everyone has the right to an optimum test-taking environment. I am less concerned with cheating than I am with you making life miserable for others taking the exam. All of the rules for this exam are constructed with this in mind.

1. Exam location: Last name A-K, WEL 2.224. Last name L-Z , Hogg Auditorium ******* HMA is the auditorium next to the Union as you walk due west from Welch Hall.********** If you go to the wrong room, you will not be allowed to take the exam. There is only enough seating for the students as listed above.

2. Exam start time: 2:00 pm. No one is allowed into the room to take the exam after 2:15. If you are late and still desire to take the exam, go to the lower division office. You will have until the end of the normal exam time to complete it there.

3. What you may bring to your seat for the exam: number 2 pencils, calculator (I don't care what kind you bring), something to drink. What you may **not** bring to your seat: anything else including coats, food, back packs, books, paper, Walkmans. If you must bring them to class, place them at the bottom of the class room before the exams begins.

4. During the exam, the TAs will be available to answer questions. Raise you hand and one of us will come to help you as best we can. Do not leave your seat unless you are finished and are leaving the room.

5. When you leave, do so quietly. AS YOU LEAVE YOU MUST SHOW YOUR UT IDENTIFICATION when you turn in your exam. Make sure your name, special code and SSN are bubbled in.

6. Exam finish time 3:15 pm. You will be given fair warning that the exam is about to end so you can start guessing on questions you don't know. I WILL NOT TOLERATE ANYONE WRITING AFTER YOU ARE TOLD TO PUT DOWN YOUR PENCILS. Anyone who is observed to be writing on their exam after the exam ends will be assumed to be cheating and will receive a 0 for the exam and will face additional academic penalties. READ THIS AGAIN IF YOU DON'T UNDERSTAND. I WILL NOT TOLERATE ANYONE ANSWERING QUESTIONS AFTER THE EXAM STOPS AT 3:15 PM.

7. If all goes well the exam scores will be posted by Tuesday at 5 pm on the web. The solution key will be up immediately after the exam.

8. If you have any special considerations please contact me immediately by e-mail so we have documentation.

9. Responsibility. There is an increasing tendency for you to think you can be irresponsible and mommy or daddy will take care of you in class. I am not your daddy. So your decision to show up unprepared for quizzes and exam without sharpened pencils or a calculator is not my problem. I will have some pencils and some calculators available because the lower division office is nice, and I will look after folks whose batteries die. But if the collection of calculators I bring to class is runs out, you are on your own. Grow up.

The 30 question types for the exam next week are:

Chapter 8

1 Theory: temperature and physical equilibria (a phase change where you have to predict H and S)
2 Theory: vapor pressure
3 Theory: salt dissociation in water
4 Problem: phase diagram interpretation
5 Problem: phase diagram navigation
6 Calculation: ΔH for heating across phases
7 Theory: gas solubility in liquids
8 Ranking: miscibility of liquids
9 Definition: colligative property
10 Calculation: vapor pressure in binary system
11 Calculation: Clausius Clapeyron
12 Ranking: Van't Hoff and solution concentrations
13 Problem: colligative property application
14 Calculation: colligative property

Chapter 9

15 Problem: Setting up K from equilibrium expression
16 Calculation: calculating K from RICE expression
17 Calculation: equilibrium concentrations from K
18 Calculation: equilibrium concentrations from K (quadratic)
19 Problem: Reaction direction from Q and K
20 Problem: LeChatelier and reaction direction
21 Problem: LeChatelier and reaction direction
22 Calculation: Relationship of ΔG to K

Chapter 10

23 Theory of auto-protolysis of water
24. Temperature dependence of K_w
25. Strong acid or base calculation
26. Weak acid or base calculation
27 Weak acid or base calculation
28. Identifying acid and base strength
29. Converting between pH, POH, H^+ and OH^-
30. Ranking acidity and basicity based on equilibrium constants