

Brief Musings with Exam 2 information—March 25, 2008

1. There is a second exam coming up on Wednesday evening. I have provided the question types for it and had a review on them Monday night. The notes from that review are found on my lecture notes web page. A format and procedure for exam 2 as well as the question types are found at the end of the musings. But some highlights of ways in which the exam procedure may be different than last semester:

- The exam will be Wednesday evening from 7:30 till 9:30 pm. You get 120 minutes sharp.
- Last name M-Z will be in Welch 2.224. Last name A-L will be in BUR 106.
- You will be given a sheet of equations and constants and a periodic table.
- A make-up exam will be given on Sunday evening from 6 to 8:00 pm in Welch 2.224. Anyone can take it and you need not contact me to let me know your decision.

2. Remember to be getting your extra credit number one in. Please follow the instructions—you are in college and it is not my job to clean up your inability to follow directions that are repeated multiple times in the musings. Specifically, put the correct title in the e-mail subject or I won't receive it. The deadline is this Friday at noon.

CH 302 Exam 2 Procedures: Format and Administration

Exam format:

1. A major CH302 exam covering Chapters 8 through the beginning of 10 will be administered Wednesday, March 26 from 7:30 till 9:30 pm. 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 below 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 M-Z, WEL 2.224. Last name A-L, BUR 106 ***** Burdine is a mess to get to these days because of renovation so plan ahead to keep yourself out of the labyrinth of fencing that takes you everywhere except to Burdine. Also, 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: 7:30 pm. We may decide not to administer the exam to late arrivals if it becomes too disruptive to those taking the exam. Once you start the exam, you may not leave to take the make-up. You must turn in scantron with validated identity.
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 your 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 9:30 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 9:00 PM.**
7. If all goes well the exam scores will be posted by Thursday morning. Please don't hassle us if they are not up right away. We are doing our best.
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 runs out, you are on your own. Grow up (he said gently.)

The 30 question types on the exam.

30 question types for the exam 2

1. Calculating simple buffers
2. Identifying buffers (after neutralization)
3. Ranking acidity and basicity based on equilibrium constants
4. Buffer capacity
5. Buffer neutralization calculation
6. Identifying features of a titration curve
7. Titration calculation
8. Titration calculation
9. Estimating solubility from K_{sp}
10. Calculating molar solubility from K_{sp}
11. Common ion calculation
12. Selective precipitation
13. Approximations of acid base equations
14. polyprotic acid equilibria
15. polyprotic acid calculations
16. Mass and charge balance
17. Setting up complex equilibrium problems
18. Equilibrium expressions for a polyprotic acid
19. Equilibria Calculations: dilute solutions
20. Equilibrium Calculations: sulfuric acid case
21. Balancing redox reactions (in acid or base)
22. Balancing redox reactions (in acid or base)
23. Ranking oxidizing and reducing strengths
24. Assigning EC cell nomenclature
25. Assigning EC cell nomenclature
26. Calculating E_{cell} at standard conditions
27. Relating E , ΔG and K
28. Stoichiometry calculation from current
29. Calculating cell potentials (Nernst)
30. Famous battery question