

## CH302 Random Musings, March 31, 2005

1. Everyone who goes bald comes to know it in different ways. Sometimes you can just look in the mirror. But if you are tall, and you bald on top of your head, you only really ever know it from the occasional photo taken while you are sitting on the floor playing with your kids.

Or in my case, the most common way comes when I am Flowbeeing my hair. For those of you who don't know what a Flowbee is, it is a device you attach to a vacuum cleaner that chops at your hair like hedge trimmers while the vacuum sucks the hair up in the air (See below—a picture is worth a thousand words). Brilliant in its simplicity, I have been Flowbeeing my hair for 25 years. I haven't had an uncomfortable conversation with a hair stylist for a quarter century. In the process, that \$50 investment has saved me about \$5000 in cheap haircuts hair cuts. Of course that saved money has been spent on other infomercial products, none of which have ever worked. So I have only broken even financially.



Back to balding. You may have noticed my hair had gotten pretty long. I haven't cut it all semester until last night. The reason? When you Flowbee, you here a kind of growling sound as the hair is cut. A very satisfying growl. But as I have grown more bald, the growl I should hear as I run the Flowbee over the top of my head has grown silent. An ever widening silence that I can no longer bear. I think it is the time in my life to start writing poetry again.

2. Quiz 4 results are in. I had to throw out the problem on ranking colligative properties. Almost all of you got it right but were tricked by a stupid way of wording the problem that evaluated the property on an absolute rather than relative scale (they attached the negative sign and decided that glucose had the smallest negative

number and was therefore the “biggest number”. Pathetic. I tossed the question and have requested that it be stricken from the data base for all time.

Anyway, the average grade was a very fine 82%, what I have been expecting from a class of this caliber. Keep it up on the exam.

3. There is a second exam on Tuesday, April 5 during regular class time. Attached below is a format and procedure for the exam. Note:

- Where you are to take the exam: L through Z last names are in Welch 2.224 and A through K in Hogg Auditorium.
- We will strictly enforce the policy about completing answers after the examination period is over. I had numerous complaints about students working after the test ended last time and I simply won't tolerate it this time. If you do not put your pencil down when you are told, I will assign you a grade of 0 for the exam. I hope this is very clear to all of you.

4. There are 36 questions on the exam taken from Chapters 12 through 14. Go to the link from Tuesday's April 29 musings for the list. Note that the electrochemistry material will not be tested until exam 3 (exam 3 is going to be a doozie, what with complex equilibria and electrochemistry both be covered.) So now is an excellent time to smoke exam 2 which is relatively simple conceptually.

<http://courses.cm.utexas.edu/dlaude/ch302/musingss05.html>

5. I am hold a review session on Sunday night in this room from 8 till 10 pm. I will answer questions from 8 till 9 and then run through the 36 questions from 9 till 10.

6. Extra credit. Did you know that turning in an extra credit problem is the same thing as missing two fewer questions on a test? For example, you miss six questions on exam 2 and turn in the extra credit problem assignment, you get the same grade of A as someone who misses only four questions and doesn't turn in the extra credit. I fiercely encourage you to do the assignment—it is part of the material for the exam anyway and could be the difference in a grade cutoff at the end of the semester.

7. Repeat of extra credit assignment 2. For ten points, you must do the following:

- Think deeply about the reasoning behind why the various colligative properties happen (freezing point depression, vapor pressure lowering, boiling point elevation, osmotic pressure.) Then for ONE of these properties, explain the theory behind why it happens. Specifically, the argument made must be a thermodynamic one that involves saying the word entropy several times. So when you write your answer to me, it must include a reference to entropy (or entropic or disorder or other synonyms) to be correct. It should take you a minimum of three or four sentences to do it properly in context.
- The answer to this question is not hard to find. It is in my notes, my course packet, the text book and just about anywhere general chemistry concepts are taught well. However I do not simply want you plagiarizing material. I want you to think through the ideas, put them into your own words, and then write them down. It might be good to practice explaining them out loud to someone. I don't mind if you work together to find the answer. But I do not want you to write an answer word for word from another source. If you do this, it will be considered academic dishonesty and you will be punished.
- Submit your answer with the subject: Colligative Property Extra Credit to [dalaude@mail.utexas.edu](mailto:dalaude@mail.utexas.edu).
- Start the extra credit answer with your name and your UTEID

- End the extra credit by mentioning your sources for learning the material (the text, the notes, friends, etc.)
- Due date for this extra credit is April 5 at noon.

8. Although technically spring started about a week ago, it was really cold right afterward. On the other hand, I walked out of my office to a help session yesterday afternoon and it felt like the middle of summer. So I guess spring is already come and gone and I hadn't provided any poetry on the subject. Here are two classics with the same title but decidedly different viewpoints:

### **Spring**

by Gerard Manley Hopkins

Nothing is so beautiful as spring -  
 When weeds, in wheels, shoot long and lovely and lush;  
 Thrush's eggs look little low heavens, and thrush  
 Through the echoing timber does so rinse and wring  
 The ear, it strikes like lightnings to hear him sing;  
 The glassy peartree leaves and blooms, they brush  
 The descending blue; that blue is all in a rush  
 With richness; the racing lambs too have fair their fling.

What is all this juice and all this joy?  
 A strain of the earth's sweet being in the beginning  
 In Eden garden. -Have, get, before it cloy,  
 Before it cloud, Christ, lord, and sour with sinning,  
 Innocent mind and Mayday in girl and boy,  
 Most, O maid's child, thy choice and worthy the  
 winning.

### **Spring by Edna St. Vincent Millay**

TO what purpose, April, do you return again?  
 Beauty is not enough.  
 You can no longer quiet me with the redness  
 Of little leaves opening stickily.  
 I know what I know.  
 The sun is hot on my neck as I observe  
 The spikes of the crocus.  
 The smell of the earth is good.  
 It is apparent that there is no death.  
 But what does that signify?  
 Not only under ground are the brains of men  
 Eaten by maggots.  
 Life in itself  
 Is nothing,  
 An empty cup, a flight of uncarpeted stairs.  
 It is not enough that yearly, down this hill,  
 April  
 Comes like an idiot, babbling and strewing flowers.

## CH 302 Exam 2 Procedures: Format and Administration

### Exam format:

1. A major CH302 exam covering Chapters 12 through 14 will be administered Tuesday, April 5 during normal class hours. The exam will be worth 180 points. Only problems similar in content and difficulty to those from CH302 quizzes and worksheets will be included on the exam.
2. Test structure: The exam will consist of 36 questions with each question worth 5 points. Questions are in a multiple-choice format . A breakdown of the problem types was provided in the March 24 musings
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: First name L-Z, WEL 2.224. Last name A-K, 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: 9:30 am. No one is allowed into the room to take the exam after 9:45. 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. You also are not allowed to bring devices that provide wireless connections to external sources.

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 10:45 am. 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 10:45 PM.
7. If all goes well the exam scores will be posted by Tuesday evening on the HW server. 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.