

A Very Brief Random Musings—April 29, 2010

1. As usual, you all did extremely well on the last quiz, with an average of 78% and over 150 students getting perfect scores. It looks like things are setting up well for exam 3, though the electrochem and kinetics questions on the exam will be a bit more of a challenge.

2. There is an exam 3 next week with the usual details to follow on Tuesday. One big issue to keep in mind: Technically the make-up exam 3 shouldn't occur during dead days after the last day of class. I try to argue it with the Registrar but they are never pleased. So here I the compromise: Examination should not occur during dead days after the last day of class and can occur only under the most extreme of circumstances. So I can offer the make-up on Sunday night, May 9, only to students with a valid conflict. So you are expected to take it Thursday night May 6 unless you provide evidence, not just that a class is scheduled, but that it is actually meeting that night.

3. The following are true as we get ready for the exam 3:

- I will have a practice exam ready on Friday evening or early Saturday morning
- The TAs will have a practice exam ready on Sunday.
- The exam is calculator free.
- My help sessions are in the classrooms
- I will have a review session on Monday evening at 9 pm in this room.
- Travis will have a review session on Tuesday evening. Specific details will follow.

4. Question types for Exam 3 are repeated below:

Question Types for Electrochemistry

1. balancing a chemical reaction in acid or base
2. assigning cell convention in electrochemical cell
3. understanding the table of standard half cells
4. Nernst equation calculation
5. ranking oxidizing and reducing agents
6. stoichiometry calculation using the Faraday
7. current calculation
8. calculation involving E, K and ΔG
9. famous battery

Question Types for Kinetics

10. calculating reaction rates
11. method of initial rates
12. integrated rate law calculation
13. integrated rate law calculation (half life)
14. extracting information from straight line plots
15. kinetic theory—collision
- 16 kinetic theory—transition state
17. combined Arrhenius calculation
18. reaction mechanisms
19. E_a and energy profiles
20. famous catalysts

Descriptive Chemistry

21. properties and reactivity of alkali metals
22. properties and reactivity of alkali earths
23. properties and reactivity of the B family
24. properties and reactivity of the N family
25. properties and reactivity of the C family
- 26 properties and reactivity of the O family
27. properties and reactivity of the halogen family
28. famous chemical manufacturing processes
29. identifying famous gemstones

Organic Molecules

30. hydrocarbon isomers
31. naming organic molecules
32. naming organic molecules
33. organic polymer chemistry
- 34 biomolecule structure
35. biomolecule structure

5. IMPORTANT TIME CHANGE FOR “HOW TO GET AN A” GROUP—Here are some things that I regret:

- The morning after I got married I went to the Natural Sciences graduation exercise to read the names of the graduates—my wife watched me from the front row wondering what she had gotten herself into.
- On Mother’s Day for the last four years, I have held a dinner party at my house for students in my seminars and for my UGTAs and TAs—my wife spends much of Mother’s Day cleaning up the mess they make.

SO

- On Sunday my daughter is having her First Communion, and relatives from all over are coming to town to celebrate, except that I have already committed to doing a chemistry circus immediately afterward, but I said, hey, let’s all go to the circus, it will be fun, and then my wife said, when are we taking the family out to eat? and I was about to say, we can’t, I am having a “How to Get an A” session at 7 pm, but I thought better of it, so now,

The How to Get an A session is Sunday evening at 9 pm rather than 7. Sorry for the inconvenience. For those who cannot make it, it will be videoed.

6. Instructions for the How to get an A group—don’t come on Sunday unless you have done the following:

- Memorized the 35 questions types (this is pretty easy if you’ve done the kinetics and EC)
- Create cards with question types, place question exams from the practice exams and quizzes on back
- Create piles based on the ones you know and the ones you don’t know
- Start to generate recipes for the question types

7. Get those extra credits in—there are plenty of scholarly lectures going on right now but they tend to wind down as the semester draws to a close. Please make it a point to earn back the last 3% of your course grade, basically worth a + or a - grade just for getting them in.

8. I will have a massive random musings for the class next Thursday to explain everything about the upcoming exams, finals, grading. Also I will give you a chance to indicate to me whether there is anything I need to know about grades or nonacademic stuff on a form you will return.

9. Poetry Corner Part I. I believe that by the time I pass on to the other side, I will have enough poetry written about my course to publish a couple volumes worth. And if everyone who ever took this course bought a copy, we’re talking New York Times Best Seller. Here is some love and some hate poetry about CH302:

Pronounced Dead as of May 13th 2008

As the death of finals creeps over me
I sit and wonder how this can be
Why did I not try a LITTLE harder to exempt
Study a LITTLE bit more, the pain would have been temp.
But now, I must suffer through this chemistry smog
It’s hurting my brain; I need a catalytic converter to clear the fog
And I’m regretting all of those stupid decisions
Because now I have no choice but to learn about molecular collisions
And rates, and methods of reactions galore
Good thing Ochem isn’t as hardcore
What keeps me going is after this test I will be free once again
To live my life, go out and have some fun with my friends!
I’ll say goodbye; RIP general chemistry 302....
Until the MCAT where I will meet the ghost of you.

--Anonymous

Dr. Laude, please fail me.

Oh my, can you believe it? The semester’s end is near.
The thought of no more CH 302, makes me shed a big tear.
Nay, not one tear, but many you see,
Because life without Laude and Co. is like Moses without the sea.
We started with struggling with quantum numbers last Fall
Oh how I’ll miss the laser pointing to the chart on the wall.
From the wet T-shirt contests using nothing but acid
To the osmotic pressure that makes fish opposite of flaccid
I enjoy every part, everything that you say
Even when you took my \$100 calculator away.
Every time I remember our days are nearly through
My heart splits in half, as if it has a Van’t Hoff factor of 2.
The same goes for your TAs, who put Einstein to shame
Especially that Travis although his beard was rarely tamed.
So, yes. You can say that I am fond of you
But please don’t confuse me with that one girl...Lulu.
You see there is nothing that I would love more,
Than instead of taking 2 semesters of Chem., to take 4.
So now, Dr. Laude, I humbly request
To please take my A and make it an F.

Poetry Corner—Part II. Arbor Day is coming. Did you know we have Nebraska to thank for Arbor Day? Arbor Day is a nationally celebrated observance that encourages tree planting and tree care. It was started by J. Sterling Morton in Nebraska in 1872. Although the actual day changes from state to state and even city to city, National Arbor Day is celebrated each year on the last Friday in April. The first Arbor Day was celebrated in the state of Nebraska in 1872, in response to a state proclamation urging settlers and homesteaders in that prairie state to plant trees that would provide shade, shelter, fruit, fuel, and beauty for residents of the largely treeless plains. Evidently Arbor Day failed in Nebraska.

By the way, do you have any idea how much poetry has been written about trees? Ranks right up there with love poetry I think. To give you an idea, I can actually find poetry by species of tree. For example, listed below is some oak tree poetry. For the tree huggers, a poem by Walt. For those of you who have been dying because of all the oak pollen or those of you who have to rake oak leaves, which simply refuse to be raked, a poem with at best a tinge of grudging admiration from Edna.

Walt Whitman-*"I saw in Louisiana a Live Oak Growing"*

I saw in Louisiana a live-oak growing,
All alone it stood and the moss hung down from its branches,
Without any companion it grew there uttering joyous leaves of dark green,
And its look, rude, unbending, lusty, made me think of myself,
But I wonder'd how it could utter joyous leaves standing alone there without its friend near,
for I knew I could not,
And I broke off a twig with a certain number of leaves upon it,
and twined around it a little moss,
And brought it away, and I have placed it in sight in my room,
It is not needed to remind me as of my own dear friends,
(For I believe lately I think of little else than them,)
Yet it remains to me a curious token, it makes me think of manly love;
For all that, and though the live-oak glistens there in Louisiana solitary in a wide flat space,
Uttering joyous leaves all its life without a friend or lover near,
I know very well I could not.

Edna St. Vincent Millay-*"The Oak Leaves"*

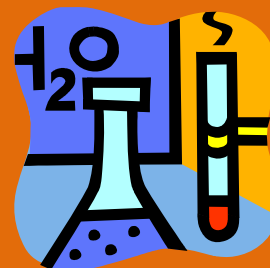
Yet in the end, defeated too, worn out and ready to fall,
Hangs from the drowsy tree with cramped and desperate stem
above the ditch the last leaf of all.
There is something to be learned, I guess, from
looking at the dead leaves under the living tree;
Something to be set to a lusty tune and learned
and sung, it well might be;
Something to be learned---though I was ever
a ten-o'clock scholar at this school---
Even perhaps by me.
But my heart goes out to the oak-leaves
that are the last to sigh
"Enough," and lose their hold;
They have boasted to the nudging frost
and to the two-and-thirty winds
that they would never die,
Never even grow old.
(These are those russet leaves that cling all winter,
even into the spring,
To the dormant bough,
in the wood knee-deep in the snow
the only coloured thing.)

UTeach Outreach

Earn Chemistry or Elective Credit!

Motivate Young Kids!

All Majors Welcome!



CH 207K **Register Now For Fall 2010!!** CH371K

Create fun science lessons for kids in grades K-6th

Practice in your UTeach Outreach class for 1 hour/week on campus

Smile when you see your students learn

Inspire at local schools

For more information contact: Mary Miller: marymiller@mail.utexas.edu
or Visit our website at <https://uteach.utexas.edu/go/uteachweb/Outreach-Initiatives>

If you're interested in becoming a middle or high school Science, Math or Engineering teacher, try UTeach STEP 1, a fully reimbursed 1 hour course. See Annette Hairston, UTeach Advisor for more information contact: hairston@mail.utexas.edu

To register for UTeach Outreach, please fill out this form and give to Judy Dean in Painter 4.02 M-F or email all of the information to judy.dean@mail.utexas.edu---Deadline to register and attend an orientation is **May 13th at 2pm**

Name _____ UT EID _____ College & Major _____

Email address _____

Register me for: (choose one)

CH 207K This class has no prerequisites.

CH 371K Prerequisites: must have completed at least 60 credit hours, including either (a) one semester of chemistry and 6 hours of upper division credit in Natural Sciences or (b) credit for CH 310N or Ch 318N (second semester organic chemistry).

I have met this prerequisite by completing the following courses: _____

Register NOW, but you must attend ONE of the following mandatory 50 minute orientation sessions in PAI 4.08 for more information.

Friday, May 7th 11-12pm or 12-1pm

Wednesday, May 12th 10-11am or 1-2pm

Thursday, May 13th 8-9am or 1-2pm

