#### CH301 Random Musings, September 9, 2008

- 1. There is a first quiz on Thursday. There are 8 multiple choice questions worth 5 points each for a total of 40 points It will occur the last 20 minutes of class and will cover material from the first three lectures. Recall that last Tuesday I provided you with a list of the question types on the quiz and they are reproduced below. I encourage you to look at each of these question types, one by one, and ask the following: can I do this? If not, that is a good place to begin your studies for the quiz.
- EMR energy order
- wave/particle duality calculation
- theory behind failure of classical physics
- deBroglie calculation

- uncertainty calculation
- boundary conditions for quantum rules
- Aufbau, Hund and Pauli
- assigning quantum numbers
- **2.** It is traditional that I make the first quiz easier than usual. I already have to deal with teaching the class how to take a quiz and fill out scantrons, so giving a killer doesn't make anyone's life easier. I anticipate an average score around 80 because the questions will be as straightforward and similar to the worksheet material as I can make it.
- **3.** What you need for the quiz. Remember that for the quiz you can bring any kind of calculator but you are not allowed to use it to store information or to program calculations that would be used on the quiz. Make sure you bring a pencil. I will provide the scantron and equation and constant sheet.
- **4. Course packets:** I still have some course packets for people who weren't able to purchase them last Thursday—please stop by office and talk to Judy about making the purchase. Also, if you are one of the 40 or so people who still need to pay for your notes because we gave you an IOU, Judy was in front of class collecting the money. If you still haven't paid, please be prompt in getting your money in. I'll have more on scholarships for the spring later.
- **5. ChemPortal.** About 90% of you are signed up for the ChemPortal and are receiving its benefits: access to course announcements, e-mails, annotated notes, practice quizzes and exams. I do not require that you purchase the portal, but if you find yourself lost in the course, missing out on information everyone else seems to know, or struggling because of a lack of access to quality resources, and you simply didn't want to pay what works out to about \$45 per semester for access, I will be confused. If you are having trouble signing up for the portal, let me know and I will assist.
- **6. My web site.** Remember that in addition to the portal, you still have access to my web site where I archive lots of information like my musings, lecture notes, worksheets, syllabus. It also easily links you to everything from Quest to the portal to my lecture videos.

#### 7. New support materials for the week.

- On Sunday I posted a Worksheet 2 for 2008—20 wonderful questions to assist your learning the first half of Chapter 1. Travis has paid particular attention to making sure that the worksheet is really useful in preparing for the quiz on Thursday. This will not always be the case, but as I said, we are being especially nice for the first quiz.
- A practice quiz 1, which is vastly harder than the real quiz I give Thursday, was posted in the portal last week. Feel free to work it to test your knowledge. A couple of things about these portal quizzes: I don't provide help equation and constants sheets, so it is perfectly fine to go look for them somewhere else during the quiz. Also, I don't require or grade this quiz, so don't freak over getting a 37% on it. It is just a tool to give you a feel for the kind of questions you will see on the real exam or quiz.

- **8. Bubbling Scantrons.** Travis wants you to know that the biggest hassle he faces in this course occurs because students don't fill out a scantron correctly. You might not think it is hard to bubble in your uteid and version number, but every year about 50 people can't do it right on the first quiz. And who has to put up with the grief of an indignant student who believes (quite incorrectly) that it isn't his or her fault? Not me. It is Travis who has to listen to the whining. So please keep Travis happy and double check that you bubbled correctly—I can imagine that if you'll be good to Travis, he'll be good to you when we write the quizzes and exams.
- **9. Regrade requests.** When you do bubble your sheet incorrectly, the thing to do at that point in download a regrade request form from my web site, fill it out, and bring it to class. Frantic e-mails letting us know your score isn't posted or in wrong does you know good. Travis only fixes grades when he has a hard copy of the request—no e-mails requests allowed, period.
- **10.** Lecture Videos. There have been a few technical issues getting the lecture videos up. It should all be fixed now so that you can go on line, linking from my web site, and view them. While this may be good news for you, it puts me in the unwelcome situation of having to lose a lot of weight—you know what the camera does. The diet starts now.
- **11. Special Accommodations.** If you are intending to take the quiz in a quiet room, or have extended testing time, I have to know right away. So please e-mail me at once—and in general, you need to let all your faculty at UT know by the 12<sup>th</sup> class day (Friday.)
- 12. 12<sup>th</sup> class day is almost upon us this Friday. By that day you have to be registered in my class. I have already alerted everyone who might be dropped from the course, the rest of you need not fear.
- 13. Where are Dr. Laude's Office Hours? I know it is a pain, but with the number of students attending my office hours varying between 4 and 340 on any given day, it is hard to find a room that is just the right size. Besides, I like having my office hours in my office where I can host intimate gatherings of upwards of 30 Students sitting on leather sofas. But when those tests and quizzes roll around, intimacy goes out the window and a room for a couple hundred seems more appropriate. So how to know which is which?
- **Method 1.** I will tell you in the musings and announcements each week. For example:
  - This week I am holding my office hours in the classrooms because there is a quiz on Thursday.
  - All next week I will be holding my office hours in my office because there is not a quiz.

**Method 2.** Make up a little poem to assist with a common sense assessment. Here are two I have written:

- If there's a quiz or a test, it's not in Dave's nest
- Is there a quiz or test soon? Go to the classroom.

Students from previous years also provided their own poetry. Most make no sense to me or seem just wrong, but hey, I don't get today's youth so maybe you'll like his better. For example:

- If you don't want your grade to go 'ka-boom' see Dr Laude in a larger room
- On days when you use a calculator, Judy will say "see you later"
- If you'll be nerv-ous, there will be more-of-us
- If you will fill out a sheet, Dr Laude is across the street

#### 14. Errata:

- There appears to be a calculation error in questions 11 and 12 on Worksheet 2 for 2008. The answer key sets the problems up correctly but I think the calculated result is off. I will have Travis and the UGTAs check into it.
- Question number 1 from Worksheet 2 for 2007, the exponent,  $10^{-24}$  is a typo and should be  $10^{-34}$ . This is fixed in the on-line notes but should also be fixed in your course packets.
- **15. Public Service Announcements.** If your academically or service oriented organization needs some free publicity, send it to me and I will post it in the musings.
  - The Multicultural Students in Natural Sciences Students assists students from under-represented groups with a variety of mentoring, academic success initiatives and career awareness programs. The first meeting of the new year is in UTC 4.124 on Wednesday, September 10 at 7 pm. Free food and prizes to those attending.
  - Natural Sciences Week Sponsored by Natural Sciences Council and Student Organizations

# Monday:

## "Cowabunga Dude!" Round Up!

Sponsored by NSC

Location: Anna Hiss Gym Courtyard

Time: 5:00-7:00 PM

# Tuesday:

## **Captain Planet: The World is Yours!**

Sponsored by NSC Location: WCH 1.120 Time: 6:00-7:30 PM

#### **Surprise Physician Lecture!**

Sponsored by Alpha Phi Sigma

Location: ART 1.102 Time: 7:30 PM

# Wednesday:

# Dr. Bromm and the Dark "Knight": A Lecture on Monster Stars

Sponsored by NSC

Location: RLM 4.102→ Roof

Time: 7:30-9:00 PM

#### **Superhero Family Feud**

Sponsored by Minorities in Natural Sciences

Location: UTC 4.102

Time: 6:00 PM

## Mental Mastery with Dr. Salinas!

Sponsored by SYNAPSE Location: WEL 2.312 Time: 6:00-7:00 PM

## **Thursday:**

## The Incredibles: Is Your Family Super?

Sponsored by NSC Location: GSB 2.122 Time: 5:00-7:00 PM

# Friday:

## **Ironman: The Power of Design**

Sponsored by NSC Location: WEL 2.312 Time: 1:00-3:00 PM

#### Science Undergraduate Research Extravaganza

Sponsored by SURGE Location: UNB 3.304 Time: 3:00-5:00 PM

#### **Become a Super Donor!**

Sponsored by HHPO and BHPO

Location: Blood-mobile on Inner Campus

Time: 9:00 AM-5:00 PM

#### 16. Poetry corner.

First, a contribution from a classmate—something she calls a haiku. Don't' know what that means, but here it is, by Kelsey Golden

As the sun set low I read through the first chapter Moreover, I slept.

I included it and comment, sadly, that is I were to give this haiku a title, it would be:

## The joys of passive learning, or how not to study for a science course.

Are haikus supposed to have titles that are longer than the haiku?

A couple of student in class have asked for a chance to provide some poetry by contemporary poets, none of this angry stuff by long dead white guys that I like. Instead, here is angry twisted stuff by living white guys. Alan Kaufman and Billy Collins provide us with angry animal poetry.

Keep those contributions coming!!

#### I Know How It Feels

My parakeet is trying to kill himself He pops his head through the rungs of his ladder and tries to twist off his head Then he climbs to the top of the cage hangs upside down, and lets go He pops up, weaves on his feet, dazed then inserts his head again in the ladder like a soda bottle cap and tries to flip off his head Then he climbs to the roof of the cage and hangs dutifully upside down and falls and crashes Then he climbs to his feet and weaves around as I watch all this from the sofa wondering if it's the thought of spending the rest of his life with me in this little room in the Lower Haight that is driving him to such desperate lengths Jeezuz, it could be, it could be ... I know how it feels to wake up in this room's sad furnishings and realize that there's little more to do today than dress, eat and stare at the wall without a hope of getting out of this s\*\*t somehow

Another Reason Why I Don't Keep A Gun In The House

The neighbors' dog will not stop barking. He is barking the same high, rhythmic bark that he barks every time they leave the house. They must switch him on on their way out.

The neighbors' dog will not stop barking. I close all the windows in the house and put on a Beethoven symphony full blast but I can still hear him muffled under the music, barking, barking, barking,

and now I can see him sitting in the orchestra, his head raised confidently as if Beethoven had included a part for barking dog.

I mean, writing poetry on welfare is a lousy occupation And all you can write about in the end is about writing poetry on welfare

Sometimes it occurs to me that as a favor to us both I simply should reach in and snap his neck I'm sure he would be grateful It's so hard to kill yourself when you're a bird Your wings are for flight, not suicide

It is sometimes necessary to act with unforgivable cruelty as the only way free of the illusion that you are free If I killed my bird, I would know for once and all what a complete a\*\*hole I am and what a relief that would be! I could then head out the door, unafraid to make the kind of mistakes that make us laugh The brand of mistake that gives us light in the dark Such mistakes as ease our pain through the long uninterrupted scream

When the record finally ends he is still barking, sitting there in the oboe section barking, his eyes fixed on the conductor who is entreating him with his baton

while the other musicians listen in respectful silence to the famous barking dog solo, that endless coda that first established Beethoven as an innovative genius.

**Billy Collins**