Physics 5260

T. DeGrand – email thomas.degrand@colorado.edu
My office is Gamow Tower F-319.

Lectures are 2:30-3:20 MWF (for sure) in G-125 (I hope). Office hours will be Wednesday 11-12 and 1-1:30, and Thursday 2-4, and when you find me (not the hour before class, please). I respond pretty quickly to emails during the day, less quickly in evenings and on weekends.

I’ll use the regular class web page

• http://www-hep.colorado.edu/~degrand/p5260.html
to get information out to you. I’ll use Canvas as little as possible. “Secret” things will go there, if necessary. Everything public will be mirrored on the regular web page.

Once again we are driven onto Zoom for the first two weeks. Please note that I am unhappier than you are about this (no matter how unhappy you are). But – (insert quote from Camus, “The Plague.”)

While we are forbidden to meet I will do Zoom lectures at the regular class time and hold Zoom office hours, also at the times shown above. I’ll put the Zoom address (it will be a recurring meeting in Zoom parlance) on the Canvas page. While we are apart I will record lectures “to the cloud” and put the URL’s on the canvas page. I plan to do some of this from my office on campus (home internet being what it is) so I hope I will be around for questions.

Let’s hope for the best, soon.

Grade:

• homework 250
• midterm 100
• final 150
• total 500 points

Homework will typically be given out on Wednesdays, due Friday of the next week. The questions will be posted on the class web page. The grader will probably be marking papers over the weekend and I will want to post solutions at some reasonable time after the Friday deadline, so keep to a schedule and negotiate with me IN ADVANCE if you feel you have to turn in something late.

Homework solutions will be scanned onto the course web page.

The grader is Sankalp Gaur sankalp.gaur@colorado.edu

If we have a real class (i.e. in person) at the times for the exams, the exams will be in person – a 1 1/2 hour long midterm some time in early March (precise time to be negotiated). The final exam is scheduled for Sunday May 1, 1:30-4.
If we are forced into another ersatz semester the exams will be take home over several days. Can we not think about this until we know more?

My notes are on the web page and are on Canvas. They will be updated as needed. (Check the date on the first page.) Tell me about typos – I will fix them. The optional text is Sakurai and Napolitano, “Modern Quantum Mechanics.” I will try to use Sakurai’s notations and conventions. Books I regularly refer to (all have titles like “Quantum Mechanics”) include

- Schiff
- Baym
- Landau and Lifshitz
- Bethe and Jackiw, Intermediate Quantum Mechanics – this is a quite useful and detailed place to read about radiative transitions and scattering
- Gasiorowicz–an undergrad text, but not low level. Try to find the 1974 edition, which is better than the later ones

The second semester is mostly about approximations: time independent and time dependent perturbation theory, the Golden Rule, the interaction of radiation and matter, scattering theory, hopefully a bit of quantum field theory (the quantum mechanics of systems whose classical equivalent is a wave system).

Finally, if you qualify for accommodations because of a disability, see me as soon as possible but please, before the second week of class.