

Physics 5260

T. DeGrand – email thomas.degrand@colorado.edu

My office is Gamow Tower F-319.

Lectures are 2:30-3:20 MWF in G-125. Office hours will be Wednesday 1-1:30 and after class until colloquium, and Thursday 2-4, plus whenever 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.

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 Matteo Wilczak Matteo.Wilczak@colorado.edu

The midterm will be a 1 1/2 hour long exam in the evening of Wednesday, March 8, 7-8:30 PM. The final exam is scheduled for Sunday May 7, 1:30-4.

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.