PHYS4702 Introduction to Quantum Mechanics II Fall 2024

This course is a continuation of PHYS3701 from Spring 2024.

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Office Hours: Fridays 2-4pm in SERC 404 *or by appointment*

GRADER: Nazmus Sayadat Ifat email: tuq08038@temple.edu

WEB PAGE: https://www.cst.temple.edu/~tuf43817/PHYS4702/
This page has links to homework assignments and other resources.

MEETINGS: SERC 456 Tue 9:30-10:50, Thu 9:30-10:50 (Lecture)

I will not be following any particular textbook, but the following will be useful resources:

- *A Modern Introduction to Quantum Mechanics*, 2nd Ed, by Townsend ("MIQM2e")
- *Modern Quantum Mechanics*, 3rd Ed, by Sakurai and Napolitano ("MQM3e")
- *Physics from Symmetry*, 2nd Ed, by Schwitchtenberg

Sections in MIQM2e and MQM3e are referenced in the syllabus. The first two weeks of class will make use of Sections 3.1 through 3.6 of Schwichtenberg.

A homework assignment is due each week (starting in week #2) on Tuesday. These assignments will be substantial and will be how you will learn most of the class material. I encourage you to collaborate on them, but you all must turn in your own work.

I need to do some traveling this semester, so a few classes will be held over Zoom. These classes are marked in blue on the syllabus. I will get you the Zoom link well ahead of the scheduled class time.

GRADING POLICY

Your course grade will be determined mainly by the homework. I will give a mandatory final exam at the end of the semester during the time slot determined by the University. Your relative grade on the final exam will be used to split hairs on your course grade.

LEARNING OUTCOMES

This is an ambitious course in Quantum Mechanics. You will build on what we did in PHYS 3701, and see many important fundamental applications and formulations of the theory. If you choose to continue into graduate education in Physics, you will find that this course is excellent preparation for even more advanced treatments.

ACADEMIC INTEGRITY STATEMENT

There is no need to belabor this point, but I will assume that we are all working together to learn this material. Everyone will help each other, but nobody will rely solely on someone else's work to complete the assignments. I will trust you to come to me if there are any integrity issues that we need to address.