

PHYS522, Spring 2024, Quantum Mechanics II

Instructor: Dr. Wonhee Ko (203 South College/233 IAMM, wko@utk.edu)

General Information

Lecture Hours: 12:55 – 2:10 pm Tue/Thu.

Location: 306 Nielsen

Office Hours: Thu 2:10 – 3:00 pm @ 203 South College (or email me anytime, starting the subject line with [PHYS522], and will reply within 24 hours)

Textbook: “Modern Quantum Mechanics” by J.J. Sakurai (revised edition)

Course Materials: Check Canvas

TA: James Christie (jchris44@vols.utk.edu)

Credit Hours: 3

Course Description

This is the 2nd part of the graduate-level quantum mechanics. We will cover chapter 4~7 of Sakurai’s book, including 1) Symmetry, 2) Gauge potentials, 3) Time-independent approximations, 4) Time-dependent approximations, 5) Identical particles, and 6) Scattering theory.

Grading Policy

The semester Grade will be based on a weighted average of the homework assignments (30 %), midterm exam (30 %), and the final exam (40 %). **No makeup assignments or exams will be given.**

Homework (30 %): Homework will be assigned regularly. The assignments will be turned in during class on the indicated due date. **No late assignments will be accepted.**

Midterm exam (30 %): The midterm exam will be in-class and expected to happen around mid-March. More information on the exam will be announced later.

Final exam (40 %): The final exam is scheduled to take place at 3:30 pm on May 15 (Wed) on Nielsen 306.

The Midterm and Final exams will be **open book**.

Letter grade will be obtained using the conversion below:

%	Grade
>90%	A
85% - 89%	A-
80% - 84%	B+
75% - 79%	B
70% - 74%	B-

65% - 69%	C+
60% - 64%	C
55% - 59%	C-
50% - 54%	D+
45% - 49%	D
40% - 44%	D-
<39%	F

* I encourage students to work together and discuss the homework with each other. Such discussions are one of the most effective ways of assimilating the material. The work you turn in must be written up by you and **NOT be a copy of your peers' work or some other source such as solutions found on the Internet. Any homework assignment that is a direct copy of another person's work without attribution will count as plagiarism and will be dealt with accordingly.**

For students with disabilities

If you need course adaptations or accommodation because of a documented disability, please contact the Office of Disability Services at 2227 Dunford Hall (telephone/TTY 865-974-6087; e-mail ods@utk.edu) by January 24. This will ensure that you are properly registered for services.

Academic Honesty

All work submitted by a student is expected to represent his/her own work. Students are expected to enter their own homework without assistance from others. Students are expected to perform all work in conformance with the University policies regarding Academic Honesty.