

Quantum Mechanics II

Instructor: Oksana Ostroverkhova, oksana@science.oregonstate.edu

Textbook: *Modern Quantum Mechanics (3rd ed.)*, J.J. Sakurai, J. Napolitano

References: 1. *Quantum Mechanics*, Cohen-Tannoudji, Diu and Laloe
2. *Quantum Mechanics*, B. H. Bransden and C. J. Joachain
3. *Quantum Mechanics*, D. McIntyre

Office hours: Weniger 413, on request

Course outline:

Particles in Spherically Symmetric Potentials		week 1-2
Angular Momentum	(Ch. 3.1 - 3.3, 3.5-3.7)	week 3-5
Addition of Angular Momenta	(Ch. 3.8, 3.9, 3.11)	week 6-8
Time-independent perturbation theory	(Ch. 5.1-5.3)	week 9-10

Homework:

There will be a homework assignment per week: check the course web for current assignments due. Homework is to be turned in at the beginning of the class; late homework is not accepted. The homework solutions will be available immediately after the due time.

Worksheets:

In order to help you check your understanding of the material and provide feedback for me, worksheets will be assigned at almost every lecture for work on the day of the class. These will be graded and returned by the next lecture.

Exams:

We will have one in-class midterm (tentative date February 5) and a final exam (registrar-scheduled time slot is on Thursday, March 20, at 9:30 am).

Grading Policy:

Homework (total)	30%
Worksheets (total)	10%
Midterm	20%
Final	40%