

5402. Quantum Mechanics II.

Fall 2020 Syllabus

Professor:	Alex Kovner	Office	Monday
Office:	S413 G	Hours:	12:00-1:00 PM
Phone:	(860) 486-4688		or any other time
email:	alexander.kovner@uconn.edu		

Textbook: The required book for the course is *R. Shankar Principles of Quantum Mechanics, second edition*,

Lectures: Monday-Wednesday, 9:30-10:45 AM, Room UTEB175. We will meet in person on Monday, August 31 and then every second Wednesday, starting Sept. 16. The Wednesday meetings will be primarily dedicated to solving problems. The rest of the meetings will be online via Blackboard Collaborate. We will also schedule an additional bi-weekly meeting - hopefully on Wednesday evenings, time TBD.

Course Grade: There will be regular graded homeworks during the semester, one midterm exam and one final exam. The homework grade will constitute 25% of the final grade, midterm - 25% and (cumulative) final 50%.

Course Outline:

1. Spin and addition of Angular momentum.
2. Variational and WKB methods.
3. Time Independent perturbation Theory.
4. Time dependent perturbation theory.
5. Scattering theory.
6. The Dirac equation.
7. More on path integrals - time permitting.