

Course Information Sheet for Physics 472: Quantum Mechanics II

A continuation of Physics 371. Schrödinger equation with an external electromagnetic field; identical particles; addition of angular momenta; fine structure of atomic spectra; molecules; approximation methods (perturbation theory; semiclassical methods; variational principle); special topics.

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Office hours: Thursdays, 1–3pm (tentative), or by appointment

Course content available at www.physics.arizona.edu/~stafford/teaching.html;
item grades and duplicates of important information available at d2l.arizona.edu.

Grading:

The course will be graded on a curve, based on the cumulative score. The minimum cumulative percentages necessary to obtain the following letter grades will be approximately (but not higher than): $A \geq 85\%$, $B \geq 70\%$, $C \geq 55\%$, $D \geq 40\%$. Cumulative scores will be determined as follows:

Homework: 15% (due Fridays at 4pm; lowest score dropped)

Midterm 1: 25% (Thursday, October 2)

Midterm 2: 25% (Thursday, November 13)

Final Exam: 35% (Wednesday, December 17, 10:30am–12:30pm)

One or more homework assignment(s) will be computational. No excuses accepted for missed homework, but the lowest homework score will be dropped. A missed exam due to an excused absence or a planned absence that is documented ahead of time by the student and approved by the instructor will be substituted with a make-up exam or an alternative arrangement at the discretion of the instructor.

All work to be considered for a regrade must be submitted at most one week after its due date.

Required Text:

David J. Griffiths, “Introduction to Quantum Mechanics” (2nd Ed., Pearson Prentice Hall, 2004).

Additional References (available in the Science Library)

Lorella M. Jones, “An introduction to Mathematical methods of physics” (Benjamin/Cummings, 1979).

Disabilities:

Students requiring accomodation in testing or note-taking must notify the instructor and sign up with the Disability Resource Center by September 5, 2014.

Academic integrity:

Students are expected to follow the University code of academic integrity and the code of student conduct. These codes can be found at deanofstudents.arizona.edu/policiesandcodes.

Note: The information contained herein is subject to change with reasonable notice from the instructor.