

Quantum Mechanics I (Undergraduate)

Quantum Mechanics

Fall, 2013

Physics 430

Section 1

Instructor: Prof. Mark Byrd

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Class URL: www.physics.siu.edu/~mbyrd/440Info

Office Hours:

MWF 10:30-11:30;1:50-2:50

Lecture Hall: The lectures for this class will take place from **1:00-1:50 on MWF, often in Neckers 410 unless otherwise noted.**

EMERGENCY PROCEDURES

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus, available on BERT's website at www.bert.siu.edu, Department of Safety's website www.dps.siu.edu (disaster drop down)

and in Emergency Response Guideline pamphlet. Know how to respond to each type of emergency.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency. The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.

COURSE OUTLINE

TEXTBOOK: Introduction to Quantum Mechanics (Second Edition), by David J. Griffiths, and [QUNET's wikibook: "Quantum Computation and Quantum Error Prevention"](#)

The goal of this course is to understand basic quantum mechanical laws, solve simple analytically solvable problems, and learn how to apply quantum mechanics to some fundamental and important basic physical problems such as explaining the spectra of the Hydrogen atom and the periodic table of the elements.

Grades: Homework: 15%, Midterm: 40%, Final:45%

HOMEWORK: There will be homework assignments given during the semester, approximately one assignment per week. The homework problems will be graded. Homework includes projects, in-class assignments, and problems assigned from the text.

COURSE OUTLINE: We will try to cover all of Chapters 1-5 and some other selected topics from quantum information. All starred problems (those marked with an asterisk) will be assigned in addition to some other homework, class presentations, and exercises.
