

**Physics 115a**  
**Quantum Mechanics**  
**Spring 2007**  
**Tues-Thurs 1:40-3pm 130 P/G**  
**Prof. Andreas Albrecht**

**General Information**

This course is the first quarter of upper division quantum mechanics. The course will cover the first three chapters of Griffiths in depth, plus special topics as time permits. Prerequisites: Physics 104A and 105B with grade of C- or better, or consent of instructor.

**Course web site:** <http://www.physics.ucdavis.edu/Cosmology/P115a/> (*the best place to find up-to-date information on the course including homework, solutions, links to, other information and resources for the course*).

**Email:** I have set up a course email list (phy115a-s07@ucdavis.edu), and I might send important information about the course to this list. *Please make sure you read your campus email regularly.* An archive of course emails will be linked to the course web site. All students can send email to this list. I encourage you to use it to form study groups, try to get answers to questions etc.

**Required Text:** Introduction to Quantum Mechanics (2nd Edition) by David Griffiths. See course web site for assigned reading

**Homework**

- Assigned (on the course web page) Thursdays and due the following Thursday **\*at the start of class\*** (or in my mailbox by 1pm the same day) unless otherwise noted (Total homework score counts as 20% of course grade)
- Teamwork on the homework is encouraged. However, please be aware that it is your responsibility to thoroughly understand all the homework you turn in. Doing your homework is the key to preparing for the exams. Not making full use of this opportunity is very likely to decrease your final grade. Also, mindlessly copying someone else's homework is not permitted and is a violation of the code of academic conduct. I may quiz individual students about their homework to check this if I am concerned.
- Homework turned in late will not be marked and will get a score of zero. (Contact me if you have special circumstances such as a medical excuse)
- Please check your MyUCD pages regularly and make sure your homework grades are properly recorded. It may not be possible to resolve issues that are not raised promptly.
- Each weekly homework carries equal weight unless otherwise specified.

**Midterms:** Tuesday *April 24* and Thursday *May 24* in class. Each midterm is 22% of the course grade.

**Final Exam:** Wednesday, June 13 at 1:30 pm (36% of course grade)

**Books on Reserve:**

i) Course Text (2hr)

ii) "Principles of Quantum Mechanics" 2nd edition by R. Shankar. *A more thorough and formal approach. See if you like it.* (24 hrs)

iii) For 24hr reserve: "Quantum Computation and Quantum Information" by M. Nielsen and I. Chuang *Cool advanced stuff.* (24 hrs)

**Feedback:** Feedback on the course is most welcome. Feel free to approach me in person, send email, or leave/send a note in my mailbox or in the homework mailbox. (A note can be anonymous if you wish.)

**Final Course Grade:**

- Your final grade for the course will be determined by combining grades for Homework (20%) Midterms (22% each) and Final exam (36%).
- I may choose to curve the final scores to produce your letter grade. On the midterms and homework, I might give you guidelines about how the curve might go, but I will not specify the curve exactly until the end of the course.