Organization

Lectures:
TR 12:30-2:00 in room 4-370.
Lecturer: Hong Liu
Room NE25-4075; Phone 253-4853; email hong.liu@mit.edu
Office Hours: Tuesdays 3-4pm, or by appointment.

Recitation Sections:
Recitation 1: MW 12-1 in room 12-122
Recitation 2: MW 1-2 in room 12-122
Instructor: Leonid Levitov
Room 12-105; Phone 253-6817; email levitov@mit.edu
Office Hours: Mondays, 2-3pm, or by appointment.

Teaching Assistant: Ilya Sigalov
Room NE25-4050; Phone 252-2583; email sigalov@mit.edu
Office Hours: Mondays 7-8pm in 8-310 (the combination: 8-0-1-2-5),
or by appointment.

Course Administrator: Maria Riefstahl
Room 4-315; Phone 253-4461; email maria@mit.edu

Texts:
D. J. Griffiths, *Introduction to Quantum Mechanics, 2nd edition* (required);
C. Cohen-Tannoudji, *Quantum Mechanics*, Vol. 2 (strongly recommended);
J. J. Sakurai, *Modern Quantum Mechanics* (recommended if you like it; somewhat advanced);

All these texts, and others which may be of value (eg Baym; Dirac; Gasiorowicz; Gottfried; Liboff; Peebles; Schiff) are available in the Physics Reading Room.

Prerequisites:
You must complete 8.05 with a grade of C or better before attempting 8.06. If you have any questions about your background, come talk with Prof. Liu.
Use of the Web

The course webpage is http://web.mit.edu/8.06/www. All course-related documents (syllabus, problem sets and solutions, notes, handouts, announcements, etc.) will be distributed electronically over the web. Students should check the 8.06 Home Page regularly for updates and announcements. If you are attending 8.06 as a Listener then it is important that you are properly registered in order to have access to class-restricted material that will be posted on the web page. Students can also send comments to the teaching staff anonymously, using the form provided on the web page. Please be constructive! Grades for homework and tests will be posted on the web using the physics grade management system. To preserve confidentiality this system uses MIT Personal Certificates (the same certificates used by many other MIT web programs). If you do not have a certificate then you should download one when you first access the grade webpage.

Grading:

Grades will be determined by a weighted average of problem sets (30%), a Midterm that will be held in class on Thursday March 23 (15%), a Term Paper (20%), and a Final Exam (35%). The faculty may alter grades to reflect class participation, improvement, effort and other qualitative measures of performance.

Problem sets:

Problem sets are a very important part of 8.06. We believe that sitting down yourself and trying to reason your way through a problem not only helps you learn the material deeply, but also develops analytical tools fundamental to a successful career in science. We recognize that students also learn a great deal from talking to and working with each other. We therefore encourage each 8.06 student to make his/her own attempt on every problem and then, having done so, to discuss the problems with one another and collaborate on understanding them more fully. The solutions you submit must reflect your own work. They must not be transcriptions or reproductions of other people’s work. Plagiarism is a serious offense and is easy to recognize. Don’t submit work which is not your own.

Problem sets will be available at http://web.mit.edu/8.06/www/ at least one week before they are due. They will be due at 7pm on the days indicated in the calendar. Solutions will be available at http://web.mit.edu/8.06/www/ the day after the problem set is due. Graded problem sets will be returned in section. We do not accept problem sets after they are due. Period. However, your lowest problem set score will be discarded at the end of the semester; only the remaining n - 1 will be used in determining your grade. Due
to the construction this term, we will not be using the usual boxes in 4-339B for turning in homework. Instead we will use a new set of homework boxes in Room 26-524 which will be labeled by your section number. Note that the Laboratory of Nuclear Science has kindly allowed us to use part of their office space in 26-524, so please be courteous and do not congregate in their hallway. You should anticipate that the boxes will be emptied shortly after the 7 pm deadline.

**Term Paper:**

Everyone in 8.06 will be expected to research, write and “publish” a short paper on a topic related to the content of 8.05 or 8.06. The paper can explain a physical effect or further explicate ideas or problems covered in the courses. It can be based on the student’s own calculations and/or library research. The paper should be written in the style and format of a brief journal article and should aim at an audience of 8.06 students. Writing, editing, revising and “publishing” skills are an integral part of the project, which is described in full in a separate handout.

Because 8.06 is a CI-M Subject, in order to pass 8.06 you must obtain a grade of C or better on your term paper. If you do not succeed in this, you will get a grade of Incomplete until you revise your term paper sufficiently to earn at least a C, and only at that time you will be assigned a final grade based on the breakdown given above.