

Mathematics 6580 (Hilbert Space)
Summer Semester 2006 - W. L. Green

1. **General Information.** This course meets for lectures on MWF from 12:00 until 1:10 PM in Room 240 of the Skiles Building. Please make sure you are properly registered. My office is in Room 134 of Skiles, my office phone is 404-894-4312, and my e-mail address is green@math.gatech.edu. I have a web page, accessible from the School of Mathematics pages, located at (<http://www.math.gatech.edu/~green/>). My office hours (tentative) are Monday and Wednesday from 3 to 4 PM, or by appointment. I respond more rapidly to telephone messages than to e-mail.

2. **Material.** The textbook for this course is *Introduction to Hilbert Space*, third edition, by Debnath and Mikusinski. You should read sections of the text as we take them up in class. We will cover most of chapters 1, 3 and 4, and parts of 5. For the first day, you should start your reading at the beginning of chapter 1.

3. **Homework and Examinations.** Homework will be assigned, and some of it will be collected and graded, provided we can find a grader for this class. I strongly urge you to do all of the assigned problems. Please write neatly, clearly, and in complete sentences. There will be a 70-minute midterm examination and a final examination. Tentative dates for these examinations are

June 19 (Monday)	Midterm
August 2 (Wednesday)	Final

The midterm will be in the same room as the lectures, and the final examination will take place as scheduled by the Office of the Registrar and the School of Mathematics. Homework assignments will be posted on my web page.

First chapter's homework assignment: Exercises 3, 5-7, 9, 12, 14, 19-20, 22, 24, 30, 34, 40, 44, 45, 49, 52.

4. **Grading.** The hour tests, homework average and final examination will be counted with the following weights.

Midterm Examination	30%
Final Examination	50%
Homework (assuming a grader)	20%

I will grade the midterm and the final myself. If you have a question regarding the grading of the midterm, please return your paper to me without writing on it or altering it in any way, and explain your question on a separate piece of paper, **within one week of the date on which the midterm was returned**. You may see your final examination paper as soon as I have completed the grading.

Please be aware of the Institute's honor code and adhere scrupulously to a policy of academic honesty. If you wish to know whether some procedure is allowed, please ask me. Calculators **are** allowed (but are probably largely useless) on the work in this course, but wherever it is possible to do so, you should provide an exact answer rather than an approximation (e. g., $1/7$ rather than 0.14). All examinations are closed book, and without cooperation.