

Math 489AB

Exam 2 Study Suggestions

In general, know the definitions. Be prepared to apply these definitions to specific examples, as well as to prove basic facts and theorems.

Know the statements of the theorems, the proofs of those that are relatively easy to prove, and the approach taken in proving the others. Be prepared to solve problems that are similar to the homework exercises (both collected and not collected) and to the proofs and examples given in class.

The Exam will cover the following material from the text.

Chapter 5: Sections 5.6 – 5.7

Chapter 7: Sections 7.1 – 7.4

Chapter 8: Sections 8.1 – 8.6

Chapter 9: Section 9.1 – 9.2

It will also cover the class notes on **Fourier Series and Transforms**, and on **3 Linear PDEs**.

You may bring a “cheat sheet” consisting of one **handwritten** 8 ½ by 11 inch sheet of paper to the exam. You may write on both sides of this paper, but your handwriting must be of relatively normal size. Include whatever you wish - definitions, theorems, exercises etc., even the basic approaches taken in various proofs. But you may **not write out complete proofs or completely worked-out problems or examples**. If you do so, I will not be able to give you credit on any related question that appears on the exam. These sheets will be collected along with the exam.

Four of the questions will be taken from the following list:

5.6.26,
Fourier Series notes #8,
7.2.16, 7.3.20, 7.4.34, 7.4.54
PDE notes #5,
8.1.7, 8.2.36, 8.4.7, 8.6.12,
9.1.32, 9.2.14