

## Math 630A Fall 2004

**Instructor:** Stefen Hui, GMCS 621, hui@math.sdsu.edu

**Text:** Gerald Folland, Real Analysis, Second Edition, Wiley

**Office Hours:** TuTh 1050AM-1150AM and by appointment

**Material Covered:** We will first go over some basic metric space theory and then cover Chapters 1-3 of the text. The main topics are the construction of measures, properties of general measures and measurable functions, integration on measure spaces, and differentiation of measures.

**Homework:** Most of the problems will be from the text. There will be roughly one assignment every two weeks. Depending on the nature of the problems, some or all of the problems will be graded. Please observe the following when doing the homework:

- Do the homework problems by yourself.
- Do discuss the problems and relevant material with your classmates to the extent of exchanging hints and ideas.
- Don't give or receive complete solutions or detailed outlines of complete solutions to or from your classmates.
- Don't make trivial changes in notation or phraseology to someone else's solution and turn it in as your own.

**Final:** The problems will be similar to the homework problems. There may be problems on definitions and statements of important theorems.

**Grading:** Homework 70%, Final 30%