# Real Analysis - Math 526

### INSTRUCTOR INFORMATION:

Instructor: Tatiana Toro

Office: Padelford C-343, Phone: 543-1173.

E-mail: toro@math.washington.edu

Office hours: Monday 10:30-11:30, Wednesday 9:15-10:15 or by appointment.

## TA INFORMATION:

TA: Carto Wong.

Office: Padelford C-404.

E-mail: carto@math.washington.edu

Office hours: Tuesday 4-6 or by appointment.

#### **TEXTS:**

- Real Analysis, Measure Theory, Integration & Hilbert Spaces, Stein & Shakarchi [SS]
- Real Analysis, Folland, 2nd Edition [F]

### RESERVE LIST:

- Real Analysis, Measure Theory, Integration & Hilbert Spaces, Stein & Shakarchi.
- Real Analysis, Folland, 2nd Edition.
- Real Analysis, Royden, 3rd Edition
- Real and Abstract Analysis, Hewitt & Stromberg.
- Real and Complex Analysis, Rudin.
- Functional Analysis, Rudin.

### **SYLLABUS:**

- The dual of C(X) [F], Ch 7.
- Compact operators on Hilbert spaces [SS], Ch 4.
- Elements of Fourier Analysis [F], Ch 8.
- Elements of Distribution Theory [F], Ch 9.

### **GRADING POLICY:**

- Homework 25%. There will 9 weekly homework assignments due on Wednesday at the beginning of class. Each homework will include one or two prelim problems.
- Midterm 15%. The problems will come directly from the homework.
- Final Exam 60%. All the material covered in Math 524, 525 and most of the material covered in Math 526 will be included in this exam.

### **IMPORTANT DATES:**

- Midterm exam, Friday May 6, 2011, in class.
- Final exam, Wednesday June 8th, 2011 1:30-5:30

**REMARKS:** There will be no class on Monday May 30th.