

# Real Analysis - Math 526

## **INSTRUCTOR INFORMATION:**

Instructor: Tatiana Toro  
Office: Padelford C-343, Phone: 543-1173.  
E-mail: toro@math.washington.edu  
Office hours: Wednesday 1:00-2:30 or by appointment.

## **TA INFORMATION:**

TA: Leonard Wong  
Office: Padelford C-552.  
E-mail: wongting@uw.edu  
Office hours: Tuesday 2-4 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:**

- Banach spaces and  $L^p$  spaces [F], Ch 5 and Ch 6.
- 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 40%. There will be 9 weekly homework assignments due on Wednesday at the beginning of class. Each homework will include one or two prelim problems.
- Final Exam 60%. All the material covered in Math 524, 525 and 526 will be included in this exam.

**IMPORTANT DATES:**

- Final exam, Wednesday June 11th, 2011 1:30-5:30

**REMARKS:** There will be no class on Monday May 26th.