# Real Analysis - Math 525

## INSTRUCTOR INFORMATION:

Instructor: Tatiana Toro

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

E-mail: toro@math.washington.edu

Office hours: Monday 9:30-11 or by appointment.

## TA INFORMATION:

TA: Jessica Merhej Office: Padelford C-543. E-mail: jem05@uw.edu

Office hours: Tuesday 11-12, Friday 2:30-3:30 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:**

- Differentiation and Integration: [SS] Ch 3, Ch 6, section 4.
- Hilbert spaces: [SS] Ch 4.
- Point set topology: [F] Ch 4.
- Elements of Functional Analysis: [F] Ch 5.

## **GRADING POLICY:**

- Homework 50%. There will 9 weekly homework assignments due on Wednesday at the beginning of class.
- Final Exam 50%.

**CLASS INFORMATION:** Students will be assigned reading for each lecture. They will be responsible for this material and are expected to be able to discuss it in general terms. Each class will start with a brief discussion of assigned reading.

IMPORTANT DATE: Final exam, Wednesday March 19, 2014 2:30-5:30

**REMARKS:** There will be no class on Monday January 20 and on Monday February 17.