Mathematics 321 Fall, 2015 Wieting

## REAL ANALYSIS

## **Basic Concepts**

- (•) Metric Spaces
- $(\bullet)$  Measure Spaces
- $(\bullet)$  Integrals

# **Basic** Theme

(•) Convergence

### Applications

- $(\bullet)$  Fractal Geometry
- $(\bullet)$  The Central Limit Theorem

#### Texts

Metric Spaces, Thomas Wieting (online)

Measures and Integrals, Thomas Wieting (online)

Measure Theory and Probability, Malcolm Adams and Victor Guillemin

#### Homework

Weekly: Wednesday  $\longrightarrow$  Wednesday

#### Examination

EndTerm: Take Home/Open Book