

**Syllabus for Math 405: Introduction to Real Analysis  
Spring 2014**

**Course:**

*Lecture:* MW 1:30-2:45 pm Rm. Kreiger 302

*Section:* F 1:30-2:20 pm Rm. Kreiger 302

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**Course Website:** The course website may be found at <http://math.jhu.edu/~bernstein/math405>.

**Text:** The course text (on reserve in the library) is:

*The Way of Analysis*, Rev. Ed., by R. Strichartz, Massachusetts: Jones and Bartlett, June 2000 (required)

**Homework:** Weekly homework will be due Friday's in section. The homework will be posted to the course website the previous week. Late work will not be accepted. There will be 10 sets assigned in total. Homework will count for **20%** of the final grade with the lowest grade dropped.

**Exams:** There will be **two** in class midterm exams. The midterms will each count for **20%** of the final grade. Date of the midterms: **Wednesday, March 5** and **Wednesday, April 9**. The final will count for **40%** of the final grade. Date of the final exam: **Wednesday, May 14, 9am-12pm:**

**Working Together:** Working together is allowed and encouraged, however it is essential that each student write up his or her own solutions. Use of sources (i.e. other people, books, the internet) without proper attribution will be considered plagiarism.

**Material to be Covered:**

The Logic of Mathematical Proofs

Construction and Topology of the Real Line

Continuous Functions

Differential Calculus

Integral Calculus

Sequences and Series of Functions

**Course Schedule:** A (tentative) schedule may be found on the course website.