## $\frac{\text{Real Analysis I - Math 420/507}}{\text{Fall 2016}}$

- Instructor: Malabika Pramanik
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- Office hours: To be announced.
- Web page: The course website is

http://www.math.ubc.ca/~malabika/teaching/ubc/fall16/math420-507/index.html

Homework assignments and all relevant course information (such as changes to office hours if any, or solutions to homework problems if needed) will be posted here.

- Text: Real analysis: Modern techniques and their applications by G.B. Folland.
- **Pre-requisite:** A score of 68% or higher in Math 321.
- Course outline: The UBC course description is as follows:
  - Sigma algebras
  - Lebesgue measure
  - $\circ$  Borel measures
  - $\circ\,$  Measurable functions
  - $\circ$  Integration
  - Convergence theorems
  - $\circ L^p$  spaces
  - Hölder and Minkowski inequalities
  - Lebesgue and/or Radon-Nikodym differentiation.

The core topics of this course are contained in Chapters 1, 2 and 3 of the textbook.

• Lectures : Monday, Wednesday, Friday 9 am - 10 am in Mathematics 202.

• Grading Policy: Homework problems will be posted regularly on the course website. There will be an in-class midterm on Friday October 21. Your total score will be a weighted average of your homework, midterm and final scores, with the breakdown as follows.

| Homework   | 40% |
|------------|-----|
| Midterm    | 20% |
| Final exam | 40% |

The final exam date will be made available during the term. Please do not make travel arrangements before this date has been released.