

# Math 321, Real Variables II

## Spring 2016

**Time and Place:** MWF 9-10, MATH 104.

**Instructor:** Kalle Karu.

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Office hours: TBA.

**Textbook:** *Principles of Mathematical Analysis, third edition* by W. Rudin.

**Website:** [www.math.ubc.ca/~karu/m321](http://www.math.ubc.ca/~karu/m321).

**Topics:** We cover Chapters 6-7 and parts of Chapters 8-10 from the textbook:

- The Riemann-Stieltjes integral.
- Sequence and series of functions, uniform convergence.
- Fourier series.
- Functions of several variables.

**Prerequisites:** Math 320.

**Homework.** Weekly homework assignments will be posted on the course website. Homeworks are due on Fridays. You are free to discuss homework problems with other students, but you need to write up your own solutions.

**Exams.** There will be two midterm exams and one final exam. The dates of the midterm exams are:

- Exam #1: Wednesday, February 10.
- Exam #2: Wednesday, March 30.

Midterm exams take place during regular class hours. The final exam is a  $2\frac{1}{2}$  hour long exam scheduled by the university. No electronic aids (calculators, cell phones, etc.), notes or books are allowed on any exam.

**Evaluation.** Your final grade will be based on your performance on homework (1/6 of final grade), midterm exams (1/6 each) and final exam (1/2).