M 547: Real Analysis (Fall 2010)

Meetings: MWF 11–12am, 1-147 Wilson Hall

- Instructor: Lukas Geyer, 2-254 Wilson, Tel. *5342, email geyer@math.montana.edu
- Office Hours: MF 9-10, W 1-2, or by appointment
- **Text:** Robert G. Bartle, *The Elements of Integration and Lebesgue Measure*, Wiley.

Additional Texts: H. L. Royden, *Real Analysis*, Prentice Hall.

Prerequisites: M 382 (MATH 362) or M 505 (MATH 505)

This course will give a rigorous introduction to the theory of measure and integration. Both the general theory and the concrete construction and properties of Lebesgue measure will be studied. The aim is to cover chapters 1–10 of Bartle's book.

The course grade will be comprised of the grades on weekly homework assignments (30%), a midterm exam (30%), and a final exam (40%). Every student should write up their own homework solutions, but collaboration on solving the problems is encouraged.

Final Exam: Thursday, December 16, 4–5:50pm.