

**MATH 810 - REAL ANALYSIS, FALL 2017**  
**T R 1:00-2:15, 564, SNOW HALL**

- **Instructor:** Professor Atanas Stefanov
- **Office:** Snow 514, Phone: 4-3009
- **Office Hours** M 1:00-2:00, F 11:00-12:00.
- **Web:** stefanov@ku.edu  
<http://www.math.ku.edu/~stefanov>
- **Prerequisite:** Math 766 or equivalent. Students should cover the background material (contained in Chapter 1) by themselves, before the start of the semester or soon thereafter.
- **Topics:**
  - Sets and measures - Chapters 2,3,4
  - Measurable functions and the Lebesgue integral - Chapters 5, 6, 7, 8, 10.
  - The Radon-Nikodym theorem - Chapters 11, 12, 13.
  - $L^p$  spaces, duality - Chapter 15
  - Hilbert spaces - Chapter 19.
- **Text:** Real analysis for graduate students, second edition by Richard F. Bass, ISBN-13: 978-1481869140. The book is in the \$10 range and it should be available through an independent publisher and through the KU bookstore. The second edition of the book is available electronically, I have already posted a link to it on my website.
- **Homework:** There will be five homework assignments covering specific portions of the material, assigned approximately once every three weeks.
- **Exams:** There will be one midterm exam and a comprehensive final exam.
- **Grade:** The grade will be determined as follows:  
Homework assignments - 40 %, Midterm exam - 20 %, Final exam - 40 %.  
The usual 90 % for an A, 80 % for a B etc. cutoffs will be applied.
- **Students with disabilities:** The staff of Services for Students with Disabilities (SSD), 135 Strong, 785-864-2620, coordinates accommodations and services for KU sources. If you have a disability for which you may request accommodation in KU classes and have not contacted them, please do so as soon as possible. Please also see your instructor privately in regard to this course.

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- **Religious observances:** Any student in this course who plans to observe a religious holiday which conflicts in any way with the course schedule or requirements should contact me as soon as possible to discuss alternative accommodations.