

**COURSE DESCRIPTION**  
**REAL ANALYSIS II**  
**MA 646-2F**  
**SPRING 2020**

DEPARTMENT OF MATHEMATICS  
UNIVERSITY OF ALABAMA AT BIRMINGHAM

**Course Instructor:** Rudi Weikard  
**Office:** UH 4032  
**Phone#:** 934-3720  
**E-mail:** weikard@uab.edu  
**Office Hours:** Drop in anytime or call for an appointment.

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**Meeting times:** TT 3:30 pm — 4:45 pm  
**Meeting location:** HHB 426  
**Textbook:** No textbook required. Lecture notes will be available.

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**Important dates:**

**First day of class:** January 13  
**Spring Break:** March 16 – 22  
**Last day of classes:** April 24  
**Final exam:** April 28, 4:15 pm – 6:45 pm  
**Grades available online:** May 6

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**Course content:**

- The Lebesgue-Radon-Nikodym Theorem
  - Radon Functionals on Locally Compact Hausdorff Spaces
  - Differentiation
  - Functions of Bounded Variation and Lebesgue-Stieltjes Measures
  - Additional Topics
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**Assessment procedures:** Final grades are determined by performance in class during the course and by a final exam.

Receiving a grade of B requires a solid understanding of the concepts of measure and integral, the ability to reason through the proofs of several standard theorems, and the ability to solve many of the assigned problems.

Receiving a grade of A requires a deep understanding of the concepts of measure and integral, the ability to reason through the proofs of most standard theorems, and the ability to solve most of the assigned problems.

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**Disability Support Services:** UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability

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*Date:* January 3, 2020.

that qualifies under the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act, and you require accommodations, please contact Disability Support Services for information on accommodations, registration and procedures. Requests for reasonable accommodations involve an interactive process and consist of a collaborative effort among the student, DSS, faculty and staff. If you are registered with Disability Support Services, please contact me to discuss accommodations that may be necessary in this course. If you have a disability but have not contacted Disability Support Services, please call 934-4205 or visit <http://www.uab.edu/dss>.