

**MATH 5210-1, 2:00 - 2:50 MTWF IN LCB 219**

**Instructor:** Gordan Savin. Office: LCB 205. Office hours: MWF, 1 - 2, or after the class or by appointment. You are also welcome to stop by my office anytime.

<http://www.math.utah.edu/~savin>

**Goal:** This is an advanced course in real analysis. We start with metric spaces and topology necessary for a proper course in real analysis, continuing with Lebesgue measure and integration in  $\mathbb{R}^n$ , normed spaces, Stone-Weierstrass approximation, functions of bounded variation and the fundamental theorem of calculus in the language of the Lebesgue integral. The course emphasizes proofs and rigorous analytic thinking. We shall use two texts: *Real Analysis* by Hasser and Sullivan, and *Introductory Real Analysis* by Kolomogorov and Fomin. The former is more aligned with this course, but we shall use the latter for Lebesgue measure and integration.

**Homework and Exams:** Grade will be based on several homework sets, published on my webpage, approximately four to five sets.

**Accommodation:** The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services (CDS), 162 Olpin Union Building, 581- 5020 (V/TDD). CDS will work with you and me to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to CDS.

**Student Code:** All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. You have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, collusion, fraud, theft, etc. Students should read the Code carefully and know you are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

<http://regulations.utah.edu/academics/6-400.php>