

MAT 412 M002 – Introduction to Real Analysis I – Fall 2014

Instructor: Leonid Kovalev

Email: lvkovale@syr.edu

Office: Carnegie 213C

Office Hours: Su, Mo, We 3-4, Tu 1-2, Th 11-12. You can also see me at other times by appointment, or whenever the office door is open.

Phone: 315.443.1487 (office), 315.200.5367 (cell).

Course Description: Introduction to the foundations of calculus covering topics from the following: the real number system, functions, limits, sequences, infinite series, continuity, and uniform continuity.

Textbook: “Introduction to Real Analysis” (4th ed.) by W. Wade, ISBN 978-0132296380. The course material is based on Chapters 1–5.

Class Time and Location: MWF 11:40–12:35, Carnegie 119.

Grading: The grades will be based on homework (25%), weekly quizzes (5%), three midterm exams (15% each), and final exam (25%). The grading scheme will be no stricter than: 93 for A, 90 for A-, 87 for B+, 83 for B, 80 for B-, 77 for C+, 73 for C, 70 for C-, 60 for D.

Homework will be assigned and collected electronically on the website writeLaTeX.com. You are encouraged to discuss the homework problems with your classmates and to work together, but submitted assignments must be written up individually. Two lowest homework scores will be dropped.

True/False Quizzes will be given at the beginning of class on most days, and will be based on the material of previous class. Two lowest quiz scores will be dropped.

Midterm Exams will be in class on **September 17, October 15, and November 12**. The cumulative **Final Exam** is scheduled for **Monday, December 8, 3–5pm**. Unexcused absence from an exam counts as zero. If the absence is excused, your grade on the relevant portion of the final will be used to replace the missed exam.

Attendance and Participation: You are expected to attend and participate in class. If you miss a class, you are responsible for obtaining notes for that class from a student who attended. It is also your responsibility to find out about any announcements made in class.

Learning Goals:

- Students will develop ability to think deductively, analyze mathematical statements, and apply mathematical ideas to the solution of new problems.
- Students will learn to write proofs of mathematical statements related to the topics covered in this course.
- Students will understand the nature and role of deductive reasoning in mathematics
- Students will be able to follow proofs and other mathematical discourse
- Students will be able to effectively use mathematical word processing software.

Students with disabilities. If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented Disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. [Read more](#)

Religious observances policy. SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class. [Read more](#)

Academic Integrity. Syracuse University sets high standards for academic integrity. Those standards are supported and enforced by students, including those who serve as academic integrity hearing panel members and hearing officers. The presumptive sanction for a first offense is course failure, accompanied by the transcript notation "Violation of the Academic Integrity Policy". The standard sanction for a first offense by graduate students is suspension or expulsion. Students should review the Office of Academic Integrity online resource "Twenty Questions and Answers About the Syracuse University Academic Integrity Policy" and confer with instructors about course-specific citation methods, permitted collaboration (if any), and rules for examinations. The Policy also governs the veracity of signatures on attendance sheets and other verification of participation in class activities. Additional guidance for students can be found in the Office of Academic Integrity resource: "What does academic integrity mean?"

Read more: [Academic Integrity Policy](#), [20 Questions and Answers](#), [What does academic integrity mean?](#)