

MATH 3610 (Real Analysis II)

Fall 2025, UNT

Lecture: LANG 312, TR 2:00-3:20pm

Instructor: [Professor Olav Richter](#)

- **Office:** GAB 412
- **Office hours:** TR 10:00-10:45am, TR 12:45-1:45pm, and by appointment
- **email:** richter@unt.edu

Course Description: MATH 3610 is the continuation of MATH 3000. The course is highly recommended for all mathematics majors, and in particular, for students that are considering applying to a graduate program in mathematics. We will examine the theoretical foundations of real analysis, or in other words, students will learn why calculus works. Topics include: Sequences, limits and continuity, differentiation, integration, infinite series, and sequences and series of functions. The course is also aimed at improving students' proof writing abilities and getting them more comfortable with precise mathematical rigor.

Prerequisites for MATH 3610: MATH 3000 and MATH 2700 (may be taken concurrently).

Textbook:

- **Title:** [Analysis with an introduction to Proof, 6th Edition](#)
- **Authors:** Steven Lay and Richard Ligo
- **Publisher:** [Pearson](#)

Homework: I will *usually* assign homework on Thursday (posted on canvas), and the assignments are *usually* due the following Thursday at the beginning of class (to be uploaded on canvas). Late homework will **NOT** be accepted for any reason. Your lowest homework score will be dropped (This includes work you miss due to illness, family emergency, transportation problems, oversleeping, work schedule, completing the wrong section, completing the wrong problems, etc.).

Exams & Grading Policy: Your final grade will be based on homework, two midterms, and a comprehensive final. No books or notes or calculators will be allowed on any of the exams. The midterms will be on Sep 30th and on Nov 4th. The final exam will be on Dec 11th. Please make sure that you are available at those dates, since there will be **No make up exams!**

The grade is comprised of

- **Homework (20%),**
- **2 Midterms (40%),**
- **Comprehensive Final (40%).**

You are encouraged to study together and help each other throughout the semester. If everyone does well, everyone will receive a good grade.

Expectations: You are expected to **come to every lecture** and come **on time**. You are responsible for everything that happens in class. You are expected to read the assigned sections before each lecture and to review your notes for an hour or two after each lecture. An average college student spends about 2--3 hours studying per week for every 1 hour in class and more time before exams and difficult assignments. Thus, if you are an "average learner", you probably want to budget 6--9 hours a week for this class and extra time before exams. **NO ELECTRONIC DEVICES IN CLASS.**

Lecture schedule: The following *Tentative Lecture Schedule* gives you an idea what material I *intend* to cover in this class, but note that the schedule *might change* often. The lectures will *not* be recorded, and you are responsible for all announcements/assignments made in class!

Tentative Lecture Schedule

Tu Aug 19 4.1	Th Aug 21 4.2	Tu Aug 26 4.3	Th Aug 28 4.4+HW	Tu Sep 2 5.1	Th Sep 4 5.2+HW	Tu Sep 9 5.3	Th Sep 11 5.4+HW
Tu Sep 16 6.1	Th Sep 18 6.1+6.2+HW	Tu Sep 23 6.2	Th Sep 25 Review+HW	Tu Sep 30 Midterm	Th Oct 2 6.3	Tu Oct 7 6.4	Th Oct 9 7.1+HW
Tu Oct 14 7.2	Th Oct 16 7.2+7.3+HW	Tu Oct 21 7.3	Th Oct 23 8.1+HW	Tu Oct 28 8.1+8.2	Th Oct 30 Review+HW	Tu Nov 4 Midterm	Th Nov 6 8.2
Tu Nov 11 8.3	Th Nov 13 9.1+HW	Tu Nov 18 9.2	Th Nov 20 9.3+HW	Tu Dec 2 9.3+Review	Th Dec 4 Review+HW		Th Dec 11 FINAL 1:30-3:30pm

UNT Policies

Academic Integrity Policy: According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

ADA Policy: UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the [ODA website](#).

Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004): UNT prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Emergency Notification & Procedure: UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.