MATH 3000, Real Analysis I
Fall 2020, Section 002

Instructor Contact
Name: Ralf Schmidt
Email: ralf.schmidt@unt.edu

Course Description
Introduction to mathematical proofs through real analysis. Topics include sets, relations, types of proofs, continuity and topology of the real line.

Course Structure
This course takes place 100% online and is being taught asynchronously. This means we will not have lectures with a fixed meeting time. Instead, there will be weekly assignments: Videos to watch, pages to read, problems to work. It is crucial that you find the self-discipline to work through the material every week as the semester progresses.

I will be available to answer questions. The best way to contact me is via e-mail to ralf.schmidt@unt.edu. You can put your questions right into an e-mail and I will answer as soon as possible. But sometimes mathematics is difficult to discuss in writing. In this case e-mail me as well to set up an appointment for virtual office hours (via Zoom).

Course Prerequisites
MATH 1720 and MATH 2000

Materials
Textbook: Steven R. Lay: Analysis with an Introduction to Proof. 5th edition, Pearson

There will also be instructional videos uploaded to Canvas.

We will use WebAssign for homeworks, for which you will have to purchase an access code. To do so, please visit

https://unt.bncollege.com/shop/unt/page/find-textbooks

and search for Department: MATH, Course: 3000, Section: 002.
Grading

Your final grade will be determined from homework assignments, two midterm exams, and one final exam. Here are the percentages counting towards the final grade, and the exam dates.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeworks</td>
<td>25%</td>
</tr>
<tr>
<td>First Exam</td>
<td>9/23/2020 25%</td>
</tr>
<tr>
<td>Second Exam</td>
<td>10/28/2020 25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>12/9/2020 25%</td>
</tr>
</tbody>
</table>

Exams will take place online. You’ll have a 24 hour window to complete a 2-hour exam.

The final grade is determined from the course percentage P as follows:

- \(90 \leq P \leq 100\): A
- \(80 \leq P < 90\): B
- \(65 \leq P < 80\): C
- \(50 \leq P < 65\): D
- \(0 \leq P < 50\): F

Course Policies

- **Late work**: Not accepted
- **Extra credit**: No extra credit in this course
- **Syllabus changes**: May happen as circumstances warrant it

Honor System

It is easy to cheat on online exams. I am no friend of excessive policing (lockdown browsers, observation by webcam etc). Instead, I trust you to be honest. Here is why you should not cheat on exams:

- It’s wrong. Same category as lying and stealing.
- You’ll have nothing to be proud of.
- You are gaining an unfair advantage over other students.
- You will feel miserable for the rest of your life.
- You are risking serious consequences if caught. (Instructors usually can tell very quickly.)
- You will damage my trust in humanity.

So please, just don’t do it.
Success in an Online Course

Please read “How to Succeed as an Online Student” (https://clear.unt.edu/teaching-resources/online-teaching/succeed-online).

Getting Help

Technical Assistance

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: UIT Student Help Desk site (http://www.unt.edu/helpdesk/index.htm)
Email: helpdesk@unt.edu
Phone: 940-565-2324
In Person: Sage Hall, Room 130
Walk-In Availability: 8am-9pm
Telephone Availability:
  - Sunday: noon-midnight
  - Monday-Thursday: 8am-midnight
  - Friday: 8am-8pm
  - Saturday: 9am-5pm
Laptop Checkout: 8am-7pm

For additional support, visit Canvas Technical Help (https://community.canvaslms.com/docs/DOC-10554-4212710328)

Student Support Services

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- Student Health and Wellness Center (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-and-testing-services)
- UNT Care Team (https://studentaffairs.unt.edu/care)
- Individual Counseling (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

Other student support services offered by UNT include

- Registrar (https://registrar.unt.edu/registration)
• **Financial Aid** (https://financialaid.unt.edu/)
• **Student Legal Services** (https://studentaffairs.unt.edu/student-legal-services)
• **Career Center** (https://studentaffairs.unt.edu/career-center)
• **Multicultural Center** (https://edo.unt.edu/multicultural-center)
• **Counseling and Testing Services** (https://studentaffairs.unt.edu/counseling-and-testing-services)
• **Pride Alliance** (https://edo.unt.edu/pridealliance)
• **UNT Food Pantry** (https://deanofstudents.unt.edu/resources/food-pantry)

Academic Support Services

• **Academic Resource Center** (https://clear.unt.edu/canvas/student-resources)
• **Academic Success Center** (https://success.unt.edu/asc)
• **UNT Libraries** (https://library.unt.edu/)
• **Writing Lab** (http://writingcenter.unt.edu/
• **MathLab** (https://math.unt.edu/mathlab)

**UNT Policies**

**Academic Integrity Policy**

Academic Integrity Standards and Consequences. 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. [Insert specific sanction or academic penalty for specific academic integrity violation.]

**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 accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the [ODA website](https://disability.unt.edu/).

**Emergency Notification & Procedures**

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.