

2025 Fall MATH 1710.410 INET/Calculus I

Instructor Information

Name: Dr. Guanghua Shi

Email: GuanghuaShi@my.unt.edu

Office Location: GAB 440

Campus Office Hours: Mon 2:00pm-3:50pm; Wed 2:00pm-3:30pm (Zoom)

Office hours offer you an opportunity to ask for clarification and to find support with understanding class material. I encourage you to connect with me! If my hours conflict with your schedule, we can schedule a mutually convenient time, just ask. Your learning success is our goal.

Communication: Canvas Inbox preferred; Use your UNT email account.

Your communication with me and your classmates should be in line with [UNT's General Online Communication Guidelines](#).

Communication Expectations: My inbox becomes rather full, if you contact me and do not receive a reply from me within one (1) business day, please send a follow-up. A gentle nudge is always appreciated.

Course Description

4 hours. Limits and continuity, derivatives, and integrals; differentiation and integration of polynomial, rational, trigonometric, and algebraic functions; applications, including slope, velocity, extrema, area, volume, and work.

Course Prerequisites or Other Restrictions

- Officially, the prerequisite is a grade of C or higher in [MATH 1650](#); or grade of C or higher in both [MATH 1600](#) and [MATH 1610](#).
- A willingness to put in necessary hours of work each week to absorb each material in each module. In math courses, especially this one, the content will build upon itself making it difficult to catch up if you fall behind.

Course Structure - INET

This course takes place 100% asynchronously online. Information on how to be successful in a remote learning environment can be found at [UNT Online](https://online.unt.edu/learn) (<https://online.unt.edu/learn>). Your interactions with me and your fellow students will take place on Canvas.

This course begins with the first content module on Canvas open. I will open subsequent modules about one week before they begin. This course has four (4) content modules. Module, chapter, and unit are used interchangeably.

In each content module, you will find student lecture notes templates that correspond to instructional videos. The lesson videos present instruction and solutions to examples. Print the student notes and fill in the blanks as you watch the videos. This is how you “attend class.”

Course Objectives

Upon successful completion of this course, learners will be able to:

- Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.
- Create graphs of functions considering limits, continuity, and differentiability at a point.
- Determine whether a function is continuous and/or differentiable at a point using limits.
- Use differentiation rules to differentiate functions.
- Identify appropriate calculus concepts and techniques to provide mathematical modules of real-world situations and determine solutions to applied problems.
- Evaluate definite integrals using the Fundamental Theorem of Calculus.
- Articulate the relationship between derivatives and integrals using the Fundamental Theorem of Calculus.
- Determine the area between curves using integration techniques.
- Determine the volume generated by rotating a curve about an axis; and
- Compute the average value of a function by integration.

Required Course Material

WebAssign

Cengage WebAssign: WebAssign is an online course delivery platform accessed directly through [Canvas](#).

WebAssign access includes many online homework assignments, the e-text of *Calculus 9th Edition*, and additional learning resources. Use the link in Canvas to register immediately. You must register in WebAssign by the 2nd class day of the semester. See [WebAssign Student Information](#).

WebAssign grants a no-cost trial 14-day access. You must purchase your access before the temporary access expires. If you do not make the purchase before the trial period ends, you may lose credit for all work previously completed. Again, see [WebAssign Student Information](#) for purchase information.

Textbook

The textbook is Stewart, James, Clegg, Daniel, and Watson, Saleem *Calculus, 9th Edition*, Cengage Learning (2021). It is available online through the WebAssign platform.

Calculator

Many calculators are sufficient for the exams in this class. Acceptable options include the: TI-30XIIS, TI-36, TI-83, or TI-84 (or similar Casio, other manufacturer's calculators). Instructional support is provided for the TI's.

Utilities with alphanumeric/CAS capabilities or have the ability to connect to the internet are NOT acceptable, neither are business analyst calculators. Not acceptable examples include the: TI-Nspire, TI 89, TI 92, TI BAII Plus, and smartphones and smart watches.

Technology

- Computer, tablet, or laptop that is compatible with all required apps for the course.
- A smartphone **is not** sufficient.
- Reliable internet access.
- Webcam and microphone for proctored tests.
- [Canvas Technical Requirements](https://clear.unt.edu/supported-technologies/canvas/requirements) (<https://clear.unt.edu/supported-technologies/canvas/requirements>)
- A printer.

Course Evaluation

Evaluation components include homework, midterm exams, and the final exam. Descriptions of each component are provided on this page.

Homework (WebAssign) – 15%

Calculus Readiness Prerequisite Diagnostic (WebAssign) – 5%

Recitation (Quizzes & Worksheet Assignments) – 12%

Midterm Exams – 48%

Final Exam – 20%

Your Course Grade

Your grades will be posted in Canvas Grades.

- A: [90, 100+), Outstanding, excellent work. The student performs well above the minimum criteria.
- B: [80, 90), Good, impressive work. The student performs above the minimum criteria.
- C: [70, 80), Solid, college-level work. The student performance meets the minimum criteria.
- D: [60, 70), Below average work. The student performs below the minimum criteria.
- F: [0, 60), Sub-par work. The student performs well below the minimum criteria.

Your course grade is determined solely by your performance on the graded items. I do not grade on a *curve* nor offer *extra credit*, as that would be a comparison of your outcomes to others. I encourage you to find opportunities to learn with and through others. Explore [Navigate's Study Buddy](https://navigate.unt.edu) (<https://navigate.unt.edu>) tool to join study groups. Maximize your learning with our coaching staff at the [Learning Center](#). Focus on areas where you are struggling in this course by connecting with me during my office hours or utilizing the [UNT Math Tutor Lab](#). Forward together!

Course Components

Homework – You Learn by Practice!

The primary purpose of homework is to provide you with opportunities to learn, practice, and retain new content. To that end, you will do homework on WebAssign and other online due each week. For your convenience, all coursework is accessed directly on Canvas. Have a dedicated notebook for your math homework. Write to show all work, including the steps on how to approach the exercises.

Getting Familiar with WA WebAssign homework is due the second day of the term. Under the Weekly Modules subheading of the syllabus, you will see assignments due that day. Note that you have, on average, three WebAssign homework tasks per week. The recommended date for homework assignments are in the title of the assignment. **Starting the 2nd week, homework from the previous week will be due by 11:59 PM on Monday of the following week (official due date).** For instance, in Week 1 we cover 1.4 and 1.5, you have until 11:59 PM of week 2 to complete them. This is to give ample time and flexibility should the unexpected happen, but ideally you should be completing the homework as you go through the module during the week. To provide an incentive, **you will receive a 5% bonus for any work on WebAssign homework completed more than 48 hours before the 11:59 PM Monday deadline.** You will have to check WebAssign frequently to keep up with the due dates. **Your lowest three (3) WebAssign homework scores will be dropped.**

Calculus Readiness Diagnostic

During the first two weeks of the semester, you will need to complete a somewhat lengthy Precalculus review assignment. It is the *Calculus Readiness Diagnostic* assignment in WebAssign. This assignment is an overview of the main topics from Precalculus to make sure that you are prepared for this and future classes. You have 100

attempts on each question, that's a lot of opportunities to review, revisit, refresh, and if needed, relearn key prerequisite material. Because this assignment is all prerequisite content, you should complete this right away, well before the due date. **This assignment is 5% of your course grade.**

Quizzes

You will have weekly quizzes on Canvas. The quizzes require Respondus Lockdown Monitor. The quizzes are **available from Friday of the week of the quiz through Monday, 11:59 PM the following week.** You should complete the homework before you attempt the quiz. The quizzes are timed and must be completed in one setting. **One (1) lowest quiz score will be dropped.**

Weekly Worksheet

You will have weekly worksheets to submit on Canvas. The worksheets provide you with the very important opportunity to learn how to construct and present mathematical work. The worksheets are released on the same schedule as the Weekly modules of lecture and are **due Monday, 11:59 PM the following week.** You should work on the worksheet problems in tandem with your WebAssign homework. One (1) lowest worksheet grade will be dropped.

Exams

You have four (5) exams: **Four (4) midterm exams and a final exam.** Content questions are not answered on exam days.

Exam 1 – **9/11/2025 8am-11:59pm.** Content: 1.4 – 1.8, 2.1, 2.2

Exam 2 – **10/2/2025 8am-11:59pm.** Content: 2.3 – 2.9

Exam 3 – **10/23/2025 8am-11:59pm.** Content: 3.1 – 3.8, not 3.6

Exam 4 – **11/13/2025 8am-11:59pm.** Content: 3.9, 4.1 – 4.5, 5.1 – 5.3

Final Exam – **12/10/2025 8am-11:59pm.** See [Final Exam Schedule](#). The final exam is comprehensive.

This course does not accept late work regardless of the reason.

Changes to Syllabus

Changes made to the syllabus will be announced in class and posted as an Announcement on Canvas.

Course Schedule

All course assignments are due 11:59 PM of the posted due date. Do your learning coursework several days before the posted due dates. Learning coursework means printing out the student notes, watching lesson videos to complete the notes, review the notes, and read supplemental textbook sections. That is, *do* your coursework before the assignment is *due*.

Week 1

8/18/2025

8/19/2025

Getting Familiar with WA

Start the **Calculus Readiness Prerequisite Diagnostics** right away!

8/20/2025

Syllabus Quiz; **1.4 Tangent and Velocity Problems**

8/21/2025

8/22/2025

1.5 The Limit of a Function, Worksheet 1, Quiz 1

Week 2

8/25/2025	Written Work Submission Practice Assignment
8/26/2025	
8/27/2025	1.6 Calculating Limits using Limit Laws
8/28/2025	
8/29/2025	1.7 The Precise Definition of a Limit , Worksheet 2, Quiz 2

Week 3

9/1/2025	Labor Day-No Class
9/2/2025	1.8 Continuity & Calculus Readiness Prerequisite Diagnostic
9/3/2025	2.1 The Derivative and the Rate of Change
9/4/2025	
9/5/2025	2.2 The Derivative as a Function , Worksheet 3, Quiz 3

Week 4

9/8/2025	
9/9/2025	
9/10/2025	
9/11/2025	Exam 1 (8 AM – 11:59 PM)
9/12/2025	2.3 Differentiation Formulas , Worksheet 4, Quiz 4

Week 5

9/15/2025	2.4 Derivatives of Trigonometric Functions
9/16/2025	
9/17/2025	2.5 The Chain Rule
9/18/2025	
9/19/2025	2.6 Implicit Differentiation , Worksheet 5, Quiz 5

Week 6

9/22/2025	2.7 Rates of Change in the Natural and Social Sciences
9/23/2025	
9/24/2025	2.8 Related Rates
9/25/2025	
9/26/2025	2.9 Linear Approximation and Differentials , Worksheet 6, Quiz 6

Week 7

9/29/2025	
9/30/2025	
10/1/2025	
10/2/2025	Exam 2 (8 AM – 11:59 PM)
10/3/2025	3.1 Maximum and Minimum Values , Worksheet 7, Quiz 7

Week 8

10/6/2025	3.2 The Mean Value Theorem
10/7/2025	

10/8/2025	3.3 How Derivatives Affect the Shape of the Graph
10/9/2025	
10/10/2025	3.4 Limits at Infinity; Horizontal Asymptotes, Worksheet 8, Quiz 8

Week 9

10/13/2025	3.5 Summary of Curve Sketching
10/14/2025	
10/15/2025	3.7 Optimization Problems
10/16/2025	
10/17/2025	3.8 Newton's Method, Worksheet 9, Quiz 9

Week 10

10/20/2025	
10/21/2025	
10/22/2025	
10/23/2025	Exam 3 (8 AM – 11:59 PM)
10/24/2025	3.9 Antiderivatives, Worksheet 10, Quiz 10

Week 11

10/27/2025	4.1 Areas and Distances
10/28/2025	
10/29/2025	4.2 The Definite Integral
10/30/2025	
10/31/2025	4.3 The Fundamental Theorem of Calculus, Worksheet 11, Quiz 11

Week 12

11/3/2025	4.4 Indefinite Integrals & Net Change Theorem
11/4/2025	
11/5/2025	4.5 The Substitution Rule
11/6/2025	
11/7/2025	5.1 Areas Between Curves, Worksheet 12, Quiz 12

Week 13

11/10/2025	
11/11/2025	
11/12/2025	
11/13/2025	Exam 4 (8 AM – 11:59 PM)
11/14/2025	5.2 Volumes, Worksheet 13, Quiz 13

Week 14

11/17/2025	5.3 Volumes by Cylindrical Shells
11/18/2025	
11/19/2025	5.5 Average Value of a Function
11/20/2025	
11/21/2025	Worksheet 14, Quiz 14

Week 15

12/1/2025	
-----------	--

12/2/2025	Calculus I (Final Exam) Review (Must be completed by 8 AM Monday of Final Exam.)
12/3/2025	Reading Day
12/4/2025	Reading Day
12/5/2025	Pre-Finals Day, no classes

Final Exams Week

12/10/2025 **FINAL EXAM (8 AM – 11:59 PM)**

Course Policies

Academic Integrity

Cheating will not be tolerated. Any student found cheating on will receive a zero on that assignment; and may receive an F for the course for cheating on an exam. A report will be filed with the [Office of Academic Integrity](#).

Attendance

Research has shown that students who attend class are more likely to be successful. In an online class attendance means regularly completing the student lecture notes as you watch the instructional videos. **It is assumed you will do this.** The instructor will not repeat whole lectures or offer personal lessons in office hours or email. These venues are for specific questions/problems.

In an online course, you have the flexibility to work ahead. For any due date conflict, work ahead. For exams, schedule with me to take it prior to the posted exam date.

Examination Policy

Exams will be administered in Canvas with Respondus Lockdown Browser and will be available during the posted exam period. **Exams not submitted by 11:59 PM receive a zero**, regardless of when you begin the exam. You may access Exams through the *Syllabus* tab on the left side of the Canvas navigation menu, or the content module.

If you **miss an exam, you receive a zero for that exam**. There are **no make-up exams**. However, if you have a [university excused absence](#), according to [06.039 Policy](#), and provide me documentation within 2 business days of the missed exam, then the zero may be replaced with your final exam grade (this includes missing an exam due to illness/covid-19).

Early Exam

If you have a conflict with a scheduled exam date, you may request to take your exam early. The request must be sent to Canvas Inbox one week prior to your desired early exam date.

Exam Protocol

- Read How to Take Exam with Respondus module in Canvas.
- Clear your test-taking environment and show clean desk surface to webcam.
- Once opened you have 60 minutes to complete the exam. You will have more time for the final exam.
- Do not open the exam unless you are prepared to take the test, and your technology is ready, and in working order.
- No extra time nor re-do's will be granted to account for technical difficulties.
- Work is NOT accepted through email.

- You will be required to complete the problems on your own paper and show your work to the webcam screen. NO VALID WORK, NO CREDIT, NO EXCEPTIONS.

You will be able to see your exam grade on Canvas about one (1) week after the exam. You may ask me to go over exam problems with you. However, all decisions on credit are final and not open for discussion.

Late Work Policy

UNT is a community of dreamers and doers who pursue excellence in everything. With that in mind, there are standards and expectations set for the class, which include that work will be completed and submitted by the posted due date. Late work is not accepted.

There will be no late exams or retakes. If an exam is missed, a grade of zero is recorded. See the Examination Policy for more information.

Student Support Services & Assistance

Academic Support & Student Services

UNT strives to offer you a high-quality education and a supportive environment, so you learn and grow. As a faculty member, I am committed to helping you be successful as a student. To learn more about campus resources and information on how you can be successful at UNT, go to [Succeed at UNT](http://unt.edu/success) (unt.edu/success) and explore the many links at [Wellness at UNT](http://unt.edu/wellness) (unt.edu/wellness). To get all your enrollment and student financial-related questions answered, go to [Integrated Student Services](http://scrappysays.unt.edu) (scrappysays.unt.edu).

Technical Assistance for Online Course System

The University is committed to providing a reliable online course system to all users. However, 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.

Visit the UIT Help Desk website for their current support hours. Website link, email, phone number, and office location provided as follows:

UIT Help Desk: [UIT Student Help Desk](http://www.unt.edu/helpdesk/index.htm) (http://www.unt.edu/helpdesk/index.htm)

Email: helpdesk@unt.edu

Phone: 940-565-2324

In Person: Sage Hall, Room 330

Canvas Technical Requirements: [Canvas Technical Requirements](https://clear.unt.edu/supported-technologies/canvas/requirements)
(https://clear.unt.edu/supported-technologies/canvas/requirements)

Additional Canvas Support: [Canvas Technical Help](https://community.canvaslms.com/docs/DOC-10554-4212710328)
(https://community.canvaslms.com/docs/DOC-10554-4212710328)

Welcome to UNT!

As members of the UNT community, we have all made a commitment to be part of an institution that respects and values the identities of the students and employees with whom we interact. UNT does not tolerate identity-based discrimination, harassment, and retaliation.

UNT Policies

Academic Integrity Standards and Consequences. 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.

Every student in my class can improve by attending class, consistently doing their own work, and accessing appropriate resources. [Academic Integrity Policy](#) violations will not. Read and follow this important set of guidelines for your academic success.

ADA Accommodation Statement

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Access (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 [Office of Disability Access](https://disability.unt.edu/) website. (<https://disability.unt.edu/>).

Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail [Eagle Connect](https://it.unt.edu/eagleconnect) (<https://it.unt.edu/eagleconnect>).

Emergency Notification and Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency. In the event of a university closure, please refer to the UNT Learning Management System, Canvas, for contingency plans for covering course materials.

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey, they will receive a confirmation email that the survey has been submitted. For additional information, please visit the [SPOT website](http://spot.unt.edu/) (<http://spot.unt.edu/>) or email spot@unt.edu.

Important Notice for F-1 Students taking Distance Education Courses

Federal regulations state that students may apply only 3 fully-online semester credit hours (SCH) to the hours required for full-time status for [F-1 Visa \(PDF\)](#) holders. Full-time status for F-1 Visa students is 12 hours for undergraduates and 9 hours for graduate students.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses. See [Student Identity Verification Policy](https://policy.unt.edu/policy/07-002), (<https://policy.unt.edu/policy/07-002>).

Summary of Key Dates – Fall 2025:

August 18, Monday

Classes begin.

August 22, Friday

Last day to add/swap a class.

August 29, Friday

Last day to drop a course without a W

September 26, Friday

Last day to change to pass/no pass

November 7, Friday

Last day for a student to drop a course or all courses with a grade of W

November 8, Saturday

Beginning this date, a student may request a grade of “I”, incomplete, a non-punitive grade given only if a student (1) is passing, (2) has justifiable reason why the work cannot be completed on schedule; and (3) arranges with the instructor to complete the work.

December 5, Friday

Reading day; no class

December 6, Saturday – December 12, Friday

Final examinations. Term ends.