MATH 1710.720 (TAMS)
Spring 2026
Last Updated: January 8, 2026

Instructor: Professor Pieter Allaart

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Office Hours:

- Mon, Tue, Thu 11:00-12:00. (5320 students prioritized on Mon; 1710 students prioritized on Tue, Thu)
- Tue, Thu 1:00-1:30. (1710 students prioritized on Tue; 5320 students prioritized on Thu)
- and by appointment.
- Due to high demand from students in both of my classes, I may sometimes have to prioritize students from my other class. This doesn't mean you are not welcome at those times. It just means that I may ask you to wait until I've finished helping the students from the other class.
- You are welcome to stop by without appointment if my door is open, but on occasion I may be busy and ask you to come back later.

Classroom Locations:

- Monday: GAB 310 (10:00 am to 10:50 am)
- Tuesday, Thursday: GAB 310 (9:30 am to 10:50 am)
- Friday: BLB 065 (10:00 am to 10:50 am)

Required Text:

- The text for our class is *Calculus* **(9th Edition)**, by Stewart.
- There is no need to buy a physical copy of the book. We will not be using it during class time. You will never need it in class. But if do you decide to purchase a physical copy, make sure you buy the 9th edition. That is the version used in non-TAMS 1710 sections.
- **You will have access to an e-version of the textbook through WebAssign.**
- **You will enroll yourself in our WebAssign class.** You will need two things:

  (a) **Our class key:**
  Instructor: Pieter Allaart
  Section: MATH 1710, section 720
  Class Key: unt 5484 1163.

  (b) A Cengage Code (they are the WebAssign parent company).

  You will pick this up at Voertmans bookstore.

Course description:

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 objectives: By the end of this course, you will be able to:

- understand and compute limits
- carefully prove limits of basic functions using the formal definition
- understand derivatives including the product rule, quotient rule, and chain rule
- solve related rates of change problems
- sketch the graph of a function using the first and second derivatives
- use derivatives to solve optimization problems step by step
- calculate integrals, including the method of u-substitution
- understand how to calculate the area under the graph of a function
- understand the first and second fundamental theorems of calculus

Responsibilities of Instructor

- You can expect me to be in class on time and well prepared. If I anticipate a day on which I may be late or absent, I will make every effort to notify you beforehand.
- You can expect me to be honest about any mistakes that I make, and to correct them as soon as possible after I am made aware of them.
- You can expect fair and equal access to the material in this class. In particular, I will not allow the irresponsibility or inappropriate behavior of some to ruin our classroom dynamic.
- You can expect that your tests be graded and returned in a reasonable amount of time. Usually, this means within three business days.

Student Responsibilities

- **You are expected to read this syllabus carefully.**
- I will hold you accountable for the information herein.
- Students will be expected to carefully read the appropriate chapters in the text, including the worked examples. This will be an essential part of your attempt to master the material.
- Students will be responsible for obtaining any and all course materials. Most handouts will be available on our Canvas class page.
- Students will need to install the Canvas app on their phones and enable notifications. I will communicate the majority of announcements to you through Canvas.
- I will hold you to the student code of conduct as described in both the *UNT Student Handbook* and the *TAMS Student Handbook*. You should read them for yourselves.
- The study habits you establish the first few weeks of class are crucial–start working now! In my 27 years of experience as a university professor, I have found that those students who fall behind during the first 3 or 4 weeks of the course, almost without exception, end up failing the course.
- Frequent practice is crucial to the successful completion of a mathematics course. Cramming at the last minute will certainly lead to failure.
- **WARNING: As TAMS students, you must maintain a 3.0 GPA. Your performance in this class will have a very significant impact.**
- **Therefore, START WORKING NOW–DAY ONE. I will not listen to any pleas at the end of the semester for a higher grade than what your percentage warrants. You will receive precisely the grade that you earn. You know what you need to do.**
- **It is essential that you begin to establish proper work habits from day one.**
- One of the major goals of this course is for you, the student, to begin the process of developing the ability to logically and systematically approach the resolution of problems. There is a substantial difference between a correct answer and a complete solution. You will be required to produce the latter. You will need to be able to do more than recite what you have memorized.

Grading Policy

Final Exam (Thursday, May 7) ..... 150 pts

Three mid-term exams (February 12, March 26, April 23) ..... 250 pts*

Derivative Exam** **..... 50 pts**

In-Class Quizzes ..... 100 pts

"Friendly Quizzes"*** **..... 50 pts**

Student evaluation of teaching ..... 5 pts

- * Each regular exam is worth 100 points, but the lowest of your three regular exam scores only carries half weight. In other words, your worst performance will be discounted.
- ** After we finish covering the chain rule, a derivative exam with 10 questions will be given in class every Friday. You need to have at least 9 out of 10 questions correct to pass. Once you pass, you do not need to take it again. You will receive 50 points regardless whether you passed with 9 or 10 correct answers.
- *** Friendly quizzes are open-book, open-note quizzes on which you work together in class in pairs. Each pair will turn in one paper. Each friendly quiz will be graded on a scale from 0 to 5.
- With the exception of the four bonus questions and the 5 points from the student evaluation of teaching there will be **NO EXTRA CREDIT OF ANY KIND**. So don't bother asking me for an extra credit assignment to raise your grade at the end of the semester. Such pleas will fall on deaf ears.
- For the purposes of your final grade, I will compute your final point percentage against a total of 600 points.
- There is ample cushioning and extra credit built into the grading system. I will also drop two quiz scores (see below).
- In light of this, I WILL NOT round up grades–so don't waste my time by asking.

The grading scale for this course is as follows:

90% **and above** ——— **A**
80% **and below** 90% — **B**
70% **and below** 80% — **C**
60% **and below** 70% — **D**
below 60% ——————— **F**

The grade of "I" is designed for students who are unable to complete work in a course but who are currently passing the course. The guidelines are clearly spelled out in the Student handbook. Before you ask, you had better have read the requirements.

Policies relating to the Examinations and Final

- **Calculators will not be permitted on any in-class quizzes or exams**.
- I expect to give each exam on the date in parentheses (see the section above on Grading Policy). However, **this is a tentative syllabus**. I will announce the exact date and time of each exam in class.
- **The Final Examination is scheduled for Thursday, May 7 at 7:30 am, in GAB 310.**
- **I will not administer an early final–each student is required to take the final exam at the scheduled time.**
- I will **not** drop the lowest exam score–all will count towards the final grade, except that your lowest exam score has only 50% weight.
- **NO MAKE-UP EXAMS WILL BE GIVEN. For those students who miss one exam due to an Authorized Absence (see the Student Handbook), the final grade will be computed based only on those exams taken, together with quiz scores and the final exam.**
- Students who miss a scheduled exam for family emergency, personal health problems, or similar legitimate reasons will be required to provide *official written* verification of said absence.
- Students who miss a scheduled exam are expected to contact me within 24 hours.
- Students missing an exam for unauthorized reasons will receive 0 (zero) points on the exam.
- The final exam will be comprehensive in the sense that problems may come from any of the sections that will be covered during the semester.
- **The grade of A signifies consistent excellence over the course of the semester.** An A on the final is not equivalent to an A for the course.
- I reserve the right to test you on problems which are generalizations of material covered in the class and/or in the book. The problems may not look exactly like the ones in the book.
- Indeed, in many cases, the problems I will ask will appear **only in class** and on quizzes. **So pay attention, and take clear and well organized notes.**
- Everything that I say in class, and everything on every handout, is fair game for exam material. You will be responsible for everything unless I advise you to the contrary.

Policies relating to In-Class Quizzes and Homework

(A) In-class Quizzes

- There will be 100 points that will be based on your **in-class quiz** scores.
- In-class quizzes will be administered during class time–**usually** on Tuesday or Thursday.
- There will be **NO MAKE UP QUIZZES**, for any reason.
- **Calculators will not be permitted**.
- **In-class quizzes must be done in pencil or erasable ink.**
- **Students will need a good quality eraser that works well with their pencil or erasable pen. BUY ONE IMMEDIATELY.**
- I will be extremely unsympathetic in regards to poorly organized work on quizzes and exams, as well as sloppy and/or otherwise unreadable work.
- Get used to working **carefully and neatly**, and learning to organize your work exactly according to my expectations.
- You must show all appropriate and expected work. I will be absolutely clear about my expectations during class time. So pay attention and take careful notes.
- The expectation is for you to produce **both complete and correct solutions with all appropriate detail included in the correct place.**
- Correct answers with incorrect or incomplete work will receive little or no credit.
- There is a fundamental difference between an answer and a solution. It is the latter that you must learn.
- I will drop the 2 (two) lowest in-class quiz scores (a missed quiz counts as a zero)
- **For the purposes of a student's final grade, your in-class quiz point total will be computed as follows:** First, the lowest 2 in-class quiz scores are dropped. Then the total points from the remaining in-class quiz scores will be divided by the total number of points available from those quizzes (that were not dropped) to obtain a student's *quiz percentage*.

(B) Homework

- I will not collect homework.
- I will post a list of **"practice problems"** on the canvas page. The problems will come from your textbook.
- I expect you to attempt as many of the problems as possible.
- We will discuss some of the problems in class before you will be taking a quiz over the material. But do not expect me to just lecture on the homework problems. If you have questions about them, you should ask in class and actively participate in the discussion.

Policies related to in-class Quizzes, Examinations, and the Final Exam

The following instructions apply to each in-class quiz, test, and to the final examination:

- **All electronic devices must be off**.
- **Cell phones, tablets, and the like are not to be handled nor looked at all during class time.**
- Students are not permitted to use notes of any kind.
- Students are not permitted to use calculators.
- Students must write in pencil or **erasable pen**. You must have a good eraser for whichever you use.
- **Students should be extremely careful to keep their eyes on their own work. Cheating is a serious offense, and will be treated as such.**
- Students will not begin a test or final exam until they are instructed to do so.
- I (or a proctor of my choosing) will keep the exact time during the quiz, exam, or final exam. The proctor will keep students abreast of the time remaining.
- **When the proctor announces that time is expired, I will say "pencils up", and ALL STUDENTS WILL STOP WRITING IMMEDIATELY.**
- **Any student still writing after that point will receive a zero (0) on the page on which he/she is working.** In the case of a quiz, this means a 0 on the entire quiz.

Attendance Policy:

- The following statement regarding "Class Attendance and Conduct" is taken directly from TAMS Student Handbook:

  Class attendance and participation are required. Students must be alert, attentive, energetic, and eager to learn. Students who exhibit disruptive behavior or show disrespect to a teacher in the classroom are subject to severe disciplinary sanctions. The Academy does not authorize absences from class. Students must report all absences to the Academic Office within 36 hours of the absence by completing an Absence Report Form (on line) with the Academic Office.
- As a TAMS student, you are required to attend class **on time**. I will report any absences or tardiness to the TAMS office.
- As a TAMS student, **you are not permitted to sleep during class.**
- During class I will clearly indicate what I consider to be a complete solution, and my expectations regarding various types of solutions, notation and so forth. You will not learn these things in the Math Lab.

Classroom Dynamics:

The following is taken directly from the list of **"Ten Student Academic Rights and Responsibilities"**, appearing on the official University of North Texas web page.

`https://studentaffairs.unt.edu/dean-of-students/conduct/10-academic-rights`

Students may not disrupt class or any other university process by any means whatsoever (including sideline conversations, comments, arguments, noise of any kind or other activity which would hinder access to or utilization of academic information.)

The following is a list of activities that I expect students to avoid. I will not tolerate behavior that is disrespectful, rude, or otherwise disruptive, in any way, to the dissemination and/or exchange of information.

I reserve the right to deduct points in the event that you do not comply with these expectations, in addition to other disciplinary consequences associate to the TAMS and UNT student codes of conduct.

- Cell phones and other electronic devices. Turn them off **before you enter the classroom), keep them off, and do not get them out during class.** Exception: If you use a tablet computer for note taking, it must be flat on the table and your face must be turned away from it when not writing notes. If you are found to be using it for anything other than taking notes, you will be subject to the penalty in the next paragraph, PLUS you will be taking notes with pencil on paper the rest of the semester.

  Any cell phone or electronic device nonsense, other than the exception in the previous bullet, will result in points being deducted from your overall point total as follows: 5 points for the first event, 10 more for the second, 15 more for the third and so on.

- Tardiness, that is, coming to class after lecture has begun. Students are expected to come to class **ON TIME**. If you know that on occasion you will be late, then you should speak to me about it. Recall that quizzes will be administered at the beginning of class.

- Leaving class early. Students are expected to remain for the entire class period. I pledge to make every effort to end class on time. If you anticipate having to leave early for some reason, then I expect you to speak to me **beforehand**.

- Book shuffling, paper shuffling, book bag zipping before lecture is finished. This is disruptive, annoying, and will not be tolerated.

- Reading materials not pertaining directly to this specific course. If you want to read or study for other classes, do so outside of this class.

- Sleeping in class. First, this is a violation of your TAMS directives. Second, people who regularly fall asleep in class are almost always gone after the first semester of TAMS. Third, it is disrespectful.

Student Evaluations

- The *Student Perception of Teaching* (AKA SPOT) evaluation process is a **requirement for all organized classes at UNT.** This short survey will be made available to you online, mid to late November and I will remind you as the time approaches.
- I am very interested in the feedback I get from students, as I work to continually improve my teaching. In addition, the University leadership considers the SPOT evaluation process to be an important part of your participation in this class.
- The SPOT evaluations can only be accessed online. I will create a Canvas assignment for this, and will explain everything when the time approaches.
- If you complete the assignment by the deadline, you will receive 5 additional points.

Special Notes

(A) 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. Consequences may include receiving a zero on a given assignment, exam, or project.

(B) 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). See the Campus Closures Policy (https://policy.unt.edu/policy/15-006). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

(C) Americans with Disabilities Act accommodation statement

The University of North Texas makes reasonable accommodations for students with disabilities. To request accommodations, you must first register with the Office of Disability Access (ODA) by completing an application for services and providing documentation to verify your eligibility each semester. Once your eligibility is confirmed, you may request your letter of accommodation. ODA will then email your faculty a letter of reasonable accommodation, initiating a private discussion about your specific needs in the course. You can request accommodations at any time, but it's important to provide ODA notice to your faculty as early as possible in the semester to avoid delays in implementation. Keep in mind that you must obtain a new letter of accommodation for each semester and meet with each faculty member before accommodations can be implemented in each class. You are strongly encouraged to meet with faculty regarding your accommodations during office hours or by appointment. Faculty have the authority to ask you to discuss your letter during their designated office hours to protect your privacy. For more information and to access resources that can support your needs, refer to the Office of Disability Access website (https://studentaffairs.unt.edu/office-disability-access).

Course schedule:

Date:	Section(s):	Description:
1/12	1.5	Introduction to limits
1/13	1.5, 1.6	Calculating limits
1/15	1.6	Calculating limits, one-sided limits
1/16	1.7	Precise definition of a limit
1/19		MLK Day – no class
1/20	1.7	Practice with the precise definition of a limit
1/22	1.8	Continuity
1/23	2.1	Derivatives and rate of change
1/26	2.2	Derivative as a function
1/27	2.3	Differentiation rules
1/29	2.3	Differentiation rules (ctd.)
1/30	2.4	Derivatives of trigonometric functions
2/2	2.5	Chain rule
2/3	2.6	Implicit differentiation
2/5	2.7	Rates of change in the sciences
2/6		Derivative exam
2/9	2.8	Related rates
2/10		Review
2/12		**Exam 1**
2/13		Derivative exam
2/16	2.9	Linearization and differentials
2/17	3.1	Maximum and minimum values
2/19	3.1	Maximum and minimum values (ctd.)
2/20		Derivative exam
2/23	3.2	The Mean Value Theorem
2/24	3.3	The shape of graphs
2/26	3.3	The shape of graphs (ctd.)
2/27		Derivative exam
3/2	3.4	Limits at infinity, horizontal asymptotes
3/3	3.5	Curve sketching
3/5	3.5	Curve sketching (ctd.)
3/6		Derivative exam
3/16	3.7	Optimization
3/17	3.7	Optimization (ctd.)
3/19	3.8	Newton's method
3/20		Derivative exam
3/23	3.9	Antiderivatives
3/24		Review
3/26		**Exam 2**

Course schedule (ctd.):

3/27		Derivative exam
3/30	3.9	Antiderivatives (ctd.)
3/31	4.1	The area under a curve
4/2	4.1	The area under a curve (ctd.)
4/3		Derivative exam
4/6	4.2	The definite integral
4/7	4.3	The Fundamental Theorem of Calculus
4/9	4.4	Indefinite integrals
4/10		Derivative exam
4/13	4.5	The substitution rule
4/14	5.1	Areas between curves
4/16	5.2	Volumes
4/17		Derivative exam
4/20	5.4	Work
4/21		Review
4/23		**Exam 3**
4/24		Derivative exam
4/27	5.5	Average value of a function
4/28		Review
4/30		Review
5/1		Reading day – no class