

M 371E: Learning Assistant Experience in Mathematics

Unique #59050 — Fall 2025

Instructor Information

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Office: PMA 12.136

Office hours: Mondays, 4 – 5 pm

Class Information

Dates: August 25th – December 8th

Time: Mondays, 5 – 6 pm

Location: In-person, PMA 5.122

Course Page: [Canvas](#)

Discussion Page: [Ed Discussion](#)

Course Description

This course is a hands-on experience in what it is like to teach and support students in the learning of mathematics in undergraduate courses. In this course, you will participate in classroom training and discussions, and you will practice your skills as learning assistants in CalcLab.

The goals of the course are that you acquire (1) a basic understanding of the fundamental principles of learning, particularly in mathematics; (2) a realistic perspective of your own strengths and weaknesses as developing professionals and educators; and (3) a compelling interest in learning about and confronting the challenges that lie before you in the remainder of your education and in your future mathematical lives. In this regard, this course will also expose you to ethical issues and to the process of applying ethical reasoning in real-life situations.

The intention is that by the end of this course, you will become effective teachers that (1) have reflected upon the practical and theoretical issues related to supervising and instructing others, and (2) have developed the leadership characteristics needed for this situation. To do this, you will develop a coherent framework for understanding of human learning in the context of mathematics instruction. Furthermore, you will gain experience implementing this framework while working in CalcLab, and planning your own class lessons and presentations.

Prerequisites

Mathematics 408C, 408K, 408N, 408R, or equivalent, and consent of instructor.

Expectations you may have of me:

- Hard work
- Respect and empathy as your instructor
- Regular, detailed preparation for class
- Clear lectures, with help on request
- Prompt responses to communication
- Fair, consistent grading
- Regular office hours

Expectations I have of you in return:

- Hard work
- Respect for the class and time
- Courtesy for your peers and myself
- Class attendance and participation
- Dedication to learning
- On-time, regular assignment completion
- Attendance in office hours when needed

Course Materials

Computer: you will need a computer with access to the internet to complete most assignments. All other course materials will be provided via the course Canvas page.

Grade Scale

Tentative final grade scale:

A	93 – 100	A–	90 – 92	B+	87 – 89
B	83 – 86	B–	80 – 82	C+	77 – 79
C	73 – 76	C–	70 – 72	D+	67 – 69
D	63 – 67	D–	60 – 62	F	0 – 59

Grading Scheme

Course grade components:

Attendance	30%
Participation	20%
Teaching Philosophy	20%
In-class Presentation	20%
Teaching Observation	10%

For the grade scale, decimals will be rounded to the nearest integer. I reserve the right to adjust grade cutoffs from the above, but only in your favor (*though you should not bank on this*). In other words, the cutoffs displayed above represent the worst letter grade you may receive for a given score. The grading scheme will not be adjusted, and course grade components are explained below.

Attendance

Attendance for this course (in class meetings) and in CalcLab (for your scheduled 2 hours a week) throughout the semester is absolutely required, and represents the largest portion of your grade for this class. As this class is largely based in discussion and getting experience helping other students via CalcLab, it is paramount that you attend whenever possible. There will be an attendance sheet next to the door in the CalcLab room which you will be expected to sign in on every time you are there, and it will be checked regularly.

Of course, I understand that there are times when attendance is not possible due to medical situations, family emergencies, and so on. Due to this, (for administrative ease) everyone will be permitted *one absence from the class meetings* and *one absence from CalcLab* for the semester, with no documentation necessary, which will lead to no grade penalty. Each absence beyond those excused ones which lacks a legitimate reason (along with proper documentation) to miss class or CalcLab will lead to a penalty of 1/10th of the attendance grade.

Participation

There are four components to the participation grade in this class:

1. **Calculus refresher:** As you will be assisting students in calculus courses this semester, there will be a short calculus quiz at the start of the semester, graded for completion. It is primarily designed for you to recall some topics, and assess whether you might need any review.
2. **In-class discussions and activities:** Contributing and engaging in the discussions and activities we will have on a weekly basis in class. Your grade here is to be judged by my own interpretation, but it will not be harsh at all; for instance, contributing periodically in a modest manner will be sufficient to receive full credit. Penalties will only be assessed if there is a clear and persistent lack of participation in the happenings in-class.

3. **Discussion threads online:** There will be frequent discussion threads on Canvas (or Ed Discussion) concerning the reading and pertinent topic of the week, with a prompt from me. Contributing to at least half the discussion threads (in at least 2 or 3 sentences) via your own post or response to another's post will be sufficient to earn full credit – these will be graded for completion only, unless the response is irrelevant/off-topic or contributes nothing.
4. **Journal entry reflections:** There will be 3 journal entries/reflections you will complete throughout the semester, each about 400-600 words in length. One will be at the beginning of the semester, one will be in the middle, and the last at the end. You will be provided a prompt for each one and will be graded only on whether your entry effectively addresses the prompt and approximately meets the length requirement.

The intent is for these assignments to essentially be completion-based. Satisfactory completion of each of the four components of the participation grade will result in receipt of full credit.

Teaching Philosophy

One of the goals of this course is for you to craft a teaching philosophy encompassing your approach and thoughts on best practices in mathematics education. One of the major assignments in this class is for you to write up a teaching philosophy statement. The final product will be a polished, 1-2 page (single spaced) essay, and part of the grade for this assignment will be based on completion of a draft. The final product will be graded based both on content and writing quality. You will receive more detailed instructions and a rubric for this assignment later in the semester.

In-class Presentation

At the end of the semester, everyone will give a 15 minute presentation on a non-calculus math topic. You will be graded on the organization and overall quality of your presentation. Topics may be chosen at will (with my approval), and I will provide a list of possible example topics if you're unsure what you would like to present on. There will be a minute or two at the end of each presentation for questions.

As this is a small class, you will be expected to be respectful and listen attentively to your peers' presentations. Part of the grade for this assignment will be determined by providing feedback to your peers on their presentations, as well as a submitted title/abstract before your presentation day.

Teaching Observation

This assignment requires you to sit in on a calculus (or other math) course at some point during the semester, and make detailed observations about the teaching practices employed by a professor in presenting a lesson. You must sit in on a class where you are already familiar with the material at hand, so that you may focus on the means and approach to the presentation rather than the content itself. A worksheet will be provided, and you will be expected to think carefully and write briefly but profoundly about the practices the instructor employs.

A list of suggested instructors/courses will be provided to you. You will need to contact the instructor ahead of time to receive their permission to sit in on the course and observe their teaching. They will not have been consulted about this assignment by anyone else prior.

Late Work Policy

In the absence of legitimate extenuating circumstances, there will be grade penalties for late submissions on major assignments (at least 20% per day late). In general, any assignments contributing to your participation grade will not be accepted late.

Important Dates

See the [UT 2025-2026 Academic Calendar](#) and the assignment due dates listed below. All assignments will be due by the start of the corresponding class, except the calculus refresher.

Tentative Schedule

The following is a *tentative* schedule for the course. It may be adjusted slightly if needed.

Class Day	Keywords	Assignment Due
Aug. 25	Syllabus, intro, qualities of good teachers	Calculus Refresher
Sep. 1	No class – Labor Day	None
Sep. 8	Positive learning environments	Journal Entry #1
Sep. 15	Effective questioning activity	Discussion Post
Sep. 22	Teaching styles, lesson design	Discussion Post
Sep. 29	Instructions activity	Discussion Post
Oct. 6	Assignments, assessment, grading	Discussion Post
Oct. 13	AI in math education	Discussion Post
Oct. 20	Ethics in education	Journal Entry #2
Oct. 27	Changing math education	Discussion Post
Nov. 3	Teaching Philosophy workshop	Teaching Philosophy draft
Nov. 10	Student presentations day 1	Discussion Post
Nov. 17	Student presentations day 2	Teaching Observation
Nov. 24	No class – Thanksgiving/Fall Break	None
Dec. 1	Student presentations day 3	Teaching Philosophy
Dec. 8	Student presentations day 4	Journal Entry #3

Tips for Success

I have advice listed on my website at www.aaronbenda.com/teaching/advice with general academic wisdom. Feel free to reach out to me for advice on any points unaddressed there.

My Classroom Philosophy

Mathematics is for *everyone*, and I am dedicated to ensuring that *all* students feel welcome in my class. Fostering an inclusive and supportive learning environment is of the utmost importance to me. It is my intent that this course will serve students from all different backgrounds well, that your learning needs will be addressed, and that the perspectives we all bring to the class can be comfortably expressed and viewed as a strength and benefit to everyone. For more details, my extended teaching philosophy statement is available at www.aaronbenda.com/teaching/my-philosophy.

Course Help

The main way to receive help for this course outside of our class meetings is to talk to your peers, or meet with me either in office hours, or one-on-one. We will not have a TA or other assistants.

Academic Integrity

Students who violate University rules on academic misconduct are subject to the student conduct process and potential disciplinary action. A student found responsible for academic misconduct may be assigned both a status sanction and a grade impact for the course. The grade impact could range from a zero on the assignment in question up to a failing grade in the course. A status sanction can range from probation, deferred suspension and/or dismissal from the University. To learn more about academic integrity standards, tips for avoiding a potential academic misconduct violation, and the overall conduct process, please visit the Student Conduct and Academic Integrity website at: <http://deanofstudents.utexas.edu/conduct>.

Be warned that I am very serious about academic integrity. With that said, *collaboration on major assignments is usually permitted, unless otherwise specified*. The previous statement does not apply to discussion posts or any other type of assignment contributing to your participation grade, as well as the teaching evaluation. On other major assignments, you are welcome to talk with your peers about the assignments and get feedback from one another. You are also welcome to use AIs or LLMs (such as ChatGPT, Google Gemini, and others) to serve similar roles in the completion of your work. However, your work and submissions must be generated on your own, not copied. To be clear, copying another student or an AI's writing or work *is cheating*; working together with others to get feedback, generate ideas, and improve the quality of your own work *is not cheating*.

Faith/Tradition Observances Policy

Students that need accommodations due to religious holidays must make arrangements with me at least two weeks in advance. I will gladly work with you to ensure nothing important is missed.

Students with Disabilities

The university is committed to creating an accessible and inclusive learning environment consistent with university policy and federal and state law. Please let me know if you experience any barriers to learning so I can work with you to ensure you have equal opportunity to participate fully in this course. If you are a student with a disability, or think you may have a disability, and need accommodations please contact Disability and Access (D&A). Please refer to D&A's website for contact and more information: <http://diversity.utexas.edu/disability/>. If you are already registered with D&A, please deliver your Accommodation Letter to me as early as possible in the term so we can discuss your approved accommodations and needs in this course.

Counseling Services

We all benefit from support during times of struggle. If you are experiencing signs of stress, anxiety, depression, academic concerns, loneliness, difficulty sleeping, or any other concern impacting your well-being — you are not alone. The Counseling and Mental Health Center (CMHC) is located on campus and provides a wide variety of mental health services to all UT students, including crisis services, counseling services with immediate support and well-being resources. You are strongly encouraged to connect with CMHC if you are experiencing any concerns; there is no shame in doing so. Additionally, CARE Counselors are located within each of the academic schools and colleges. These counselors are familiar with the concerns that are unique to their unit's students. For more information on CMHC, visit <https://cmhc.utexas.edu/> or call 512-471-3515.

Health Services

Your physical health and well-being are a priority. University Health Services (UHS) is the on-campus medical facility providing high quality medical care and patient education to UT students. Services offered include general medicine, specialty clinics including the gynecology clinic, sports medicine, nutrition services, allergy, immunization and travel health, physical therapy, urgent care, a 24/7 nurse advice line, and lab and radiology services. For additional information, visit <https://healthyhorns.utexas.edu/> or call 512-471-4955.

Title IX

By law, all employees of Texas universities must report any information to the Title IX Office regarding sexual harassment, sexual assault, dating violence, and stalking that is disclosed to them. Texas law requires that all employees who witness or receive any information of this type must report it to the Title IX Coordinator. Before talking with me about a Title IX related incident, please remember that I will be required to report this information. Title IX is a federal civil rights law that prohibits discrimination on the basis of sex – including pregnancy and parental status – in educational programs and activities. The Title IX Office has developed supportive ways and compiled campus resources to support all impacted by a Title IX matter.

To speak with a Case Manager in the Title IX Office, email: supportandresources@austin.utexas.edu. For more information about reporting options and resources, please visit: <https://titleix.utexas.edu> or contact the Title IX Office via email at: titleix@austin.utexas.edu, or call 512-471-0419.