

MATH 2417 - CALCULUS I

Fall 2025 Syllabus

Lecture Section Information:

Class Section	Room	Days/ Time	Instructor
MATH 2417.001	CR 1.202	TR 10:00am-11:15am	Dr. Theodosios Douvropoulaos
MATH 2417.002	SCI 3.230	TR 10:00am-11:15pm	Dr. Diarisoa Mihaja Rakotomalala
MATH 2417.003	GR 4.301	TR 4:00pm-5:15pm	Dr. Diarisoa Mihaja Rakotomalala
MATH 2417.004	SCI 2.235	TR 8:30am-9:45am	Dr. Joselle Kehoe
MATH 2417.005	GR 4.301	TR 1:00pm-2:15pm	Dr. James Miller
MATH 2417.006	FO 3.616	TR 2:30pm-3:45pm	Dr. James Miller
MATH 2417.007	SCI 2.225	TR 11:30am-12:45pm	Dr. Diarisoa Mihaja Rakotomalala

Instructor Information:

Dr. Theodosios Douvropoulaos

Office: TBD

Email: dal326158@utdallas.edu

Office Hours: TBD

Dr. Diarisoa Mihaja Rakotomalala

Office: FA 2.106 (Founders Annex)

Email: mihaja@utdallas.edu

Office Hours: TR 2:45 - 3:45 PM (or by appointment)

Dr. Joselle Kehoe

Office: FO 2.108

Email: jxk061000@utdallas.edu

Office Hours: TR 11:30 AM - 12:30 PM (or by appointment)

Dr. James Miller

Office: BE 3.204D

Email: James.Miller3@UTDallas.edu

Office Hours: TR 4:00 - 5:00 PM (or by appointment)

Remark: When contacting your instructor, make sure you use your UTD email account (@utdallas.edu). Refer to the Lecture Section information above and include your section number in the subject line of your email.

To

Bcc

Cc

HW1 Question – MATH 2417.001

Course Pre-Requisite, Co-requisite and/or Other Restrictions:

1. A minimal placement score of 85% on ALEKS math placement exam or a grade of at least a C- in MATH 2306 or MATH 2312. Repeat Restriction.
2. Students must enroll in one of the problem sections MATH 2417.3XX or MATH 2417.8XX.
3. Students are automatically enrolled in MATH 2417.701 exam section which meets on exam days only.
4. Enrollment in one of the following problem sections is mandatory

Problem Sections Information:

Section	Day, Time	Location	TA	e-mail: @utdallas.edu
MATH 2417.301	F, 8:00 - 9:50am	SCI 3.270	Alabbadi Ismail	ixa230001@utdallas.edu
MATH 2417.302	F, 10:00 - 11:50am	SCI 3.270	Chepkemboi Carolyne	dal052453@utdallas.edu
MATH 2417.303	F, 1:00 - 2:50pm	SCI 3.270	Aloah Isaac	dal326212@utdallas.edu
MATH 2417.304	F, 3:00 - 4:50pm	SCI 3.270	Aloah Isaac	dal326212@utdallas.edu
MATH 2417.305	F, 8:00 - 9:50am	SCI 3.260	Billah Misha	mx210085@utdallas.edu
MATH 2417.306	F, 10:00 - 11:50am	SCI 3.260	Anaab Judith	jxa230060@utdallas.edu
MATH 2417.307	F, 3:00 - 4:50pm	FN 2.204	Harikumar Rohin	rxh210003@utdallas.edu
MATH 2417.308	F, 10:00 - 11:50am	FN 2.204	Billah Misha	mx210085@utdallas.edu
MATH 2417.309	F, 1:00 - 2:50pm	FN 2.204	Sarkar Soham	sxs210586@utdallas.edu
MATH 2417.310	F, 1:00 - 2:50pm	SCI 3.240	Senanayake Nimsha	dal514438@utdallas.edu
MATH 2417.311	F, 3:00 - 4:50pm	SCI 3.240	Sarkar Soham	sxs210586@utdallas.edu
MATH 2417.312	F, 8:00 - 9:50am	SCI 3.240	Senanayake Nimsha	dal514438@utdallas.edu
MATH 2417.313	F, 10:00 - 11:50am	CB 1.219	Alabbadi Ismail	ixa230001@utdallas.edu
MATH 2417.314	F, 4:00 - 5:50pm	FN 2.304	Das Anwesha	dal003480@utdallas.edu
MATH 2417.315	F, 4:00 - 5:50pm	GR 4.208	Khandelwal Abinash	axk155531@utdallas.edu
MATH 2417.801	W, 5:00 - 6:50pm	ML2 1.216	Chepkemboi Carolyne	dal052453@utdallas.edu
MATH 2417.802	W, 5:00 - 6:50pm	SLC 2.202	Anaab Judith	jxa230060@utdallas.edu
MATH 2417.803	W, 5:00 - 6:50pm	SCI 3.270	Harikumar Rohin	rxh210003@utdallas.edu

Course Description:

1. (4 semester credit hours) Functions, limits, continuity, differentiation; integration of function of one variable; logarithmic, exponential, and inverse trigonometric functions; techniques of integration, and applications.
 2. Three lecture hours and two discussion hours a week; problem section required with MATH 2417, and will also be registered for exam section.
 3. Not all MATH/STAT courses may be counted toward various degree plans. Please consult your degree plan to determine the appropriate MATH/STAT course requirements.
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Textbook and Materials:

- **Textbook:** Calculus, 11th edition; Larson & Edwards.
 - **Sections Covered:** The course will cover the following sections of the textbook:
1.1, 1.2, 1.3, 1.4, 1.5; 2.1, 2.2, 2.3, 2.4, 2.5, 2.6; 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.9; 4.1, 4.2, 4.3, 4.4, 4.5; 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8; 7.1, 7.2; 8.1, 8.2, 8.3, 8.4, 8.5.
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Students Learning Outcomes

1. Students will be able to determine the existence of the limit of a function at a given point geometrically and analytically. Students will also be able to verify the limit of a function at a given point using $\epsilon - \delta$ definition.
 2. Students will be able to calculate the derivative of: algebraic, trigonometric, exponential, logarithmic, and combination of such functions. Students will be able to calculate the derivative using: power, sum, product, quotient, and chain rule as appropriate.
 3. Students will be able apply derivative to solve related rates problems, find the interval of increase and decrease and find the critical numbers of functions.
 4. Students will be able to find the interval(s) on which the graph of function is concave up and concave down, and find the point(s) of inflection.
 5. Students will be able to find the absolute and relative extrema of given functions.
 6. Students will be able to find indefinite integrals using: substitution rule, partial fractions, by parts etc.
 7. Students will be able calculate the definite integral of some simple algebraic functions using the limit definition.
 8. Students will be able to calculate the definite integral using the fundamental theorem of calculus.
 9. Students will be able to calculate the area of the plane regions between to curves over given interval.
 10. Students will be able to calculate the volume of solids obtained by revolving a plane region about horizontal or vertical lines.
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eLearning:

You must regularly check the MATH 2417.701 (the exam section) page of eLearning:

<https://elearning.utdallas.edu>

Under this course on elearning: paper homework (HW) will be assigned; a grade book will be maintained, and other important announcements will be posted. You will also access the **Webwork** for Digital Homework (DHW) through this course on eLearning.

ASSIGNMENTS:

1. **Quizzes:** Weekly quizzes will be given in the last 20 minutes of your problem section except in the exam weeks.
2. **Paper Homework (HW):** A pdf file of weekly HW will be posted on eLearning course MATH 2417.701 every Tuesday and is due at 11:59pm on Tuesday the following week.
3. **Digital Homework (DHW):** Weekly DHW is due each Friday, except during exam weeks.
 - Accessing Webwork on campus: Go to eLearning “MATH 2417.701”, select the folder “Digital Homework (DHW)” from the course homepage, click on the links of the homework.
 - Accessing Webwork off campus (including campus housing): First, make sure you have already set up GlobalProtect VPN. If not, click on the the suitable links below and follow the instructions there.

Windows	https://atlas.utdallas.edu/TDClient/30/Portal/KB/ArticleDet?ID=152
iOS	iOS: https://atlas.utdallas.edu/TDClient/30/Portal/KB/ArticleDet?ID=277
macOS	https://atlas.utdallas.edu/TDClient/30/Portal/KB/ArticleDet?ID=279

Once connected to UTD network via VPN, go to MATH 2417.701, click Daily Homework (DHW),...

- Power outage, internet outage, glitches in eLearning or Webwork, connection issue with GlobalProtect VPN, or unexpected circumstances may occur at any time so we suggest you plan to submit each DHW at least 24 hours before it is due so that you will still have 24 hours to find an alternate method of submission within the deadline in case of above mentioned circumstances. For such circumstances, please do not expect a DHW deadline extension. Only in the case of an extreme situation, supported by a strong document, a DHW extension may be possible based on the discretion of an instructor.
- For GlobalProtect VPN issue: Click on **IT Support** at the top of the page after you click above links.

Remark: To accommodate students who registered late and to account for any missed work, we will drop the following:

- The lowest 2 quiz scores
- The lowest 2 HW scores
- The lowest 3 DHW scores

Grading Policy

- – Digital homework (DHW): 10%
- – Paper homework (HW): 15%
- – Quizzes: 15%
- – Two midterm exams: 35% (Low midterm exam grade: 15%. High midterm exam grade: 20%).
- – Final exam: 25%
- Letter grades will be assigned in according to the following table of numeric to alphabetic conversions.

[0; 60) : F		
[60; 63): D-	[63; 67): D	[67; 70): D+
[70; 73): C-	[73; 77): C	[77; 80): C+
[80; 83): B-	[83; 87): B	[87; 90): B+
[90; 93): A-	[93; 97): A	[97; 100]: A+

Important Dates

- **Exam 1:** Friday, October 3, 2025, 8:30 PM – 9:45 PM
- **Exam 2:** Friday, November 7, 2025, 8:30 PM – 9:45 PM
- **Exam 3:** TBD

Schedule (subject to change)

Week	Tuesday	Lecture	HW (Tue.)	Pb. Sec. W/F	Quiz	DHW (F.)
1	08/26	SEC 1.2, 1.3	No HW	Review	No Quiz	DHW 1
2	09/02	SEC 1.4, 1.5	HW 1	SEC 1.2, 1.3	Quiz 1	DHW 2
3	09/09	SEC 3.5, 2.1, 2.2	HW 2	SEC 1.4, 1.5	Quiz 2	DHW 3
4	09/16	SEC 2.3, 2.4, 2.5	HW 3	SEC 3.5, 2.1, 2.2	Quiz 3	DHW 4
5	09/23	SEC 2.6, 3.1, 3.2	HW 4	SEC 2.3, 2.4, 2.5	Quiz 4	DHW 5
6	09/30	SEC 3.3, 3.4, 3.7	HW 5	SEC 2.6, 3.1, 3.2	No Quiz	NO DHW
7	10/07	SEC 3.9, 4.1, 4.2	HW 6	SEC 3.3, 3.4, 3.7	Quiz 5	DHW 6
8	10/14	SEC 4.3, 4.4, 4.5	HW 7	SEC 3.9, 4.1, 4.2	Quiz 6	DHW 7
9	10/21	SEC 5.1, 5.2, 5.3	HW 8	SEC 4.3, 4.4, 4.5	Quiz 7	DHW 8
10	10/28	SEC 5.4, 5.5, 5.6	HW 9	SEC 5.1, 5.2, 5.3	Quiz 8	DHW 9
11	11/04	SEC 5.7, 5.8	HW 10	SEC 5.4, 5.5, 5.6	No Quiz	NO DHW
12	11/11	SEC 8.1, 8.2	HW 11	SEC 5.7, 5.8	Quiz 9	DHW 10
13	11/18	SEC 8.3, 8.4	HW 12	SEC 8.1, 8.2	Quiz 10	DHW 11
14	11/25	F A L L B R E A K				
15	12/02	SEC 8.5, 7.1	HW 13	SEC 8.3, 8.4, 8.5	Quiz 11	DHW 11
16	12/09	SEC 7.2	HW 14	No Pb Sec.		

SEC 1.2 Limits (Graphically & Numerically)	SEC 1.3 Limits (Analytically)	SEC 1.4 Continuity and One-sided limits	SEC 1.5 Infinite limits
SEC 3.5 Limits at infinity	SEC 2.1 Definition of Derivatives	SEC 2.2 Basic Differentiation rules	SEC 2.3 Product and Quotient rules
SEC 2.4 The Chain Rule	SEC 2.5 Implicit Differentiation	SEC 2.6 Related Rates	SEC 3.1 Extrema
SEC 3.2 Rolle's and MVT	SEC 3.3 Inc./Dec. Functions	SEC 3.4 Concavity	SEC 3.7 Optimization
SEC 3.9 Differentials	SEC 4.1 Antiderivatives	SEC 4.2 Area	SEC 4.3 Definite integrals
SEC 4.4 The F.T.C	SEC 4.5 u -sub	SEC 5.1 Natural Log.: Differentiation	SEC 5.2 Natural Log.: Integration
SEC 5.4 Inverse Functions	SEC 5.4 Exp. Functions	SEC 5.5 Exp. with base $\neq e$	SEC 5.6 Indeterminate Forms
SEC 5.7 Inverse Trig. Functions: derivatives	SEC 5.8 Inverse Trig. Functions: Integrals	SEC 8.1 Basic Integration Rules	SEC 8.2 Integration by Parts
SEC 8.3 Trig. Integrals	SEC 8.4 Trig. Substitution	SEC 8.5 Partial Fractions	SEC 7.1 Area
SEC 7.2: Volume (Disk/Washer method)			

Course & Instructor Policies:

1. **Late/Missed Coursework:** There is no make-up for late or missed assignments, quizzes, or exams, unless extreme circumstances with proper documentation accepted by the instructor.
2. **Calculators:** Calculators are not allowed in the quizzes and exams. The exams and quizzes will involve simple calculations so that you will not need a calculator.

Class Materials:

The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the **Student Code of Conduct**.

Class Attendance:

Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty. If you have to miss a class, you are responsible for the material covered in class. You are responsible for any/all assignments regardless of your attendance.

Class Participation:

Regular class participation is encouraged, however, please raise your hand to speak. Avoid having side conversations and using electronic devices (such as phone, laptop) to prevent unnecessary distractions to yourself and your classmates. You are welcome to use a writing tablet to take lecture notes.

Student AccessAbility

It is the policy and practice of The University of Texas at Dallas to make reasonable classroom accommodations for students with properly documented disabilities. However, written notification from the AccessAbility Resource Center (ARC) is required. If you are eligible to receive an accommodation and would like to request it for this course, please discuss it with me and allow one week advance notice. Students who have questions about receiving accommodations, or those who have, or think they may have, a disability (mobility, sensory, health, psychological, learning, etc.) are invited to contact ARC for a confidential discussion. ARC is located in the Student Administration Building, AD 2.224. They can be reached by phone at 972-883-2098, by email at: studentaccess@utdallas.edu, or at their website. To receive academic accommodations for this class, please register and request services by completing the Request for Services form with the proper documentation and meeting with the Director of ARC at the beginning of the semester.

Class Recordings:

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the **Student Code of Conduct**.

Course Supports

1. Peer Tutoring:

Peer Tutoring is a drop-in tutoring service offered to currently enrolled students in various math, chemistry, physics, and engineering courses. As a drop-in tutoring service, you do not need to schedule an appointment in advance; rather, you can simply show up to the tutoring lab any time they are open. The tutoring lab is located in the bottom floor of the McDermott Library in room MC 1.304. Please visit their website:

<https://studentsuccess.utdallas.edu/programs/peer-tutoring/>

for detail information. You can call them at 972-883-5480, or e-mail at tutoring@utdallas.edu.

2. Peer Led Team Learning (PLTL):

Peer-Led Team Learning (PLTL) offers an active, engaged learning experience. Its is all about working together as a group. Students who register with PLTL will meet once a week for 1.5 hours with a small group of up to eight students and one leader. The group members are expected to attend every session. A trained PLTL Leader helps guide the team members through a potentially difficult gateway course. Peer leaders are trained to be facilitators, not lecturers or teaching assistants. They do not provide answers to their students; instead they guide them toward answers and set a tone for group discussion and learning. Students do most of the explanation and reasoning to the rest of the group. Individual points of view are respected, criticism is constructive, and all members have an equal opportunity to participate. Students can only enroll in PLTL sessions for courses they are currently taking. Courses offering PLTL sessions vary each semester. Space is limited; check PLTL offerings at the beginning of the fall and spring semesters. Results at UT Dallas and nationally have shown that students who consistently participate in PLTL sessions attain higher grades and better learning outcomes. They not only reap the benefits of higher engagement with and application of course material, but also connect with peers who have prior knowledge, experience and success in the course. When students learn from other students, they become more adept in managing learning behaviors, approaches to group study, and time. for detail information, please visit their website:

<https://studentsuccess.utdallas.edu/programs/peer-led-team-learning/>

If you have any additional questions, please email them at pltl@utdallas.edu.

3. Please visit the following webpage for the full list of University's academic support resources for all students.

<http://go.utdallas.edu/academic-support-resources>

Technical Supports

If you experience any problems with your UTD account you may send an email to: assist@utdallas.edu or call the UTD Computer Helpdesk at 972-883-2911.

UT Dallas Syllabus Policies and Procedures:

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please review the catalog sections regarding the **credit/no credit** or **pass/fail** grading option and withdrawal from class. Please go to

<http://go.utdallas.edu/syllabus-policies>

for these policies.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

Note: The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professors.