MATH 2417 CALCULUS I- Spring 2025
Syllabus

Lecture Section Information:

Class Section	Room	Days/ Time	Instructor
MATH 2417.001	SCI 2.225	TR 8:30am-9:45am	Ajaya Paudel
MATH 2417.002	FN 2.106	TR 11:30am-12:45am	Tomoki Ohsawa
MATH 2417.003	SCI 2.225	TR 4:00pm-5:15pm	Ajaya Paudel
MATH 2417.004	SCI 2.235	TR 10:00pm-11:15pm	Tomoki Ohsawa

Instructor Information:

Dr. Ajaya Paudel	Dr. Tomoki Ohsawa
Office: FA 2.106	Office: FO 3.704C
Email: `ajaya.paudel@utdallas.edu`	Email: `tomoki@utdallas.edu`
Office Phone: 972-883-6589	Office Phone: 972-883-6560
Office Hours: TR 10:00am-11:00am or by appt.	Office Hours: TR 1:00pm - 2:00pm.

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.

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.

Textbook and Materials:

- **Textbook:** Calculus, 11^{th} *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.

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.

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 (PHW) 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 & Academic Calendar

1. **Digital Homework (DHW):**
   - DHW average is worth 10% of your course grade.
   - Out of 14 assigned DHWs, the scores of the lowest 2 will be dropped and the best 12 will be considered.
   - To access an assigned DHW, say, DHW1, abbreviated as D1, you can follow the following two options:

Accessing DHW on campus
eLearning of MATH 2417.701 ⇒ Course Homepage ⇒ "DHW" Folder ⇒ D1.

Accessing DHW off campus (including campus housing)
Step 1: Set up the GlobalProtect VPN by clicking on a suitable link below and following the instructions: 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`
Step 2: Once the GlobalProtect VPN set up process is complete, connect to UTD network via this VPN. For any VPN issue, click on **IT Support** at the top of the page after you click above links.
Step 3: eLearning of MATH 2417.701 ⇒ Course Homepage ⇒ "DHW" Folder ⇒ D1.

   - DHW1 will available at 1.00am on 01/21. Other DHWs will be available at 1:00am on every Saturday. Please look at page 4 for the due dates of the DHWs. You will have multiple attempts for each DHW. A submitted DHW is graded immediately in Webwork and its grade will be posted in elearning.
   - 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.

2. **Paper Homework (PHW):**
   - PHW average is worth 15% of your course grade.
   - Out of 11 assigned PHWs, the scores of the lowest 2 will be dropped and the best 9 will be considered.
   - PHWs will be posted on eLearning of MATH 2417.701 at 1.00am on Mondays (except for exam weeks).
   - The number of problems in each PHW set will vary with the material covered.
   - Download and print the assigned PHW pdf file. You can print it 2-sided. Write your solutions on the space provided. Use "Microsoft Lens" or any scanning app to scan and combine your answer in a single pdf file form. Upload this file through the provided link in eLearning. DO NOT submit your PHW in a picture file format such as jpeg or tiff. We will NOT grade any PHW that is not in pdf.
   - Power or internet outage, glitches in eLearning, or unexpected circumstances may occur at any time so plan to submit each PHW at least 24 hours before it is due. If any unforeseen circumstances occur to you, you will still have 24 hours to find an alternate method of submission within the deadline.
   - Submit your PHW solution by 11:59 pm of its due date (See the calendar in page 4 for the due dates).
   - Late submitted PHWs will not be graded. Moreover, we will not extend the deadlines for PHWs.
   - Only a subset of the assigned problems will be graded and you will not be told in advance which ones.
   - To earn full credit, show all the work, maintain a logical flow, use proper notations, and write neatly. Fill in the header information on the top of page 1 correctly to avoid losing 10% of the possible points.
3. **Quizzes:**
   - Quiz average is worth 15% of your course grade.
   - Out of 11 assigned quizzes, the scores of the lowest 3 will be dropped and the best 8 will be considered.
   - There will be no make-up quizzes. You can treat a missed quiz as 1 of 3 quiz scores to be dropped.
   - Weekly quizzes will be given in the last 20 minutes of your problem section except in the exam weeks.
4. **Exams:**
   - There will be two Midterm Exams and one Final Exam.
   - The lower and higher Midterm Exam score are worth 15% and 20% respectively of your course grade.
   - Final exam score is worth 25% toward your course grade.
   - Final Exam will be comprehensive with more emphasis on contents covered after Midterm Exam II.
   - You can find the Exam schedules at the end of page 4.

Note: Exam information will be posted on eLearning course MATH 2417.701 one week before each exam.

Grading Policy

Letter Grade Scale		
[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+

Weights					
DHW	PHW	Quiz	Low Midterm	High Midterm	Final
10%	15%	15%	15%	20%	25%

An Example of Course Grade Calculation		
DHW: 84	PHW: 85	Quiz: 71
Low Midterm: 50	High Midterm: 90	Final: 80
0.1*84+0.15*85+0.15*71+0.15*50+0.2*90+0.25*80		
Course Grade: 77.3. Course Letter Grade: C+		

Tentative Schedule

T: Tuesday, R: Thursday, 1.1: Section 1.1 of Calculus (Larson/Edwards, 11e)., D1: DHW1, P1: PHW1, Q1: Quiz1.

Lecture Sec	Problem Sec	DHW	PHW	Quiz
T, 01/21: 1.2, 1.3* R, 01/23: 1.3, 1.4*	M: No session W: 1.2	D1. Due: Fri, 01/24 1.2	P1. Due: Sun, 01/26 1.2	No Quiz
T, 01/28: 1.4, 1.5* R, 01/30: 1.5, 2.1	M: 1.2, 1.3 W: 1.3, 1.4	D2. Due: Fri, 01/31 1.3, 1.4, 1.5	P2. Due: Sun, 02/02 1.3, 1.4, 1.5	M: 01/27, W: 01/29 Q1: 1.2
T, 02/04: 2.2, 2.3 R, 02/06: 2.4, 2.5*	M: 1.4, 1.5, 2.1 W: 1.5, 2.1, 2.2	D3. Due: Fri, 02/07 2.1, 2.2, 2.3	P3. Due: Sun, 02/09 2.1, 2.2, 2.3	M: 02/03, W: 02/05 Q2: 1.3, 1.4, 1.5
T, 02/11: 2.5, 2.6 R, 02/13: 3.1, 3.2*	M: 2.2, 2.3, 2.4 W: 2.3, 2.4, 2.5	D4. Due: Fri, 02/14 2.4, 2.5, 2.6	P4. Due: Sun, 02/16 2.4, 2.5, 2.6	M: 02/10, W: 02/12 Q3: 2.1, 2.2, 2.3
T, 02/18: 3.2, 3.3 R, 02/20: 3.4, 3.5*	M: 2.5, 2.6, 3.1 W: 2.6, 3.1, 3.2	D5. Due: Fri, 02/21 3.1, 3.2, 3.3	P5. Due: Sun, 02/23 3.1, 3.2, 3.3	M: 02/17, W: 02/19 Q4: 2.4, 2.5, 2.6
T, 02/25: 3.5, 3.7 R, 02/27: 3.9, 4.1*	M: 3.2, 3.3, 3.4 W: 3.3, 3.4, 3.5	D6. Due: Sun, 03/02 3.4, 3.5, 3.7	Exam 1 week Exam 1 on Fri, 02/28, 8.30 -9.45pm	
T, 03/04: 4.1, 4.2* R, 03/06: 4.2, 4.3*	M: 3.5, 3.7, 3.9 W: 3.7, 3.9, 4.1	D7. Due: Fri, 03/07 3.9, 4.1	P6. Due: Sun, 03/09 3.4, 3.5, 3.7, 3.9, 4.1	M: 03/03, W: 03/05 Q5: 3.4, 3.5, 3.7
T, 03/11: 4.3, 4.4* R, 03/13: 4.4, 4.5*	M: 4.1, 4.2 W: 4.2, 4.3	D8. Due: Fri, 03/14 4.2, 4.3	P7. Due: Sun, 03/16 4.2, 4.3	M: 03/10, W: 03/12 Q6: 3.9, 4.1
Spring Break Week (03/17 - 03/23)				
T, 03/25: 4.5, 5.1 R, 03/27: 5.2, 5.3*	M: 4.3, 4.4 W: 4.4, 4.5, 5.1	D9. Due: Fri, 03/28 4.4, 4.5, 5.1	P8. Due: Sun, 03/30 4.4, 4.5, 5.1	M: 03/24, W: 03/26 Q7: 4.2, 4.3
T, 04/01: 5.3, 5.4 R, 04/03: 5.5, 5.6*	M: 4.5, 5.1, 5.2 W: 5.2, 5.3, 5.4	D10. Due: Fri, 04/04 5.2, 5.3, 5.4	P9. Due: Sun, 04/13 5.2, 5.3, 5.4	M: 03/31, W: 04/02 Q8: 4.4, 4.5, 5.1
T, 04/08: 5.6, 5.7 R, 04/10: 5.8	M: 5.3, 5.4, 5.5 W: 5.5, 5.6, 5.7	D11. Due: Sun, 04/13 5.5, 5.6, 5.7	Exam 2 week Exam 2 on Fri, 04/11, 8.30 -9.45pm	
T, 04/15: 8.1 R, 04/17: 8.2	M: 5.6, 5.7, 5.8 W: 5.8, 8.1	D12. Due: Fri, 04/18 5.8, 8.1	P10. Due: Sun, 04/20 5.5, 5.6, 5.7, 5.8, 8.1	M: 04/14, W: 04/16 Q9: 5.5, 5.6, 5.7
T, 04/22: 8.3 R, 04/24: 8.4	M: 8.1, 8.2 W: 8.2, 8.3	D13. Due: Sun, 04/27 8.2, 8.3, 8.4	P11. Due: Sun, 05/04 8.2, 8.3, 8.4, 8.5 7.1	M: 04/21, W: 04/23 Q10: 5.8, 8.1
T, 04/29: 8.5 R, 05/01: 7.1	M: 8.3, 8.4 W: 8.4, 8.5	D14. Due: Sun, 05/04 8.5, 7.1	P12. No due 7.2	M: 04/28, W: 04/30 Q11: 8.2, 8.3, 8.4
T, 05/06: 7.2 R, 05/08: Review	M: 8.5, 7.1 W: 7.1, 7.2	P12: No due. Covers section 7.2. Available after 1:00am on Tuesday, 05/06. D15: No due. Covers section 7.2. Available after 1:00am on Tuesday, 05/06.		

Exam	Section	Date and time	Location
Exam 1	1.2 - 3.3	02/28, Friday, 8.30pm-9.45pm	To be announced
Exam 2	3.4 - 5.4	04/11, Friday, 8.30pm-9.45pm	To be announced
Final	1.2 - 5.8, 8.1 - 8.5, 7.1, 7.2	To be announced	To be announced

Important Dates

- **Classes begin:** 01/21, Tuesday.
- **Last Day to Drop a class without a "W" Full Term Session:** 02/05.
- **Exam I**: 02/28, Friday, 8:30pm - 9:45pm. Locations: To be announced.
- **Spring Break**: 03/17, Monday - 03/23, Sunday.
- **Last Day to Drop a Course**: 04/09, Thursday.
- **Exam II**: 04/11, Friday, 8:30pm - 9:45pm. Locations: To be announced.
- **Last Day of MATH 2417 Lecture** - 05/05, Thursday.
- **Final Exam**: Locations: To be announced.

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.

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 and electronic devices are not allowed:** 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. Moreover, electronic devices such as smart watches and cell phones are not allowed in quizzes and exams.

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.

Those students who attend the lectures and problem sections regularly and punctually do have better prospect of performing well in this course. Therefore, to encourage the students for regular classroom attendance, this course introduces the following special bonus point policy:

- Starting week 2, attendances will be taken in the lectures - in every lectures or in some lectures.
- Out of all those days in which attendances are taken, only 10 random days will be chosen in the end.
- Out of the attendances taken in those randomly chosen 10 attendance days,
    - 9-10 attendances give 10 bonus points.
    - 8 attendances gives 7 bonus points.
    - 7 attendances give 5 bonus points.
    - 6 attendances give 2 bonus points.
    - 1-5 attendances give 0 bonus points.
- These special bonus points will be added to your Exam 2 score. The maximum score for Exam 2 will be 100 points. With the 10 points added into it, the maximum possible score for Exam 2 will be 110 points.

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**.

Problem Sections Information: Students are required to enroll in and attend one of the problem sections.

Section	Day, Time	Location	TA	e-mail: ....@utdallas.edu
MATH 2417.301	W, 8:00 - 9:50am	FN 2.204	Soufiane Abbadi	soufiane.abbadi@
MATH 2417.302	M, 10:00 - 11:50am	FN 2.204	Minu Maria Mathew	minumaria.mathew@
MATH 2417.303	W, 10:00 - 11:50am	FN 2.204	Minu Maria Mathew	minumaria.mathew@
MATH 2417.304	M, 1:00 - 2:50pm	SCI 3.240	Gurpreet Kaur	gurpreet.kaur@
MATH 2417.305	M, 4:00 - 5:50pm	FN 2.204	Soufiane Abbadi	soufiane.abbadi@
MATH 2417.306	M, 3:00 - 4:50pm	SCI 3.240	Gurpreet Kaur	gurpreet.kaur@

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.`