MATH 2417 CALCULUS I- Spring 2024
Syllabus

Class Information:

Class Section	Room	Days/ Time	Instructor
MATH 2417.001	SCI 2.225	TR 8:30am-9:45am	Mohammad Ahsan
MATH 2417.002	GR 3.302	TR 11:30am-12:45pm	Rabin Dahal
MATH 2417.003	SCI 2.225	TR 4:00pm-5:15pm	Tomoki Ohsawa
MATH 2417.004	SCI 3.230	TR 10:00am-11:15am	Mohammad Ahsan

Instructor Information:

Instructor: Mohammad Ahsan Office: FO 2.410F Email: `mkahsan@utdallas.edu` Office Phone: 972-883-6336 Office Hours: TR 12:00pm-12:50pm or by appt.	Instructor: Rabin Dahal Office: FO 2.410B Email: `Rabin.Dahal@utdallas.edu` Office Phone: 972-883-6584 Office Hours: TR 1:00pm-2:00pm or by appt.
Instructor: Tomoki Ohsawa Office: FO 3.704C Email: `tomoki@utdallas.edu` Office Phone: 972-883-6560 Office Hours: TR 11:00am-12:00pm	

Course Pre-Requisite, Co-requisite and/or Other Restrictions: 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. Students must enroll in one of the problem sections MATH 2417.3XX. Students are automatically enrolled in MATH 2417.701 exam section which meets on exam days only.

Course Description: (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. Three lecture hours and two discussion hours a week; problem section required with MATH 2417, and will also be registered for exam section. 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.
- **WebAssign:** You must have **WebAssign** access. Weekly digital homework (DHW) will be assigned on WebAssign. WebAssign also contains an electronic version of the textbook, so you are not required to purchase a physical copy. Here are some of the options for purchasing the access:
  1. Loose-leaf textbook+ WebAssign Multi-Term Printed Access Card: 9781337604741
  2. WebAssign Single-Term: 9781337879644
  3. WebAssign Multi-Term Printed Access Card 9781337652650
  4. Cengage Unlimited 4 mths: 9780357700006
  5. Cengage Unlimited 1 Year: 9780357700013

6. Cengage Unlimited 2 Years: 9780357700020

- **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, 3.6, 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 to find the critical numbers of functions.
4. Students will be able to determine 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 (PHW) will be assigned; a grade book will be maintained, and other important announcements will be posted. You will also access the WebAssign for Digital Homework (DHW) through this course on eLearning.

Assignments & Academic Calendar

1. **Digital Homework (DHW):**
   - Weekly Digital Homework (DHW) will be made available on WebAssign every Tuesday and will be due at 11:59pm, Thursday of the following week.
   - To access DHW, you must log in to elearning course MATH 2417.701 homepage and click on the link "Access WebAssign".
   - Two lowest DHW scores will be dropped at the end of the semester.
   - DHW is worth 10% toward your final grade.
2. **Quizzes:**
   - Weekly quizzes will be given in the last 25 minutes of your problem section except in the exam weeks.
   - Two lowest quiz scores will be dropped at the end of the semester.
   - Quiz average will count 15% toward your final grade.

3. **Paper Homework (PHW):**

   - A pdf file of weekly Paper Homework (PHW) will be posted each week on eLearning course MATH 2417.701.
   - You must print the pdf, write your solutions on the space provided, scan it, and submit it at the beginning of your problem section.
   - You must show all of your work to earn full credit.
   - Power outage, internet outage, eLearning malfunction, or unexpected circumstances may occur at any time. We suggest you plan to submit each PHW at least 24 hours before it is due so that you will still have 24 hours to find an alternate method submission within the deadline in case of above mentioned circumstances.
   - Only a subset of assigned problems on PHW will be graded.
   - PHW average will count 15% toward your final grade.
   - Two lowest PHW scores will be dropped at the end of the semester. Late submissions will not be accepted.

4. **Mid-Term Exams:**

   - Exam I: Feb. 23, Friday, 8:30pm-9:45pm. Location: SLC 1.102
   - Exam II: April 05, Friday, 8:30pm-9:45pm. Location: SLC 1.102
   - Each midterm exam counts 18% toward your final grade.

5. **Final Exam**

   - Date: TBA Location: TBA.
   - Comprehensive but more emphasis will be on the material covered after Exam II.
   - Final exam will count as 24% toward your final grade.

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

Grading Policy

- – Two midterm exams: 18% each
  – Digital homework (DHW): 10%
  – Paper homework (PHW): 15%
  – Quizzes: 15%
  – Final exam: 24%
- All letter grades will be assigned in accordance with the table of numeric to alphabetic conversions given below.

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

Tentative Schedule for Lecture and Problem Section

Monday	Tuesday	Wednesday	Thursday
Jan 15th **1**	16th **2** Sec 1.2	17th **3** PS 1.2	18th **4** Sec 1.3
22nd **5** PS 1.2, 1.3	23rd **6** Sec 1.4, 1.5	24th **7** PS 1.3, 1.4	25th **8** Sec 1.5, 2.1
29th **9** PS 1.4, 1.5, 2.1 Quiz 1	30th **10** Sec 2.2, 2.3	31st **11** PS 1.5, 2.1, 2.2 Quiz 1	Feb 1st **12** Sec 2.3, 2.4
5th **13** PS 2.2, 2.3, 2.4 Quiz 2	6th **14** Sec 2.5, 2.6	7th **15** PS 2.3, 2.4, 2.5 Quiz 2	8th **16** Sec 2.6, 3.1
12th **17** PS 2.5 2.6, 3.1 Quiz 3	13th **18** Sec 3.2, 3.3	14th **19** PS 2.6, 3.1, 3.2 Quiz 3	15th **20** Sec 3.3, 3.4
19th **21** PS 3.2, 3.3, 3.4	20th **22** Sec 3.5	21st **23** PS 3.3, 3.4, 3.5	22nd **24** Sec 3.7
26th **25** PS 3.5, 3.7 Quiz 4	27th **26** Sec 3.9, 4.1	28th **27** PS 3.7, 3.9, 4.1 Quiz 4	29th **28** Sec 4.2
Mar 4th **29** PS 3.9, 4.1, 4.2 Quiz 5	5th **30** Sec 4.3	6th **31** PS 4.2, 4.3 Quiz 5	7th **32** Sec 4.4
11th **33** Spring Break	12th **34** Spring Break	13th **35** Spring Break	14th **36** Spring Break
18th **37** PS 4.3, 4.4 Quiz 6	19th **38** Sec 4.5, 5.1	20th **39** PS 4.4, 4.5 Quiz 6	21st **40** Sec 5.1, 5.2
25th **41** PS 4.5, 5.1, 5.2 Quiz 7	26th **42** Sec 5.3	27th **43** PS 5.1, 5.2, 5.3 Quiz 7	28th **44** Sec 5.4
Apr 1st **45** PS 5.3, 5.4	2nd **46** Sec 5.5, 5.6	3rd **47** PS 5.4, 5.5	4th **48** Sec 5.6, 5.7
8th **49** PS 5.5, 5.6, 5.7 Quiz 8	9th **50** Sec 5.8, 8.1	10th **51** PS 5.6, 5.7, 5.8 Quiz 8	11th **52** Sec 8.1, 8.2
15th **53** PS 5.8, 8.1, 8.2, Quiz 9	16th **54** Sec 8.3	17th **55** PS 8.1, 8.2, 8.3 Quiz 9	18th **56** Sec 8.4
22nd **57** PS 8.3, 8.4, Quiz 10	23rd **58** 8.5	24th **59** PS 8.4, 8.5, Quiz 10	25th **60** Sec 7.1
29th **61** PS 8.5, 7.1 Quiz 11	30th **62** Sec 7.2	May 1st **63** PS 8.5, 7.1, 7.2 Quiz 11	2nd **64** Review

PHW Schedule:

	Textbook Sections	Posting	Due
PHW 1	1.2, 1.3	01/16	01/28
PHW 2	1.4, 1.5, 2.1	01/28	02/04
PHW 3	2.2, 2.3, 2.4	01/30	02/11
PHW 4	2.5, 2.6, 3.1	02/06	02/18
PHW 5	3.2, 3.3, 3.4, 3.5, 3.7	02/13	03/03
PHW 6	3.9, 4.1,4.2	02/27	03/17
PHW 7	4.3, 4.4	03/05	03/24
PHW 8	4.5, 5.1, 5.2	03/19	03/31
PHW 9	5.3, 5.4, 5.5, 5.6, 5.7	03/26	04/14
PHW 10	5.8, 8.1, 8.2	04/09	04/21
PHW 11	8.3, 8.4	04/16	04/28
PHW 12	8.5, 7.1, 7.2	04/23	Not due

Quiz Schedule:

	Textbook Sections	Date
Quiz 1	1.2, 1.3	PS on 01/29 or 01/31
Quiz 2	1.4, 1.5, 2.1	PS on 02/05 or 02/07
Quiz 3	2.2, 2.3, 2.4	PS on 02/12 or 02/14
Quiz 4	3.2, 3.3, 3.4	PS on 02/26 or 02/28
Quiz 5	3.5, 3.7	PS on 03/04 or 03/06
Quiz 6	3.9, 4.1, 4.2	PS on 03/18 or 03/20
Quiz 7	4.3, 4.4	PS on 03/25 or 03/27
Quiz 8	5.3, 5.4	PS on 04/08 or 04/10
Quiz 9	5.5, 5.6, 5.7	PS on 04/15 or 04/17
Quiz 10	5.8, 8.1, 8.2	PS on 04/22 or 04/24
Quiz 11	8.3, 8.4	PS on 04/29 or 05/01

Exam Schedule:

	Textbook Sections	Date
Exam 1	1.1-3.3	02/23, Friday 8:30-9:45pm
Exam 2	3.4-5.4	04/05, Friday 8:30pm-9:45pm
Final	Comprehensive	TBA

DHW Schedule:

	Textbook Sections	Posting	Due
DHW 1	1.2	01/16	01/26
DHW 2	1.3, 1.4	01/18	02/02
DHW 3	1.5, 2.1, 2.2	01/23	02/09
DHW 4	2.3, 2.4, 2.5	01/30	02/16
DHW 5	2.6, 3.1, 3.2	02/06	02/23
DHW 6	3.3, 3.4, 3.5	02/13	03/01
DHW 7	3.7, 3.9, 4.1	02/22	03/08
DHW 8	4.2, 4.3	02/29	03/22
DHW 9	4.4, 4.5	03/09	03/29
DHW 10	5.1, 5.2, 5.3	03/19	04/05
DHW 11	5.4, 5.5	03/28	04/12
DHW 12	5.6, 5.7, 5.8	04/02	04/19
DHW 13	8.1, 8.2, 8.3	04/09	04/26
DHW 14	8.4, 8.5	04/18	05/03

Important Dates

- **Classes begin:** Tuesday, January 16, 2024.
- **Last Day to Drop a class without a "W" Full Term Session:** Wednesday, Jan 31, 2024.
- **Midterm Exam I**: Friday, Feb. 23, 8:30pm - 9:45pm. Location: SLC 1.102
- **Spring Break**: March 11 - March 17 - No classes.
- **Last Day to Drop a Course**: Wednesday, April 03.
- **Midterm Exam II**: Friday, April 05, 8:30pm - 9:45pm. Location: SLC 1.102
- **Last Day of Classes** - Friday, May 03.
- **Final Exam**: Date: TBA; Location: TBD

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 accommodations for students with properly documented disabilities. However, written notification from the Office of Student AccessAbility (OSA) 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 OSA for a confidential discussion. OSA is located in the Student Administration Building, AD 2.224. They can be reached by phone at 972-883-2098, or by email at: `studentaccess@utdallas.edu`

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**.

Academic Support Resources

1. Peer Tutoring: The Student Success Center offers free help in math, physics and statistics courses to the UT Dallas students currently enrolled in classes. Please visit their website:

   `https://studentsuccess.utdallas.edu/programs/peer-tutoring/`

   for detail information.

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

`http://go.utdallas.edu/academic-support-resources`

MATH 2417 WebAssign Instructions:

To gain access to WebAssign:

1. Log into eLearning, and select the course **MATH 2417.701 Calculus I - S24**
2. Click the link on the eLearning course homepage entitled **"Access WebAssign"**.
3. If you already have a WebAssign account, you will either see the WebAssign course **MATH 2417.701 Calculus I - S24** at the left or you will see a pull-down menu with courses listed; choose

   MATH 2417.701 Calculus I-S24

4. If you do not already have a WebAssign account with the text for this course, you will have 3 options to register.
   - Purchase access online if you do not already have an access code and you want to buy access to the ebook and homework problems without printed text.
   - Enter an access code if you have already purchased an access code.
   - Continue the **trial period** if you want to start using the system before purchasing.

   Once you have registered, you should be taken to the WebAssign course

   MATH 2417.701 Calculus I-S24

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

Section	Days & Time	Location	Teaching Assistant
MATH 2417.301	Wed 8:00am-9:50 am	FN 2.204	Soufiane Abbadi
MATH 2417.302	Mon 10:00am-11:50am	FN 2.204	Rohin Harikumar
MATH 2417.303	Wed 10:00am-11:50am	FN 2.204	Rohin Harikumar
MATH 2417.304	Mon 1:00pm-2:50pm	SCI 3.240	Soham Changani
MATH 2417.305	Mon 4:00pm-5:50pm	SLC 2.203	Soham Changani
MATH 2417.306	Mon 3:00pm-4:50pm	SCI 3.240	Ismail Alabbadi
MATH 2417.307	Wed 10:00am-11:50am	ECSN 2.120	Soufiane Abbadi

TA Office Information:

TA	Office	Office Hour	Email
Ismail Alabbadi	BSB 11.318W	Mon 1-3pm or by appt.	`Ismail.Alabbadi@utdallas.edu`
Rohin Harikumar	FN 3.118C	Mon. 4-5pm or by appt.	`Rohin.Harikumar@utdallas.edu`
Soham Changani	BSB 11.318 P	Wed 1pm-3pm or by appt.	`sxc220235@utdallas.edu`
Soufiane Abbadi	BSB 11.419J	Tue 4:00pm-5:15pm or by appt.	`Soufiane.Abbadi@utdallas.edu`

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.`