MATH 2417 CALCULUS I- Fall 2023

Syllabus

Class Information:

Class Section	Room	Days/ Time	Instructor
MATH 2417.001	SCI 3.250	TR 10:00am-11:15am	Carlos Arreche
MATH 2417.002	SCI 3.230	TR 10:00am-11:15am	Rabin Dahal
MATH 2417.003	SCI 3.230	TR 4:00pm -5:15pm	Tomoki Ohsawa
MATH 2417.004	SCI 2.235	TR 8:30am - 9:45am	Rabin Dahal
MATH 2417.005	SCI 2.235	TR 1:00pm-2:15pm	Rabin Dahal
MATH 2417.006	SCI 2.235	TR 2:30pm -3:45pm	Tomoki Ohsawa

Instructor Information:

Instructor: Carlos Arreche Office: FO 2.408D Email: `Arreche@utdallas.edu` Office Phone: 972-883-6594 Office Hours: TR 2:30pm-3:30pm 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 or by appt.
Instructor: Rabin Dahal Office: FO 2.410B Email: `Rabin.Dahal@utdallas.edu` Office Phone: 972-883-6584 Office Hours: MW 9-10am; 1-2pm or by appt.	

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 or MATH 2417.8XX. 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.

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, integration by parts etc.
7. Students will be able calculate the definite integrals of simple algebraic functions using the limit definition.
8. Students will be able to calculate the definite integrals using the fundamental theorem of calculus.
9. Students will be able to calculate the area of the plane regions between two curves over given interval.
10. Students will be able to calculate the volume of some simple solids that can be obtained by revolving plane surfaces.

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 of the textbook. 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.

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, Tuesday of the following week.
   - Two lowest DHW scores will be dropped at the end of the semester.
   - DHW average is worth 10% toward your final grade.
2. **Quizzes:**
   - Weekly quizzes will be given during the last 20 minutes of your problem sections except on 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.
   - You must print the pdf, write your solutions on the space provided, staple it and turn in at the beginning of your problem section. In case your arrive late to your problem section, the TA still may accept your PHW if (1) it is within the first 10 minutes from the session started and (2) submitted upon your arrival before taking a seat.
   - You must show all of your work to earn full credit.
   - Only a subset of assigned problems on PHW will be graded.
   - PHW average will count as 15% toward your final grade.
   - Two lowest PHW scores will be dropped at the end of the semester.
4. **Mid-Term Exams:**
   - Exam I: Sept. 29, Friday, 8:30 pm-9:45 pm. Location: TBA
   - Exam II: Nov. 3, Friday, 8:30 pm-9:45 pm. Location: TBA
   - 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 tentatively one week before each exam.

Tentative Schedule

Tuesday	Wednesday	Thursday	Friday
Aug 22nd **1** Sec 1.1, 1.2	23rd **2** PS 1.2	24th **3** Sec 1.3, 1.4	25th **4** PS 1.2
29th **5** Sec 1.4, 1.5 DHW 1 Due	30th **6** PS 1.3, 1.4, 1.5 PHW 1 Due Quiz 1	31st **7** Sec 2.1, 2.2	Sep 1st **8** PS 1.3, 1.4, 1.5 PHW 1 Due Quiz 1
5th **9** Sec 2.2, 2.3 DHW 2 Due	6th **10** PS 2.1, 2.2, 2.3 PHW 2 Due Quiz 2	7th **11** Sec 2.4, 2.5	8th **12** PS 2.1 2.2, 2.3 PHW 2 Due Quiz 2 Due
12th **13** Sec 2.5, 2.6 DHW 3 Due	13th **14** PS 2.4, 2.5 2.6 PHW 3 Due Quiz 3	14th **15** Sec 3.1, 3.2	15th **16** PS 2.4 ,2.5 2.6 PHW 3 Quiz 3
19th **17** Sec 3.2, 3.3 DHW 4 Due	20th **18** PS 3.1, 3.2, 3.3 PHW 4 Due Quiz 4	21st **19** Sec 3.4, 3.5	22nd **20** PS 3.1, 3.2, 3.3 PHW 4 Due Quiz 4
26th **21** Sec 3.5, 3.7 DHW 5 Due	27th **22** PS 3.4, 3.5, 3.7 PHW 5 Due	28th **23** Sec 3.9	29th **24** PS 3.4, 3.5, 3.7 PHW 5 Due Exam#1
Oct 3rd **25** Sec 4.1 DHW 6	4th **26** PS 3.9, 4.1 Quiz 5	5th **27** Sec 4.2	6th **28** PS 3.9, 4.1 Quiz 5
10th **29** Sec 4.3 DHW 7 Due	11th **30** PS 4.2, 4.3 PHW 6 Due Quiz 6	12th **31** Sec 4.4, 4.5	13th **32** PS 4.2, 4.3 PHW 6 Due Quiz 6
17th **33** Sec 4.5, 5.1 DHW 8 Due	18th **34** PS 4.4, 4.5, 5.1 PHW 7 Due Quiz 7	19th **35** Sec 5.2, 5.3	20th **36** PS 4.4, 4.5, 5.1 PHW 7 Due Quiz 7
24th **37** Sec 5.3, 5.4 DHW 9 Due	25th **38** PS 5.2, 5.3, 5.4 PHW 8 Due Quiz 8	26th **39** Sec 5.5, 5.6	27th **40** PS 5.2, 5.3, 5.4 PHW 8 Due Quiz 8

Tuesday	Wednesday	Thursday	Friday
31st **41** Sec 5.6, 5.7 DHW 10 Due	Nov 1st **42** PS 5.5, 5.6, 5.7 PHW 9 Due	2nd **43** Sec 5.8	3rd **44** PS 5.5, 5.6, 5.7 PHW 9 Due Exam 2
7th **45** Sec 8.1 DHW 11 Due	8th **46** PS 5.8, 8.1 Quiz 9	9th **47** Sec 8.2	10th **48** PS 5.8, 8.1 Quiz 9
14th **49** Sec 8.3 DHW 12 Due	15th **50** PS 8.2, 8.3 PHW 10 Due Quiz 10	16th **51** Sec 8.4	17th **52** PS 8.2, 8.3 PHW 10 Due Quiz 10
21st **53** Fall Break	22nd **54** Fall Break	23rd **55** Fall Break	24th **56** Fall Break
28th **57** 8.5 DHW 13 Due	29th **58** PS 8.4, 8.5 PHW 11 Due Quiz 11	30th **59** Sec 7.1	Dec 1st **60** PS 8.4, 8.5, 7.1 PHW 11 Due Quiz 11
5th **61** 7.2 DHW 14 Due	6th **62** PS 7.1, 7.2	7th **63** Review	8th **64**

Important Dates

- **Classes begin:** Monday, August 21, 2023.
- **Last Day to Drop a class without a "W" Full Term Session:** Wednesday, Sept. 06, 2023.
- **Midterm Exam I**: Friday, Sept. 29, 8:30 pm-9:45 pm. Location: TBA
- **Midterm Exam II**: Friday, Nov. 03, Friday 8:30 pm-9:45 pm. Location: TBA
- **Last Day of Classes** - Thursday, Dec. 07, 2023.
- **Fall/Thanksgiving Break**: Nov. 20- Nov. 26- No classes.
- **Final Exam**: TBA

Grading Policy

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  - 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.

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 exams. The exams 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 mobile devices to prevent unnecessary distractions to yourself and your classmates.

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 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 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.

2. The Peer-Led Team Learning (PLTL): PLTL program provides an active, engaged learning experience for students enrolled in potentially difficult gateway courses. Students who register with PLTL will meet in small groups once a week and are expected to attend every session. Students who regularly attend sessions typically earn a half to a whole letter grade higher than students who do not participate in the PLTL program.

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

3. Supplemental Instruction (SI): SI provides peer-facilitated weekly study sessions for students taking historically difficult courses. SI sessions encourage active, collaborative learning based on critical thinking and transferable study skills. SI Leaders attend lectures and take notes, just like the enrolled students. Students should check the SSC website for supported subjects and session times.

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`

Problem Sections and Teaching Assistant Information: Students are required to enroll in and attend one of the problem section. The problem sections and Teaching Assistant information is summarized in the tables below. Please feel free to ask for an appointment if your TA's office hours are not convenient for you.

Section	Days &Time	Location	TA
MATH 2417.301	Fri 8:00am-9:50 am	SCI 3.270	Ismail Alabbadi
MATH 2417.302	Fri 10:00am-11:50 am	SCI 3.270	Ismail Alabbadi
MATH 2417.303	Fri 1:00pm-2:50pm	SCI 3.270	Jing Guo
MATH 2417.304	Fri 3:00pm-4:50pm	SCI 3.270	Rachindra Kudasinghe
MATH 2417.305	Fri 8:00am-9:50am	SCI 3.260	Safi Ur Rahman Zafar
MATH 2417.306	Fri 10:00pm-11:50pm	SCI 3.260	Jing Guo
MATH 2417.307	Fri 1:00pm-2:50pm	SCI 3.260	Soham Changani
MATH 2417.309	Fri 10:00am-11:50am	SCI 2.215	Rachindra Kudasinghe
MATH 2417.310	Fri 10:00am-11:50am	SCI 3.240	Safi Ur Rahman Zafar
MATH 2417.311	Fri 1:00pm-2:50pm	SCI 3.240	Ngoc Hoang
MATH 2417.312	Fri 3:00pm-4:50pm	SCI 3.240	Ngoc Hoang
MATH 2417.313	Fri 3:00pm-4:50pm	FN 2.204	Sushmita Sinha Roy
MATH 2417.314	Fri 8:00am-9:50am	SCI 3.240	Ibrahim Sajal
MATH 2417.801	Wed 5:00pm-6:50pm	SCI 3.270	Ibrahim Sajal
MATH 2417.802	Wed 5:00pm-6:50pm	SCI 3.260	Soham Changani

TA Office Information:

TA	Office	Office Hour	Email
Sushmita Sinha Roy	FO 3.608	Fri 1:45-2:45pm	sxs170121@UTDallas.edu
Ibrahim Sajal	BE 3.302	Fri 10:30-11:30am	ixs180023@UTDallas.edu
Soham Changani	BSB 11.318P	Wed. 2:30-4:30pm	sxc220235@UTDallas.edu
Ngoc Hoang	FO 1.204O	Fri. 9-11am	Ngoc.Hoang2@UTDallas.edu
Safi Ur Rahman Zafar	BE 3.302a	Fri 12:30-1:30pm	sxz220031@utdallas.edu
Rachindra Kudasinghe	FO 1.204M	Fri 1:30-2:30pm	rvk220002@utdallas.edu
Jing Guo	BSB 11.318N	Fri 9-10am, 12-1pm	Jing.Guo@utdallas.edu
Ismail Alabbadi	BSB 11.318W	Tue 3-4pm	Ismail.Alabbadi@utdallas.edu

MATH 2417 WebAssign Instructions:

To gain access to WebAssign:

1. Log into eLearning, and select the course

   MATH 2417.701 Calculus I - F23

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 - F23** at the left or you will see a pull-down menu with courses listed; choose

   MATH 2417.701 Calculus I-F23

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. The deadline is given in red.

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

MATH 2417.701 Calculus I-F23

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.`