King Fahd University of Petroleum and Minerals

Department of Mathematics

Math 101 Recitation Lab Syllabus, Term 232 (2024)

Coordinator: Yaqoub Shehadeh

Course Code and Title: Math 101, Calculus I

Textbook: Larson, R. & Edwards, B., Calculus: Early Transcendental Functions, Metric Version, 7th edition, Cengage Learning, Inc., 2019.

Recitation Manual: Math 101 Recitation Manual for MATLAB, Department of Mathematics, KFUPM, 2023.

Recitation Lab Objective: The objective of the recitation lab is to
1. Acquaint students with MATLB
2. Foster the development of solution skills in Calculus I using MATLAB

Grading Policy:

	Date	Time	Place	Material	Percentage
Midterm (8 MCQ)	TBA	TBA	TBA	Lab 1 to Lab 7	8 points
Final Exam (12 MCQ)	TBA	TBA	TBA	Comprehensive	12 points
					20 points

Other Exam Issues:

➢ No student will be allowed to take the exam if he/she does not bring his/her KFUPM ID, or National/Iqama ID, or Driver's License with him/her to the exam hall.
➢ Students are not allowed to have their mobiles, smart watches, or any electronic device in the exam hall. A violation of this will be considered an attempt of cheating.

Missing an Exam: In case a student misses an exam (Midterm or the Final Exam) for a legitimate reason (such as medical emergencies), he/she must bring an official excuse from Students Affairs. Otherwise, he/she will get a score of zero in the missed exam.

Attendance: Students are expected to attend all lab classes.

If a student misses a lab, he/she is responsible for any announcement made in that lab.

The Usage of Mobiles in Lab: Students are not allowed to use mobiles for any purpose during lab time. Students who want to use electronic devices to take notes must take permission from their instructor. Violations of these rules will result in a penalty decided by the instructor.

Academic Integrity: All KFUPM policies regarding ethics apply to this course. See the Undergraduate Bulletin in the Registrar's website.

Coverage Plan

Week	Date (2024)	Sec	Title (24 sections)
1	Jan. 14-18		Lab#1 Introduction to MATLAB
2	Jan. 21-25,		Lab# 2 & 3 The Tangent Line Problem; Limits and One Side Limit
3	Jan. 28-Feb. 1		Lab# 2 & 3 The Tangent Line Problem; Limits and One Side Limit
4	Feb. 4-8,		Lab# 4 Infinite Limits, and Limits at Infinity
5	Feb.11-15		Lab#5 The Derivative and the Tangent Line Problem
6	Feb. 18-21		Lab #6 Product and Quotient Rules and Higher-Order Derivatives
<td colspan="3" align="center">**Saudi Founding Day (February 22, 2024)**</td>			
7	Feb. 25-29		Lab#7 The Chain Rule
8	March. 2-7		Midterm Exam
9	March. 10-14		Lab#8 Derivatives of Inverse Functions; Related Rates and Newton's method
10	March. 17-21		Lab#9 Extrema on an Interval; Rolle's Theorem and the Mean Value Theorem
11	March. 24-28		Lab#10 Increasing and Decreasing and the first Derivative Test
<td colspan="3" align="center">19 Ramadan - 9 Shawwal Eid Al-Fitr Holidays March 29, 2024-April 18, 2024</td>			
12	April. 21-25		Lab#11 Concavity and the Second Derivative Test, limit at Infinity
13	April. 28-May 2		Lab#12 Optimization Problems; Linear Approximations and Differentials
14	May 5- 9		Lab#13 Antiderivatives and Indefinite Integration
15	May 12- 16		Lab Final Exam