King Fahd University of Petroleum & Minerals

Department of Mathematics

Math 101 Lab Syllabus, Semester 243(2025)

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.

Lab Manual: Math 101 Lab Manual, Department of Mathematics, KFUPM, 2025.

Lab Objective:

1. Familiarize students with MATLAB within the context of differential Calculus.
2. Apply techniques of differential Calculus in real-life projects.

Grading Policy:

	Date	**Time**	**Place**	**Material**	**Points**
Midterm (MCQ)	**TBA**	TBA	TBA	Lab#1 to Lab#6	10 points
Final Exam (MCQ)	**TBA**	TBA	TBA	All Labs	20 points
					30 points

Other Exam Issues:

- **Identification:** Students must present KFUPM, National/Iqama ID, or Driver's License Card for exam hall entry. No student will be allowed to take the exam without these forms of identification.
- **Exam Hall Protocol:** No mobile phones, smartwatches, or any electronic devices are allowed. Violations will be considered attempted cheating.
- **Seating Arrangement**: Students must occupy assigned seats only during exams. Any violation of this will be considered an attempt at cheating.

Missing an Exam: In case a student misses an 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. A makeup exam will be decided later.

Attendance: Students must strictly adhere to the university's attendance policy. If a student misses a lab, he/she is responsible for any announcement made in that lab.

The Usage of Smart Phones in Lab: Students are not allowed to use smart phones for any purpose during the lab time. Students who wish to use electronic devices to take notes must seek permission from the 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.

Coverage Plan

Week	Lab #	Topics
1	1&2	Introduction
		Matrices and Arrays
2	3&4	Visualization
		Limits
3	5&6	Loops and Conditional Statements
		Differentiation
4	7	Project I: Building a Better Roller Coaster
	Midterm Exam (Lab#1-Lab#6)	
5	8&9	Project I: Continued
		Project I: Continued
6	10&11	Project I: Continued
		Project II: Vertical Distance Traversed by a Zipline Rider
7	12&13	Project II: Continued
		Project II: Continued
8	Final Exam (All Labs)	