King Fahd University of Petroleum and Minerals

Department of Mathematics

Math 102 Recitation Lab Syllabus, Term 233 (2024)

Course Code and Title: Math 102, Calculus II

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

Recitation Manual: Math 102 Recitation Manual for Python, Department of Mathematics, KFUPM, 2023.

Recitation Lab. Objectives:

- Acquaint students with Python.
- Foster the development of solution skills in Calculus II using Python.

Grading Policy:

	Date	**Time**	**Place**	**Material**	**Percentage**
Midterm (7 MCQ)				Lab. 1 to Lab 7.	7 points
Final Exam (8 MCQ)				Comprehensive	8points
					15 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 recitation lab classes.

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

The Usage of Mobiles in Lab: Students are not allowed to use mobiles for any purpose during the recitation 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 (2023)	Section	Title
1	Jun.23-27	5.2 & 5.3 5.1 & 5.4	Introduction + Areas and Distances Antiderivatives+ The Fundamental Theorem of calculus
2	Jun.30- Jul.4	5.5 5.7, 5.8 & 5.9	The Substitution Rule Natural Logarithmic+ Inverse Trigonometric+ Hyperbolic Functions
3	Jul.7-11	7.1 7.2 & 7.3	Areas Between Curves Volumes by Disks + Washers
4	Jul.14-18	7.4 8.2 & 8.3	Arc Length and Surfaces of Revolution Integration by parts + Trigonometric Integrals
5	Jul.21-25	8.4 & 8.5 8.7 & 8.8	Trigonometric Substitution + Partial Fractions Rational Functions of Sine and Cosine + Improper Integrals
6	Jul.28-Aug.1	9.1 & 9.2 9.3 & 9.4	Sequences + Series and Convergence Integral Test + *p*-series and comparison of series
7	Aug.4-8	9.5 & 9.6	Alternating Series + Root Tests
8	Aug.11-12	9.8 & 9.10	Power Series + Taylor and Maclaurin Series