King Fahd University of Petroleum and Minerals
Department of Mathematics & Statistics

Math 201 – Syllabus

2013-2014 (131)
Coordinator: Dr. Assane Lo

Title: Calculus III
Credit: 3-0-3
Textbook: Thomas' Calculus (Early Transcendentals), by Thomas, Weir and Hass, 12th Edition, Pearson, 2010
Description: These courses are designed as an introduction to the fundamental concepts of calculus and analytic geometry. The concepts studied in Math 201 include solid analytic geometry, vectors and surfaces, differentiation of functions of several variables and multiple integrals.

Prerequisites: The students must review the material of MATH 001/002/101/102 which is required in the contents of MATH 201

Grading Policy:

1. **Exam I**: 25% (100 points), Date: Saturday, Oct. 05, 2013. [common written exam.] Material: [11.1 – 12.4]. Place: Building 54, Time: 09:00-11:00 AM.
2. **Exam II**: 25% (100 points), Date: Monday, Nov. 25, 2013. [common written exam.] Material: [12.5 – 14.8]. Place: Building 54, Time: 08:00-11:00 PM.

3. **Class Work:**	**i) Online Homework:** The web address for online homework is **kfupm.mylabsplus.com The online homework will count for 5%.**
	ii) Class Activities: They are based on quizzes, class tests, or other class activities determined by the instructor. Any quiz or test under class activities should be of a written type and not of a multiple choice type. **This will count for 10%. The average x (out of 40) of class activities of the sections taught by the same instructor should be in the interval [24, 30].**

4. **Final Exam**: 35% (140 points), [comprehensive common exam.] Date: To be announced (final exam week)

Exam Questions: The questions of the common exams are based on the examples, homework problems, recitation problems and the exercises of the textbook.

Missing Exam I or Exam II: No makeup exam will be given under any circumstances. When students misses Exam I or Exam II for a legitimate reason (such as medical emergencies), his grade for this exam will be determined based on the Department policy. Further, the student must provide an official excuse within one week of the missed exam.

Attendance: Attendance is a University Requirement (see p. 38 of the Undergraduate Bulletin 2006-2009.) A DN grade will be awarded to any student who accumulates 9 unexcused absences.
Academic Integrity: All KFUPM policies regarding ethics apply to this course. The students are advised to discuss their grievances/problems with course instructor in a respectful manner.
The course instructor has the right to report a student's misconduct in the class, instructor's office or at the exam site to the chairman's office. The complaint will be forwarded to the Dean of Sciences & the Dean, Student Affairs for appropriate investigation.

Week	Date	Sec.	Topics
1	Sep. 01-05	11.1 11.2	Curves Defined by Parametric Equations Calculus with Parametric Curves
2	Sep. 08-12	11.3 11.4	Polar Coordinates Graphing in Polar Coordinates
3	Sep. 15-19	11.5 12.1 12.2	Areas and Lengths in Polar Coordinates Three-Dimensional Coordinate Systems Vectors
Monday, Sep. 23, 2013: National Day (Holiday)			
4	Sep. 22-26	12.3 12.4 12.5	The Dot Product The Cross Product Equations of Lines and Planes
5	Sep. 29-Oct 03	12.5 12.6	Equations of Lines and Planes (Continued) Cylinders and Quadric Surfaces Review for Exam I
Exam I: Sunday, Oct. 05, 2013; Material: [11.1 – 12.4]			
6	Oct. 6-10	14.1 14.2	Functions of Several Variables Limits and Continuity of Functions of Several Variables
Id al-Adha Vacation: Oct. 10-Oct.20, 2013			
7	Oct. 21-24	14.3 14.4	Partial Derivatives The Chain Rule
8	Oct. 27-31	14.4 14.5	Continued Directional Derivatives and the Gradient Vector
9	Nov. 03-07	14.5 14.6	Continued Tangent Planes, Differential & Linear Approximation
10	Nov. 10-14	14.7 14.8	Extreme Values and Saddle Points Lagrange Multipliers
11	Nov. 17-21	14.8	Continued (End of Exam II Materials) Review for Exam II
Exam II: Monday, Nov. 25, 2013; Material: [12.5 – 14.8]			
12	Nov. 24-28	15.1 15.2	Double and Iterated Integrals over Rectangles Double Integrals over General Regions
13	Dec. 01-05	15.3 15.4	Area by Double Integration Double Integrals in Polar Coordinates
14	Dec. 08-12	15.5 15.7	Triple Integrals in Rectangular Coordinates Triple Integrals in Cylindrical and Spherical Coordinates
15	Dec. 15-19	15.7	Continued
16	Dec. 22-24		Review and Catch-up
Final Exam: To be announced (exam week)			