Prince Sultan University Department of Mathematical Science

SYLLABUS MATH 211 (131)

Mathematics Department Website: www.psu.edu.sa/math



Textbook: Calculus for Business, Economics, and the Social & life Sciences By: Laurence D. Hoffmann and Gerald Bradley; 10th Edition.

Week#	Date	Section	Торіс
1	September 01 – 05	1.1	Functions
		1.2	The Graph of a Function
2	September 08 – 12	1.3	Linear Functions
		1.4	Functional Models
3	September 15 – 19	1.5	Limits
		1.6	One-Sided Limits and Continuity
4	September 22 – 26	2.1	The Derivative
		2.2	Techniques of Differentiation
5	Sept. 29 – Oct. 03	2.3	Product and Quotient Rules; Higher-Order Derivatives
		2.4	The Chain Rule
6	October 06 – 10	2.5	Marginal Analysis & Approximations Using Increments
		2.6	Implicit Differentiation and Related Rates
First Major Exam: Wed. October 9 th , 2013 at 12:00 noon to 1:00 pm from section 1.1 to 2.6			
Eid Al Adha Vacation Friday - October 11 Sunday - October 20			
7	October 21 – 24	3.1	Increasing and Decreasing Functions; Relative Extrema
		3.2	Concavity and Points of Inflection
8	October 27 – 31	3.3	Curve Sketching
31 October 2012. Last day for dropping one or more courses with grade "W"			
9	November 03 – 07	3.4	Optimization
		3.5	Additional Optimization Problems
10	November 10 – 14	4.1	Exponential Functions
		4.2	Logarithmic Functions
11	November 17 – 21	4.3	Differ. of Logarithmic & Exponential Functions
		5.1	Anti-differentiation: The Indefinite Integral
12	November 24 – 28	5.2	Integration by Substitution
		6.1	Integration by Parts
Second Major Exam: Wed. April 15 th , 2013 at 12:00 noon to 1:00 pm from section 3.1 t			
13	December 01 – 05	5.3	The Definite Integral & The Fundam. Theo. of Calculus
		5.4	Area between curves & Average Value
14	December 08 – 12	5.5	Applications for Business and Economics
		7.1	Functions of Several Variables
15	December 15 – 19	7.1	Functions of Several Variables
		7.2	Partial Derivatives
16	December 22 – 23 December 24 – 26		Revision
			Final Exam Preparation Period

Class attendance:

- Students are required to attend <u>all</u> classes starting from the <u>first day</u> of the semester. Attendance will be taken at the start of the lecture. If the student enters the classroom after the attendance was taken and within **5 minutes**, he will be marked **late**. 3 lates will be counted as one absence. If the student enters the classroom **after 5 minutes**, he will be marked **absent**.
- No excuses for missing classes, including medical reasons, are accepted. Any excuse, legitimate or not, will be counted against the student's limit for DN (13 Absences).
- "DN Grade" will be issued to a student who misses 13 classes. This means he cannot enter any more classes or exams. (1st warning: 5 absences ; 2nd warning: 9 absences)
- In case a student **misses** a class, he must contact any one of his classmates to get all information and topics covered of classes he **missed**.
- 5 points will be assigned to the attendance. **One point will be deducted** from the student's total grade for every one absent.

Class work (Quizzes, Online Homework and Class Participation)

- The class work grade is expected to reflect the performance of the student throughout the semester and is based on at least 10 quizzes, class participation, and attendance.
- <u>Quizzes</u> will be given at the beginning of some lessons. The quiz covers the materials discussed during the previous lectures you are given along with the syllabus. (Remember that if you are absent or late for the lesson, then you will get a zero for the quiz). (There is no make up for the quizzes).
- *Class Participation*, behavior, and attitude in the class is also part of your class work assessment.

Exams:

- Two Class Majors will be given during the term. These exams count for 40% of your total grade.
- A Final exam given at the end of the term covering all the subjects taken during the term and is worth 40%.

Math Department Website:

• A student can visit "The Math Department Page" through the Mathematical Sciences Website (www.psu.edu.sa/math) where he can find several helping information such as the syllabi for all math courses, useful links to help the student in his study, and a huge collection of the previous majors and final exams that were administered by the Department through the previous semesters.

Calculators:

Only Scientific Calculators are allowed in this course. (No Graphing Calculators)

Office Hours:

Check the table posted on your instructor's door for the office hours incase you need assistance or you need to inquire about matters concerning your marks, absence, and so on.

Grading Policy:

Two Majors: 40%; Quizzes & Homeworks: 10%; Attendance 5%; Participation 5%; Final: 40%

Tips on how to enhance your problem-solving abilities:

- Attend all classes.
- Do all the homework assignments on time. It is impossible to really understand math without solving problems.
- You are urged to practice (but not memorize) more problems than the ones assigned.
- You should always try to solve a problem on your own before reading the solution or asking for help.
- If you find it difficult to handle a certain type of problems, you should try more problems of that type.
- You are encouraged to solve some of the review problems at the end of each chapter.
- The practice you get doing homework and reviewing the class lectures will make exam problems easier and quicker to solve.
- Make good use of the office hours of your instructor.