Prince Sultan University
Department of Mathematical Sciences
SYLLABUS
Second Semester – 2010 (092)

Course: MATH 111   **Title:** Calculus I   **Instructor:** Dr. Jehad Alzabut

Textbook   :   Calculus I, 8th Edition: Anton, Bivens, Davis.

Week	Date	Section	Topic
1	Feb 20 — Feb 24	1.1	Functions
		1.3	New functions from old
2	Feb 27 — March 03	1.3	New functions from old
		1.4	Families of functions
3	March 06 — March 10	1.4	Families of functions
		2.1	Limits
4	March 13 — March 17	2.2	Computing Limits
		2.3	Limits at infinity (End Behavior)
5	March 20 — March 24	2.5	Continuity
		2.6	Continuity of trigonometric functions
6	March 27 — March 31	3.1	Slopes and rates
Exam I (1.1 — 2.6): March 27, 2010			
7	April 03 — April 07	3.2	The derivative
		3.3	Techniques of differentiation
8	April 10 — April 14	3.3	Techniques of differentiation
		3.4	The product and quotient rule
Midterm Vacation: April 17, 2010 — April 21, 2010			
9	April 24 — April 28	3.5	Derivatives of trigonometric functions
		3.6	The chain rule
10	May 01 — May 05	3.7	Implicit differentiation
		7.1	Exponential and logarithmic functions
Last Day for Dropping Courses with Grade "W": May 5, 2010			
11	May 08 — May 12	7.2	Derivative of exponential functions
		7.3	Derivative of logarithmic functions
12	May 15 — May 19	7.7	Derivatives of inverse trigonometric functions
		3.8	Related rates
Exam II (3.1 — 3.8, 7.1 — 7.7): May 19, 2010			
13	May 22 — May 26	3.9	Differentials
		4.1	Increase, decrease and concavity
14	May 29 — June 02	4.2	Relative extrema and graphing polynomials
		4.3	Rational functions
15	June 05 — June 09	4.5	Applied maximum and minimum problems
		4.8	Rectilinear motion
Final Exam: June 12 — June 22			

Grading Policy:

Exam I: 22.5%, **Exam II**: 22.5%.
Quizes, homeworks and attendance: 15%.
Final Exam: 40%.