DEPARTMENT OF SCIENCE
MA 1130 – ELEMENTARY CALCULUS I
Fall 2010

Title : Elementary Calculus I 3(3 – 2 – 0) UT 75 Hours
Prerequisite: Pure Mathematics 30
Transfers to U of A as Math 113. See Alberta transfer guide for transfer to other institutions.
For a detailed course description see page 208 of college calendar.

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Schedule :

A2	J202	--W-F	13:00	-14:20
AS1	J202	---R	14:30	-16:20
AS2	J202	-T	14:30	-16:20
B2	J228	--W-F	13:00	-14:20
BS1	J228	-T	14:30	-16:20
BS2	J228	---R	14:30	-16:20
C2	J226	-T-R	08:30	-09:50
CS1	J202	--W	14:30	-16:20
CS2	J202	M	14:30	-16:20
D2	J228	-T-R	08:30	-09:50
DS1	J226	--W	14:30	-16:20

Textbook : Single Variable Calculus; James Stewart 6th Ed.
Course will cover material from Chapters 1 through Section 6.1

Grading :

Assignments	10%	
Quizzes	15 %	
Mid-term Exam	25 %	(week of October 18)
Final Exam	50 %	TBA

For conversion from percentage to letter grade, refer to the guideline given in the college calendar on page 43.

Calculators: No calculators allowed in Quizzes and Exams

Topics Covered:

Functions and their graphs

Limit of a function, Calculating Limits using the Limit Laws, Limits of Trigonometric Functions

Continuity

Derivatives, Differentiation Formulas, Derivatives of Trigonometric Functions, Chain Rule, Implicit Differentiation, Higher Derivatives, Related Rates, Differentials, Linear and Quadratic Method

Maximum and Minimum Values, Mean Value Theorem, Increasing and Decreasing Functions, First Derivative Test, Concavity and Points of Inflection, Second Derivative Test, Limits at Infinity, Horizontal and Vertical Asymptotes, Curve Sketching, Applied Maximum and Minimum Problems, Anti-derivatives

Sigma Notation, Area, Definite Integral, Fundamental Theorem of Calculus, Substitution Rule, Areas between Curves.

STATEMENT ON PLAGIARISM AND CHEATING:

Please refer to pages 49-50 of the College calendar regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.