DEPARTMENT OF SCIENCE

COURSE OUTLINE – MA1000 ENGINEERING CALCULUS I
FALL 2014

INSTRUCTOR:	Dallas Sawtell	**PHONE:**	539-2989
OFFICE:	C204	**E-MAIL:**	dsawtell@gprc.ab.ca

OFFICE HOURS: Mondays 12-1 and any other times I'm in my office

PREREQUISITE(S): Math 30-1 and Math 31 or equivalent

REQUIRED TEXTS: Calculus Early Transcendentals by James Stewart

CALENDAR DESCRIPTION: Polar coordinates, analytic geometry, functions, transcendental functions, limits, continuity, derivatives and applications, Taylor expansion, integration and applications.

CREDIT/CONTACT HOURS: (3-2-0) 4 credits

DELIVERY MODE(S): Lecture:	A2	M W F	9:30-10:20	J228
Seminar:	AS1	T	2:30-4:20	J227
	AS2	R	2:30-4:20	J228

COURSE SCHEDULE:

2.1-2.8	Limits, Continuity and The Definition of a Derivative
3.1-3.6,3.9-3.11	Derviatives of Polynomials, Exponentials, Logarithms, Trigonometric Functions, Inverse Trigonometric Functions, Hyperbolic and Inverse Hyperbolic Functions, the Product and Quotient Rule, Chain Rule, Related Rates and Linear Approximation, Differentials
4.1-4.5,4.7,4.9	Maximum and Minimums, Mean Value Theorem, Rolle's Theorem, Increase, Decrease, Graphing, L'Hospital's Rule, Optimization Problems, Antiderivatives
5.1-5.5	Areas and Distances, The Definite and Indefinite Integral, The Fundamental Theorem of Calculus, The Substitution Rule
6.1	Area Between Curves
11.10	Taylor and Maclaurin Series
14.3	Partial Derivatives

TRANSFERABILITY: See www.gprc.ab.ca and www.acat.gov.ab.ca

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions and may not meet the prerequisite requirements for other math courses. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	**4-point Equivalent**	**Percentage Guidelines**	**Designation**
A^+	**4.0**	**95 – 100**	**EXCELLENT**
A	**4.0**	**90 – 94**	
A^-	**3.7**	**85 – 89**	**FIRST CLASS STANDING**
B^+	**3.3**	**80 – 84**	
B	**3.0**	**75 – 79**	**GOOD**
B^-	**2.7**	**70 – 74**	
C^+	**2.3**	**66 – 69**	**SATISFACTORY**
C	**2.0**	**62 – 65**	
C^-	**1.7**	**58 – 61**	
D^+	**1.3**	**55 – 57**	**MINIMAL PASS**
D	**1.0**	**50 – 54**	
F	**0.0**	**0 – 49**	**FAIL**
WF	**0.0**	**0**	**FAIL, withdrawal after the deadline**

EVALUATIONS: Worksheets 10%
Quizzes 15% Every other Monday, starting Sept. 15
Midterm 25% TBA in the week of Oct. 20-24
Final Exam 50% Dec. 10-19 inclusive including Saturdays and evenings

STUDENT RESPONSIBILITIES: Students are responsible for all lecture material, seminars and readings. Students are expected to practice the material by doing problems from the textbook. No late worksheets will be accepted. Quizzes cannot be made up if missed. If the midterm is missed due to illness the weight will be put on the final (ie. the final will be worth 75%). If the final is missed due to illness it will be deferred (see calendar for information). A doctor's note and a phone message or email will be required in both cases.
Cellphone use is not permitted in the classroom. This includes texting. Please turn off and put away your cellphone during class. You may be asked to leave the classroom if using a cellphone.

STATEMENT ON PLAGIARISM AND CHEATING: Refer to the Student Conduct section of the College Admission Guide at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/**
**Note: all Academic and Administrative policies are available on the same page.