GPRC

DEPARTMENT OF SCIENCE

COURSE OUTLINE – MA1000 CALCULUS I
FALL 2017

INSTRUCTOR:	Thomas Kaip	**PHONE:**	539-2963
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OFFICE HOURS: TBA

DELIVERY MODE(S):
Lecture: A2   M W F   9:30-10:20   J228
Seminar: AS1   T   4:30-6:20   J228
               AS2   R   4:30-6:20   J228

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

REQUIRED TEXTS: Calculus Early Transcendentals by James Stewart any edition

CALENDAR DESCRIPTION: This course covers coordinates, polar coordinates, analytic geometry, functions, transcendental functions, limits, continuity, derivatives and applications, Taylor expansion, integration and applications.

CREDIT AND HOURS: 4 (3-2-0)

LEARNING OUTCOMES:

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'Hopital'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, 11,11   Taylor and Maclaurin Series

14.3   Partial Derivatives

COURSE OBJECTIVES: A successful student will be able to adequately demonstrate an understanding of the calculus concepts stated in the outcomes.

COURSE SCHEDULE: 2.1-2.8, 3.1-3.6, 14.3, 3.9-3.10, 11.10, 11.11, 3.11, 4.1-4.5, 4.7, 4.9, 5.1-5.5, 6.1

EVALUATIONS: Assignments   10%
           Quizzes   15
           Midterm   25%
           Final Exam   50%
No calculators or formula sheets are allowed on quizzes, midterm or the final exam

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	**4-point Equivalent**	**Percentage Guidelines**	**Designation**
A⁺	4.0	90 – 100	**EXCELLENT**
A	4.0	85 – 89	
A⁻	3.7	80 – 84	**FIRST CLASS STANDING**
B⁺	3.3	77 – 79	
B	3.0	73 – 76	**GOOD**
B⁻	2.7	70 – 72	
C⁺	2.3	67 – 69	**SATISFACTORY**
C	2.0	63 – 66	
C⁻	1.7	60 – 62	
D⁺	1.3	55 – 59	**MINIMAL PASS**
D	1.0	50 – 54	
F	0.0	0 – 49	**FAIL**
WF	0.0	0	**FAIL, withdrawal after the deadline**

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 all 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.

No recording of any kind is allowed in the class, seminar or during consultation with the instructor.

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 http://www.gprc.ab.ca/about/administration/policies/

**Note: all Academic and Administrative policies are available on the same page.

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