# GRANDE PRAIRIE REGIONAL COLLEGE <br> MATH 1000 <br> FALL 2010 

Title: $\quad$ Engineering Calculus I 4(3-2-0)

Transfer: UA*, UC*, UL*, AU*, AF*, CU, CUC, KUC (from GPRC Calendar)
*means important transfer information. Consult the Alberta Transfer
Guide. www.acat.gov.ab.ca

Prerequisite: Pure Math 30, Math 31

| Schedule: | Lecture | M | W |  | $10: 00-11: 30$ | J228 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Seminar S1 |  |  | F | $10: 00-12: 00$ | J228 |
|  | Seminar S2 |  |  | W |  |  |
|  | $2: 30-4: 30$ | J228 |  |  |  |  |

Instructor: Dallas Sawtell
Office C204
Phone 539-2989
e-mail dsawtell@gprc.ab.ca

Textbooks: James Stewart's Calculus Early Transcendentals

Grading: Worksheets $10 \%$
Quizzes 15\%
Midterm 25\%
Final Exam 50\%

Seminars/worksheets: A worksheet will be given out that must be handed in by the end of the seminar for marking.

Quizzes: Quizzes will be held every other Monday starting on Sept 13. Quizzes can not be made up if missed.

Midterm: If the midterm is missed with a good reason, the weight will be put on the final (ie. the final will be worth $75 \%$ ). A doctors note will be required. The midterm will be during class on Wed, Oct27.

Final: $\quad$ Finals are held Dec. 9 to 18 inclusive (includes Saturdays and evenings). Writing finals early is not permitted.

Calculators: Use of calculators is not permitted on the quizzes or exams.

Learning Support Centre: The learning support centre is located in the library.

Content:Ch 2-Limits, precise definition of a limit, continuity, asymptotes, derivatives
Ch3-Derivatives or polynomial and exponential functions, product and quotient rules, chain rule, implicit differentiation, derivatives of logarithmic functions, exponential growth and decay, related rates, linear approximations and differentials, hyperbolic functions
Ch 4-Maximum and Minimum values, the Mean Value Theorem, Rolle's Theorem, concavity, indeterminate forms and L'Hospital's Rule, curves sketching, optimization problems, antiderivatives
Ch 5- Areas, the definite integral, the Fundamental Theorem of Calculus, indefinite integrals, substitution rule
6.1- Areas between curves

Grading Scheme:

| A+ | 4.0 | $95-100 \%$ |  |
| :--- | :--- | :--- | :--- |
| A | 4.0 | $90-94 \%$ | Excellent |
| A- | 3.7 | $85-89 \%$ |  |
|  |  |  |  |
| B+ | 3.3 | $80-84 \%$ |  |
| B | 3.0 | $75-79 \%$ | Good |
| B- | 2.7 | $70-74 \%$ |  |
|  |  |  |  |
| C+ | 2.3 | $66-69 \%$ |  |
| C | 2.0 | $62-65 \%$ | Satisfactory |
| C- | 1.7 | $58-61 \%$ |  |
|  |  |  |  |
| D+ | 1.3 | $55-57 \%$ | Minimal Pass |
| D | 1.0 | $50-54 \%$ |  |
|  |  |  |  |
| F | 0.0 | $0-49 \%$ | Pass |

Note: a grade of $\mathbf{D}$ or $\mathbf{D +}$ will NOT meet the prerequisite requirements for other math courses and will not be accepted by other universities.

Plagarism: See Calendar

