MATH 2311: Intermediate Calculus II   **Winter 2008**

Instructor	James Muir, MN 101, 420-5788 (office phone), jamuir at cs dot smu dot ca
lectures	Section A, 8:30am–9:45am Tuesday & Thursday in LA 283
	Section B, 11:30am–12:45pm Monday & Wednesday in MN 223
recitations	Section RA, 10:00am–11:15am Tuesday in ME 111
	Section RB, 10:00am–11:15am Wednesday in ME 105
	Section RC, 10:00am–11:15am Thursday in ME 111
office hours	Wednesday & Thursday 1pm-4pm

Course web page. http://cs.smu.ca/~jamuir/math2311/ Note that parts of the course web page require a username and password.   username: _____   password: _____

Course description (from the Academic Calendar).   Limits and continuity of functions of several variables, partial derivatives, and the chain rule, directional derivatives and gradient vector, the total differential, tangent planes and normals to a surface, higher order partial derivatives, extrema of functions of two variables. The double integrals, iterated integrals, double integrals in polar coordinates, applications of double integrals, the triple integral, triple integrals in cylindrical and spherical coordinates, applications of triple integrals, vector fields, divergence and curl of vector fields, line integrals, path-independent line integrals. Green's theorem, Stokes' theorem, and the divergence theorem.

Prerequisites: MATH 2310 (Intermediate Cal I), or both MATH 1212 (Cal II for Engineers) and MATH 2301 (Linear Algebra for Engineers).

Text.   The required text is *Calculus: Early Transcendentals, Fifth Edition* by James Stewart (please note that we will be using the **Fifth Edition**).

Syllabus.   We will cover a selection of topics from chapters 12, 13, 14, 15 and 16.

Evaluation.   Your final mark will be computed using the following weights:

    20% Quizzes (a total of ten, held during recitations)
    30% Midterm (one)
    50% Final Exam (to be scheduled by the University)

Conversion to letter grades will be done according to the table listed on page 36 of the 2007-2008 Academic Calendar.

Policies.

1. The course web page (listed above) is the primary source for announcements and materials related to this course. Please check it regularly. In the event that a class or recitation must be cancelled, an annoucement of this will be posted in advance on the course web page.

2. Students are expected to be familiar with the university policy on *Academic Integrity and Student Responsibility* found in the 2007-2008 Academic Calendar (pp. 22–30). There is to be no talking or joint work during quizzes, midterms or exams, unless such activity is explicitly allowed by the instructor. Copying work from another student is always prohibited and offenders will be subject to academic discipline. Note that the penalties for academic offences are quite serious (e.g., a failing grade in the course, required withdrawal for an academic term or year, expulsion from the University, loss of scholarships and bursaries).

3. Students who need support to help lessen the impact of a disability should contact The Atlantic Centre for Students with Disabilities at the beginning of the term.

4. Each quiz is mandatory. Any missed quiz will receive a score of zero, unless a proper medical or compassionate excuse is provided. Do not make travel plans that conflict with quiz times.