## The University of Western Ontario (Western University)

## Calculus 2502A, Fall 2016 Advanced Calculus I

September–December 2016

Lectures: MWF 1:30-2:30 pm, in PAB 106 (Prof. Barron, tatyana.barron@uwo.ca)

**Textbook:** Multivariable Calculus, 8th. ed., by J. Stewart (**required**).

Student Solution Manual is recommended.

**Prerequisites:** A minimum mark of 60% in Calculus 1501A/B or Applied Mathematics 1413, or Calculus 1301A/B with a mark of at least 85%.

Antirequisites: Calculus 2302A/B.

Course description: Differential calculus of functions of several variables: level curves and surfaces; limits; continuity; partial derivatives; total differentials; Jacobian matrix; chain rule; implicit functions; inverse functions; curvilinear coordinates; derivatives; the Laplacian; Taylor Series; extrema; Lagrange multipliers; vector and scalar fields; divergence and curl.

What is expected of the student: Students are expected to attend all lectures, complete all assignments and write all examinations. Solutions of collected homework problems must be written neatly, and handed in by the deadline.

Calculator policy: use of calculators will **not** be permitted on examinations.

## Evaluation of student performance:

homework 30% midterm exam (Wednesday October 19, 7-9 pm; 30%) final exam (3 hours, to be scheduled by the Registrar's office) 40%

Course webpage: http://www-home.math.uwo.ca/~tfoth/calcf2016/ Some information will be posted on owl - to be announced in class.

## The policy on Accommodation for Medical Illness:

See http://www.westerncalendar.uwo.ca/2016/pg117.html

In particular, students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must contact the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department.

Students seeking academic accommodation for a missed homework assignment should contact the instructor without delay.

Late homework will not be accepted.

Missed final exam: Course instructors are not able to grant permission for a student to miss or re-schedule a final examination. Students who have missed or plan to miss a final examination should contact an academic counsellor at their home Faculty Dean's office.

Statement on Prerequisites: Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

**Statement on Academic Offences:** Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at

http://www.westerncalendar.uwo.ca/2016/pg113.html

**Accessibility Statement:** Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.