

MATH 200/253 Term I, Summer 2014: MULTIVARIABLE CALCULUS

In addition to the office hours of your instructor, there is DROP-IN HELP for Math 200/253 at the Math Learning Centre. See the schedule on the course webpage.

Textbook *Multivariable Calculus* by J. Stewart, 7th Edition (which is included in *Calculus* 7th Edition by J. Stewart). Or equivalently, *Calculus / Multivariable Calculus: Early Transcendentals* by J. Stewart, 7th Edition.

Course Outline

This is an introduction to calculus of several variables. The main topics are partial derivatives and multiple integrals. An appreciation of three-dimensional geometry is essential.

Section numbers refer to Stewart, *Multivariable Calculus*, 7th edition.

1. Vectors, quadric surfaces (Sections 12.1-12.6)
2. Partial derivatives, linearization, chain rule (Sections 14.1-14.5)
3. Directional derivative and Gradient (Section 14.6)
4. Max/min, Lagrange multipliers (Sections 14.7 14.8)
5. Double integrals (Sections 15.1-15.6)
6. Triple integrals (Sections 15.7-15.9)

Course website

<http://www.math.ubc.ca/~afraser/200>

Course Policies

- Grades will be scaled if necessary, to ensure fairness.
- Missing a homework or midterm normally results in a mark of 0. Exceptions may be granted in two cases: prior consent of the instructor or a medical emergency. The instructor must be notified within 48 hours of a missed midterm, and presented with a doctor's note immediately upon the student's return to UBC. A physician's note should specifically state that the student was medically unfit to write the missed midterm on that day.

There will be no make-up homework. If you miss a homework with a valid reason, the weight will be transferred to the final exam. We will schedule a make-up midterm for students who missed the midterm with a valid reason. In the event that the makeup midterm is also missed for a valid reason, the weight will be transferred to the final exam. Missed homework and exams without a valid reason will receive a grade of 0.

- No books, notes, formula sheets, calculators or other electronic devices are permitted for use during the midterm or final exam.