

MATH 317

Calculus IV

Fall term, September-December, 2015

Time: Mon/Wed/Fri 10:00-11:00

Place: Buchanan A203

Office hours: Monday 11:00-12:00 in Math Annex 1102,
Wednesday 15:00-16:00 in Math Annex 1102,
Friday 12:00-13:00 in Math Annex 1101.

Instructor's e-mail: sibilla@math.ubc.ca

Syllabus

- **Textbook:** "Multivariable Calculus" by James Stewart, edition 7E
- **Topics:**
 - Vector valued functions of one variable (Chapter 13):
Parameterized curves, velocity, acceleration, arc length (includes curvature, normal and binormal vectors, tangential and normal components of acceleration).
 - Vector valued functions of several variables (Chapter 16):
Vector fields, line integrals, conservative fields, fundamental theorem of line integrals, Green's theorem, gradient, curl, divergence, parameterized surfaces, surface area, surface integrals, Stoke's theorem, divergence theorem.

Grading Scheme

The grade is composed of:

- final exam (50%),
- two midterms (30%),
- homework and quizzes (20%),

or the final exam grade minus 10 points (whichever is higher).

The second option is a safety net --- even if you did poorly during the semester, you can still have a good grade by doing well on the final exam. Final grades may be subject to scaling.

Homework and Quizzes

Homework will be published every Wednesday. On Friday of the following week, either the written homework will be collected to be marked, or there will be a 10-15 minutes quiz based on the homework. The two lowest homework/quiz grades will be dropped.