# Math 226, 2017W Term 1

# Advanced Calculus I (Honours)

# **Syllabus**

#### **Instructor Information**

**Instructor:** Brian Marcus

Email: marcus[at]math[dot]ubc[dot]ca
Office: Math Building, Room 218

Office Hours: W 1:30 - 3:00, Th 11:30 - 1:00 and by appointment

Phone: 822-3262

#### **Course Information**

Class time: MWF 11:00 - 12:00

Class location: Buchanan 202A

**Course web page:** <a href="http://www.math.ubc.ca/~marcus/Math226">http://www.math.ubc.ca/~marcus/Math226</a> will be updated throughout the term.

Text: Adams and Essex: Calculus: Several Variables. Pearson, 9th Edition

#### **Course Description:**

This is an HONOURS course. The emphasis will be on ideas and computation, but students will also be expected to understand and write mathematical proofs at an elementary level.

Topics: Differential and Integral Calculus of functions of several variables: Vectors and Geometry, Partial Derivatives and Differentiability, Applications of Derivatives, Multiple Integrals.

Course material will mostly be taken from Chapters 10,12,13,14 of the text.

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One-variable calculus (68% in Math 121 or 80% in Science 1, Math 101, 103 or 105);

## **CO-requisite:**

Linear algebra (Math 223, 221, 152)

## **Evaluation**

The course mark will be based on weekly homework assignments (15%), two midterms (total of 35%), and a final exam (50%). This percentage distribution is approximate.

## **Homework**

Homework assignments will be assigned weekly and due on Fridays.