

**Vector Analysis**  
**MATH 227**

**Textbook:**

*Calculus*, 5e, James Stewart.

**Prerequisites:** APSC 171, 172, and 174

**Instructor:**

Chris Brav

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Office Hours: Wednesdays and Thursdays, 2pm - 4pm.

**Course Info:**

[www.mast.queensu.ca/~math227](http://www.mast.queensu.ca/~math227)

Slot 1 - Mon 8:30, Tues 10:30, Thurs 9:30.

All lectures are in Jeffery Hall, room 127.

**Evaluation:**

Homework 30%, Quizzes 10%, Midterm 25%, Final 35%

**Assignments** There will be 10 assignments, due by 12pm on Fridays at the front office in Jeffery Hall. Assignment #1 will be due on September 22nd and Assignment #10 will be due on November 31st. There will be no assignment due on October 27th; instead, the midterm will be held in class on Thursday, October 26th.

Assignments are expected to be written carefully and legibly. Credit will be given for both content and presentation. You are encouraged to collaborate with other students, but should acknowledge your collaborators at the top of your assignment. In cases of obvious and mindless copying, I will set aside the work in question and let you know that there is a problem about which you should speak with me.

**Quizzes** There will be 5 short in-class quizzes, roughly every other week. The point of these is to encourage you to stay on track. Dates to be announced.

**Office hours** I'm a pretty nice guy and want to help you, so *come to see me*. If the scheduled times don't work for you, let me know and we can arrange something.

**Topics:**

- Curves in space.
- Vector fields.
- Line integrals
- Green's theorem
- Stokes's theorem
- Divergence theorem
- Applications to electromagnetism and fluid mechanics