Math 255: Vector Analysis
Semester: Fall 2016
Instructor: Christopher Natoli

1 Details

Classroom:	Hunter West 411
Class time:	8:25–9:40 PM Tuesdays and Thursdays
Office hours:	after class on Tuesdays
Textbook:	*Vector Calculus* by Marsden and Tromba, sixth edition
Email:	chrisnatoli@gmail.com (*do not email me at any other address*)
Website:	https://chrisnatoli.github.io

2 Topics

1. Review of Vectors, Vector Fields
2. Divergence and Curl
3. The Path Integral
4. The Line Integral
5. Parametrized Surfaces
6. Area of a Surface
7. Integrals of Scalar Functions Over Surfaces
8. Surface Integrals of Vector Fields
9. Applications of Surface Integrals
10. Green's Theorem
11. Stokes' Theorem
12. Conservative Fields
13. Gauss's Theorem
14. Differential Forms

3 Homework policy

Problem sets will usually be assigned weekly and will be due approximately one week later. Problems will usually come from the textbook, but the assigned problems will be typed and uploaded to the website so that you aren't required to buy the textbook. Please write (or type with LaTeX!) your problem sets neatly. You must show your work; do not write only the final answer. Late homework will not be accepted, but the lowest problem set score will be dropped from your grade.

4 Exams

There will be one midterm and one final exam. The midterm will be in class on Thursday October 13. The date of the final is yet to be decided.

5 Grading

25% problem sets, 35% midterm, 40% final exam. These percentages are subject to change.