## Vector Calculus

Math 3740.001, Fall 2010, MWF 9:00-9:50, Language 310

Professor: Dr. Conley, GAB 419, 565-3326, conley@unt.edu. Assignments and announcements will be posted at www.math.unt.edu/~conley.

Office Hours: MW 10:00-11:30, F 10:00-11:00
Text and Prerequisites: The text is Vector Calculus, fifth edition, by Marsden \& Tromba. The prerequisites are Calculus III (2730) and Linear Algebra (2700).

Exams, Homework, and Grading: There will be two 100 point midterms, on the Wednesdays of October 6 and November 10, and a comprehensive 180 point final on Monday, December 13, 8:00-10:00. There will also be thirteen problem sets, eleven worth 10 points each and two worth 5 points each. These are usually due Fridays at the beginning of class. There will be no make-up exams, and late homework will not be accepted. Homework which is messy, unstapled, or inconvenient for the grader will be penalized 1 or 2 points.

Disabled Students: Please let me know of your disability at the end of the first lecture.

Tentative Plan: I plan to cover essentially the entire book, skipping certain sections not essential to the flow. The first three chapters should be review, so we will go over them quickly. Chapters $4-8$ are the core of the course, and we will cover them at a rate of around two or three sections per week.

Problem Set 1 (due Friday, September 3):
Section 1.1: 6, 22, 28
Section 1.2: 14, 18
Section 1.3: 4, 6, 8, 10, 16c, 18, 24, 28
Section 1.4: 2ab, 3b, 4, 8

Math 3740, Vector Calculus, MWF 9-10, Language 310, Fall 2010, Conley

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
| :---: | :---: | :---: | :---: | :---: |
| 8/23 | 8/24 | 8/25 | 8/26 | 8/27 |
|  |  |  |  | First Class |
| 8/30 | 8/31 | 9/1 | 9/2 | 9/3 |
|  |  |  |  | HW 1 |
| 9/6 | 9/7 | 9/8 | 9/9 | 9/10 |
| Holiday |  |  |  | HW 2 (5 points) |
| 9/13 | 9/14 | 9/15 | 9/16 | 9/17 |
|  |  |  |  | HW 3 |
| 9/20 | 9/21 | 9/22 | 9/23 | 9/24 |
|  |  |  |  | HW 4 |
| 9/27 | 9/28 | 9/29 | 9/30 | 10/1 |
|  |  |  |  | HW 5 |
| 10/4 | 10/5 | 10/6 | 10/7 | 10/8 |
|  |  | Exam 1 |  |  |
| 10/11 | 10/12 | 10/13 | 10/14 | 10/15 |
|  |  |  |  | HW 6 |
| 10/18 | 10/19 | 10/20 | 10/21 | 10/22 |
|  |  |  |  | HW 7 |
| 10/25 | 10/26 | 10/27 | 10/28 | 10/29 (Drop Day) |
|  |  |  |  | HW 8 |
| 11/1 | 11/2 | 11/3 | 11/4 | 11/5 |
|  |  |  |  | HW 9 |
| 11/8 | 11/9 | 11/10 | 11/11 | 11/12 |
|  |  | Exam 2 |  |  |
| 11/15 | 11/16 | 11/17 | 11/18 | 11/19 |
|  |  |  |  | HW 10 |
| 11/22 | 11/23 | 11/24 <br> HW 11 (5 points) | 11/25 <br> Holiday | 11/26 |
|  |  |  |  | Holiday |
| 11/29 | 11/30 | 12/1 | 12/2 | $12 / 3$ <br> HW 12 |
|  |  |  |  |  |
| 12/6 | 12/7 | $12 / 8$HW 13 | 12/9 | 12/10 |
|  |  |  |  | No Class |
| 12/13 | 12/14 | 12/15 | 12/16 | 12/17 |
| Final Exam: 8-10 |  |  |  |  |

