Mathematical Methods for Physical Sciences I Math 20000: Section 11 Autumn 2015

Instructor: William Feldman Office: Ryerson 360-A Email: feldman@math.uchicago.edu Course Webpage: www.math.uchicago.edu/~feldman/teaching.html

Class: MWF 8:30-9:20am, Eckhart 203 Office Hours: M 2:30-3:30pm, T 5:00-6:00pm (subject to change) or by appointment.

Text: Vector Calculus, 6th edition, Marsden and Tromba.

General Policy: There will be two in-class hour tests and a final exam. Homework will be assigned weekly on Wednesdays and due the next Wednesday in class. Late homework will not be accepted. You may of course collaborate on the homework assignments, but you should write up the solutions independently. The coursework will be weighted as follows in the final grade:

Hour Tests: 40% (20% each) Final Exam: 40% Homework: 20%

Important dates:

Hour Test 1: In class on Wednesday, October 21 (Week 4) Hour Test 2: In class on Wednesday, November 18 (Week 8) Final Exam: Friday, Dec 11, 8:00-10:00 AM

Important Notice:

It is the policy of the Department of Mathematics that the following rules apply to final exams in all undergraduate mathematics courses:

- 1. The final exam must occur at the time and place designated on the College Final Exam Schedule. In particular, no final examinations may be given during the tenth week of the quarter, except in the case of graduating seniors.
- 2. Instructions are not permitted to excuse students from the scheduled time of the final exam except in the cases of an Incomplete.

Tentative Course Outline: (Chapters from Marsden and Tromba)

Week 1: MW 1.1-1.5, 2.1, F 2.2-2.3
Week 2: MW 2.3-2.6, F3.1-3.2
Week 3: MWF 3.2-3.4
Week 4: M 4.1, W Hour Test 1, F 4.2
Week 5: M 4.3-4.4, W 5.1-5.2, F 5.3
Week 6: M 5.4, W 5.5, F 7.1-7.2
Week 7: M 7.3-7.4, W 7.5, F 7.6
Week 8: M 8.1, W Hour Test 2, F 8.1-8.2
Week 9: MW more Chapter 8, F Holiday
Week 10: MW more Chapter 8, F Reading and Review