

Department of Mathematics  
Christopher Newport University

**Math 350**  
*Spring Term 2006*

## Vector Calculus

**Instructor:** Dr. Khalili  
**Email:** pkhalili@cnu.edu  
**Office:** Gosnold 121= 11<sup>2</sup>  
**Office Hours:** MWF 10:00 - 10:45 am, TTH 12:30-2:00 pm  
**Classroom:** Gosnold 203  
**Class Hours:** TTH 2:30-3:45 pm  
**Phone:** 594-7037(office), 594-7194 (department secretary)

**Textbook:** *Vector Calculus*, Susan Jane Colley, Third Edition.

**Course Objective:** Math 350 may be viewed as a continuation of calculus courses. This course essentially extends the subjects we have learned in calculus to functions of several variables and vectors. Vector calculus in general is intended to show how the concept of “vector” can be used to develop and interpret calculus concepts in relation to functions of several variables. In addition, we will show many applications of vector calculus in physics and engineering. The prerequisite for this course is Math 250, however the students must be fresh on calculus topics of differentiation and integration.

### This course is intended to achieve the following objectives

1. Gaining factual knowledge (terminology, classifications, methods, trends)
2. Learning fundamental principles, generalizations, or theories
3. Learning to apply course material (to improve thinking, problem solving, and decisions)

### Course Outline:

<u>Chapter</u>	<u>Section</u>
1	1,2,3,4,5,6
2	5,6
3	1,2,3,4
5	1,2,3,4,5
6	1,2,3
7	1,2,3

**Grading System:** The course grade is based on three tests, weekly homework (about 10 homework will be collected), and the final exam. Each of these activities account for 20% of the course grade. Final exam is scheduled for Tuesday May 2, from 2:00-4:30 pm in G-203. .

**Homework:** Homework will be assigned daily and covered in class the next day.

**Grading Scale:** The course grade is assigned based on the following scale:

$$91 - 100 = A$$

$$88 - 90 = A^-$$

$$85 - 87 = B^+$$

$$81 - 84 = B$$

$$79 - 80 = B^-$$

$$75 - 78 = C^+$$

$$70 - 74 = C$$

$$67 - 69 = C^-$$

$$64 - 66 = D^+$$

$$61 - 63 = D$$

$$58 - 60 = D^-$$

$$00 - 57 = F$$

**Attendance:** Attendance is necessary, and you are responsible for all class materials, assignments and deadlines.

**Withdrawal Policy:** The withdrawal policy is the same as an official university policy. Therefore the last day to withdraw is March 27, 2006.

**University Regulations on Students with Disabilities:**

If you believe that you have a disability, you should make an appointment to see me to discuss your needs. In order to receive an accommodation, your disability must be on record in Disability Services office located in Room 101, Mcmurrin building ( Telephone 594-8763).