### Math 243 - 050\*

# Analytical Geometry and Calculus C

## Spring 2012

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http://www.math.udel.edu/~mmontes/teaching/UD/S12-MATH243-50.html

Office hours: Monday through Thursday 5:00pm-6:00pm or by appointment.

Lectures: Tuesday and Thursday, 7:00pm-9:00pm, 205 Ewing Hall.

### 1 Course Description

This course deals with the extension of the basic ideas of calculus to problems that involve two, three, and perhaps more variables. Among other topics, we will study: vectors, vector functions, equations of lines, planes, and other surfaces in 3D, functions of several variables, partial derivatives, multiple integrals, vector fields, and Green's theorem.

Maple will be used throughout the term. Among other things, you will learn how to use Maple to perform vector operations and to plot curves, surfaces and vector fields in three-dimensions.

#### 2 Textbook

Math 241/242/243, University of Delaware by James Stewart. The book Calculus: Early Transcendentals 7th edition by J. Stewart works just as well. The chapters this course is based on are: 12, 13, 14, 15 (except 15.5), and 16 (except 16.8).

## 3 Important Dates

February 20: Last day to register or to add courses.

March 6: First midterm exam.

April 10: Second midterm exam.

April 16: Last day to change registration or to withdraw from courses without academic penalty.

May 8: Third midterm exam.

May 17-23: Final exam. Check http://www.udel.edu/exams toward the end of the term to know the exact date and location.

#### 4 Exams

As you noticed, there will be four exams: Three midterm exams and one comprehensive final exam. Each exam will be graded on a scale from 0 to 100 points. Exam absences due to recognized University related activities, religious holidays, verifiable illness, and family/medical emergencies will be dealt with on an individual basis.

<sup>\*</sup>This syllabus is subject to change. Please check the course webpage for the latest version.

### 5 Quizzes

There will be a quiz every other week at the beginning of our Wednesday lecture. In teams, you will grade the quizzes and provide constructive feedback to your classmates. The grading scale for each quizz will be 0 to 100 points. I will drop the worst quiz grade.

### 6 Homework

Homework will be assigned and collected throughout the term. Each homework will be graded on a scale from 0 to 100 points. These homeworks will be posted on the course webpage, so make sure that you check it regularly. The number of problems may vary from one assignment to another. Also, some homeworks will include a programming component.

I will drop the worst two homework grades to allow for missed homeworks.

## 7 Grading Policy

The final grade composition is

Component	Weight
Homeworks	15%
Quizzes	10%
1st exam	15%
2nd exam	15%
3rd exam	15%
Final exam	30%

The following scale will be used to determine the final grade:  $[93, 100] \rightarrow A$ ,  $[90, 93) \rightarrow A$ -,  $[87, 90) \rightarrow B$ +,  $[83, 97) \rightarrow B$ ,  $[80, 83) \rightarrow B$ -,  $[77, 80) \rightarrow C$ +,  $[73, 77) \rightarrow C$ ,  $[70, 73) \rightarrow C$ -,  $[67, 60) \rightarrow D$ +,  $[63, 67) \rightarrow D$ ,  $[60, 63) \rightarrow D$ -,  $[0, 60) \rightarrow F$ .

## 8 Expected Behavior

#### 8.1 Attendance

You are expected to attend all the scheduled lectures. Please see the University's attendance policies for more information (Go to http://academiccatalog.udel.edu  $\rightarrow$  2011-2012 Undergraduate Programs  $\rightarrow$  Academic Regulations for Undergraduates  $\rightarrow$  UNIVERSITY ATTENDANCE POLICIES  $\rightarrow$  Class Attendance).

#### 8.2 Academic Honesty

All University of Delaware Policies regarding ethics and honorable behavior apply to this course. Please see the Chapter on Academic Honesty of the Student Guide to University Policies: Code of Conduct on the web at http://www.udel.edu/stuguide/11-12/code.html#honesty

## 9 Accessibility for Students with Disabilities

If you are a student with a disability and wish to request accommodations, please contact the Office of Disabilities Support Services, 240 Academy St. Alison Hall Suite 119, or call (302) 831-4643. Information regarding your disability will be treated in a confidential manner. Because many accommodations require early planning, requests for accommodations should be made as early as possible.