

<b>Syllabus for: Math 50C, Multivariable Calculus</b>	
<b>Semester &amp; Year:</b>	Spring 2014
<b>Course ID and Section Number:</b>	MATH-50C-E5183
<b>Number of Credits/Units:</b>	4
<b>Day/Time:</b>	MWF 11:40-12:55
<b>Location:</b>	SC 202
<b>Instructor's Name:</b>	Butler/Jackson
<b>Contact Information:</b>	Office location and hours: SC216L Phone: 476-4234/476-4219 Email:Michael-butler@redwoods.edu/steve-jackson@redwoods.edu
<b>Course Description :</b> The third in the series of three calculus courses. Multivariable Calculus applies the techniques and theory of differentiation and integration to vector-valued functions and functions of more than one variable. The course presents a thorough study of vectors in two and three dimensions, vector-valued functions, curves and surfaces, motion in two and three dimensions, and an introduction to vector fields.	
<b>Student Learning Outcomes :</b>	
<ol style="list-style-type: none"> <li>1. Apply methods of differentiation and integration to vector-valued functions and functions of more than one variable, and use the theory of vectors as a fundamental problem-solving tool.</li> <li>2. Apply the mathematics of multivariate functions to solve real-world problems and applications.</li> <li>3. Use graphing technology to visualize curves and surfaces in two and three dimensions, explore mathematical concepts, and verify results.</li> <li>4. Use sound mathematical writing and appropriate use of numerical, graphical, and symbolic representations to present solutions of mathematical exercises and applications.</li> </ol>	
<b>Special accommodations:</b> College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS.	
<b>Academic Misconduct:</b> Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course.	

The student code of conduct is available on the College of the Redwoods website at:

<http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf>

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

## **Required Textbooks**

We will be using Calculus, Early Transcendentals, 5th Edition, Stewart. There are also student solution manuals that accompany the book. The first volume has the solutions that are needed for math 50A and 50B. The second has the solutions for the problems in 50C. If you decide to purchase the solutions manual, MAKE SURE that you get the correct solutions manual.

See the Math Departments web page and in particular the information regarding the Math 50C course: <http://msenex.redwoods.edu/math/courses/math50C.php>

Also see: <http://www.stewartcalculus.com>

AND:

A MATLAB Companion for Multivariable Calculus, Cooper

ISBN-13: 978-0-12187625-8

ISBN-10: 0-12-187625-X

**This is a required textbook!**

## **Calculators**

A graphing calculator is required for the course. The Math Department also has calculators that it rents to students. For more information on renting a calculator go to the following link:

<http://msenex.redwoods.edu/mathdept/docs/student>

## **Homework:**

I feel that homework is by far the most important aspect of this course. Participation in the course is essential. While participation includes coming to class and joining in the discussion, participation also includes keeping up with the homework. Therefore, not keeping up with the homework implies nonparticipation in the course and as a consequence we reserve the right to faculty withdraw you from the course. The homework is graded on appearance, on whether the work is complete, and on whether the problems are done correctly. Homework will be kept in a journal which will be turned in and graded at each exam. We will be spot-checking the homework journals at random times during the semester.

### **Guidelines for homework:**

- \*) Do your homework in pencil.
- \*) Make sure you put your name and assignment on the homework.
- \*) State the original problem and then show all the necessary work that supports your answer(s).
- \*) Make sure your work is neat.
- \*) Make sure that your work can be easily followed. Remember, you are communicating your mathematical ideas. Have another pair of eyes look at your work and ask for comments. Professionals do this, why not you?
- \*) We understand that you will be using the solutions manual as a guide to doing your homework. If you use a solution from the solution manual you need to cite your source. Use the following format: Begin SM <work> End SM.
- \*) There will be Matlab assignments as part of the homework. We will discuss the particulars in

class.

**Exams:**

There will be 2-3 mid-term exams plus the comprehensive final given this semester. Please see me before each exam if special arrangements are needed. The final exam will given only at the allotted time on the finals schedule. Make travel plans accordingly.

**Quizzes:**

There may be several quizzes given throughout the semester. Some of them will be of the in-class variety, some of them take-home. The point value and instructions will vary depending on the material and length of each quiz.

**Grading:**

Homework 20%

Exams/Quizzes 80%

Grades will be assigned as follows: 93 - 100% A

90 - 92.9% A-

86 - 89% B+

83- 85.9% B

80 - 82.9% B-

76 - 79.9% C+

70 - 75.9% C

60 - 69% D

Below 60% F

**Canceled Classes:**

Call 476-4210 wait for the greeting, then press 5, to check on any classes that may be canceled with the MSE division. Given the hour of our class, we will attempt to send an email to everyone either the night before or that morning if class is to be canceled.

The above information is subject to change depending on class circumstances.