Syllabus for Math50C Multivariable Calculus – Eureka Campus		
Semester & Year	Spring 2019	
Course ID and Section #	MATH-50C-E6087	
Instructor's Name	Steve Jackson	
Day/Time	MWF 11:40AM-12:55PM	
Location	SC214	
Number of Credits/Units	4 Credits	
Contact Information	*Office location*	SC216L
	Office hours	TBA
	Phone number	476-4219
	Email address	Steve-jackson@redwoods.edu
Textbook Information	*Title & Edition*	Calculus Early Transcendentals 5e
	Author	James Stewart
	ISBN	0-534-39321-7

Course Description

The third in the series of three calculus courses. Multivariable Calculus applies the techniques and theory of differentiation and integration to a thorough study of vectors in two and three dimensions, vector-valued functions, calculus of functions of more than one variable, partial derivatives, multiple integration, Green's Theorem, Stokes' Theorem, Divergence Theorem; includes motion in two and three dimensions, curves and surfaces.

Extensive computer visualization is an integral component of this course.

Student Learning Outcomes

1. Formulate equations of lines and planes including a tangent plane to a surface at a point.
2. Evaluate partial derivatives, and two- and three-dimensional integrals. Apply techniques to real-world problems.
3. Perform vector operations. Differentiate and integrate vector-valued functions. Compute arc length. Use the theory of vectors as a fundamental problem-solving tool.
4. Determine for a function of several variables: the limit at a point, differentiability, local extrema and test for saddle points. Solve constraint problems using Lagrange multipliers.
5. Find the divergence and curl of a vector field. Apply Green's, Stokes', and Divergence Theorems.

Special Accommodations

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 at 707-476-4280.

Academic Support

Academic support is available at Counseling and Advising and includes academic advising and educational planning, Academic Support Center for tutoring and proctored tests, and Extended Opportunity Programs & Services, for eligible students, with advising, assistance, tutoring, and more.

Academic Honesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services, and scroll to AP 5500. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods website.

Disruptive Classroom Behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process a disruptive student may be temporarily removed from class. In addition, he or she may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services and scroll to AP 5500.
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Emergency Procedures for the Eureka campus:

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Eureka **campus emergency map** is available at: (http://www.redwoods.edu/aboutcr/Eureka-Map; choose the evacuation map option). For more information on Public Safety, go to http://www.redwoods.edu/publicsafety. In an emergency that requires an evacuation of the building:

- Be aware of all marked exits from your area and building.
- Once outside, move to the nearest evacuation point outside your building:
- Keep streets and walkways clear for emergency vehicles and personnel.
- Do not leave campus, unless it has been deemed safe by the Incident Commander or campus authorities. (CR's lower parking lot and Tompkins Hill Rd are within the Tsunami Zone.)

RAVE – College of the Redwoods has implemented an emergency alert system. In the event of

an emergency on campus you can receive an alert through your personal email and/or phones at your home, office, and cell. Registration is necessary in order to receive emergency alerts. Please go to https://www.GetRave.com/login/Redwoods and use the "Register" button on the top right portion of the registration page to create an account. During the registration process you can elect to add additional information, such as office phone, home phone, cell phone, and personal email. Please use your CR email address as your primary Registration Email. Your CR email address ends with "redwoods.edu." Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions.

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. In addition, there are student solutions 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://msenux.redwoods.edu/math/courses/math50C.php
Also see: http://www.stewartcalculus.com

This is a required textbook!

Calculators:

Your choice.

Homework:

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. Not keeping up with the homework implies non-participation and as a consequence you may be dropped from the course. Homework is graded on appearance, on whether the work is complete, and on whether the problems are done correctly. Please keep your homework in a journal so that I can check your endeavors from time to time during the semester.

Guidelines for homework:

*) Do your homework in pencil.
*) Make sure your 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. If you wish, typeset your work in *Latex.*
*) 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?
*) I understand that you may 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.

Visualization: We will be learning Mathematica® together.

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

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