Syllabus for: Math 50A Differential Calculus		
Semester & Year:	SPRING 2013	
Course ID and Section Number:	MATH-50A-E2711	
Number of Credits/Units:	4	
Day/Time:	MWF 11:40AM-12:55PM 01/12/2013 - 05/10/2013	
Location:	Room: PS 117	
Instructor's Name:	Jackson	
Contact Information:	Office location and hours: PS119B TBA	
	Phone: 476-4219	
	Email:steve-jackson@redwoods.edu	

Course Description (catalog description as described in course outline):

A study of limits, continuity, and derivatives of algebraic, transcendental, and trigonometric functions. Applications of the derivative include optimization, related rates, examples from the natural and social sciences, and graphing of functions. The course introduces the integral and the connection between the integral and derivative. Note: A graphing calculator is required.

Student Learning Outcomes (as described in course outline):

- 1. Read, write, and speak accurately about mathematical ideas and use correct mathematical notation.
- 2. Use graphing technology to visualize functions, explore mathematical concepts, and verify their work.
- 3. Apply differentiation techniques and theory to functions of one variable.
- 4. Apply the concept of the derivative and integral to solve real-world problems and applications.
- 5. Demonstrate the fundamental relationship between the derivative and the integral.
- 6. Use numerical, graphical, symbolic, and verbal representations to solve problems and communicate with others.

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.

Academic Misconduct: 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.

Prerequisites: Math 30 and Math 25 (or the equivalent) with a grade of "C" or better, or appropriate score on assessment exam

Students must be well-grounded in both college algebra and trigonometry to be successful in this first course in calculus.

Textbook: 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 50A course: Math Dept 50A Web Page

Also see: Stewart Calculus

Calculator: A graphing calculator is required for the course. I recommend a TI83 or a TI84. If, however, you already have a calculator bring it to me to see if it will work 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: <u>Calculator Rentals</u>

Homework: We will be keeping homework journals. The details of the homework journal will be discussed in class. We will also have written assignments. The points and instructions of the written assignments will depend on the particular assignment.

Quizzes: There will 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.

Exams: We will have several exams plus one final exam this semester. Let me know in advance if you are going to miss an exam. Make-ups will only be given at *my* discretion. Do *not* miss an exam! The cumulative final exam is scheduled during finals week May 6 - May 10. Do NOT plan on leaving town until after your last final exam.

Attendance:

The Mathematics Department Policy Regarding "Faculty Withdrawal" of Students after Census Day: A student who is absent from class for the amount of time equal to two weeks of classes, will be withdrawn from the course, unless there are extenuating circumstances that are communicated to the instructor in a timely manner. This "faculty withdrawal" can occur between Week 4 and Week 10 of the semester.

Grading:

Grading Weights	Homework		20%
	Exams/Quizzes	80%	
Grades will be assigned as for	ollows:		
	93 - 100%	A	
	90 - 92.9%	A-	
	86 - 89%	B+	
	83- 85.9%	В	
	80 - 82.9%	B-	
	76 - 79.9%	C+	
	70 - 75.9%	C	
	60 - 69%	D	
В	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. I will attempt to send an email to everyone either the night before or that morning if class is to be canceled.

This information is subject to change depending on class circumstances.