Syllabus for Math 50A: Differential Calculus			
Semester & Year:	Spring 2015		
Course ID and Section Number:	MATH-50A-E7049 (037049)		
Number of Credits/Units:	4		
Day/Time:	Monday, Tuesday, Thursday, Friday 11:40-12:45		
Location:	SC 204		
Instructor's Name:	Mike Haley		
Contact Information:	Office location and hours: SC 216 I, Tuesday 9:00-10:00 am,		
	Thursday 12:50-1:50 pm, Drop In, and By Appointment		
	Phone: (707) 476-4352		
	Email: mike-haley@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.

## **Student Learning Outcomes (as described in course outline):**

- 1. Evaluate the limit of a function at a real number and determine if a function is continuous at a real number. Use the limit to find the derivative of a function.
- 2. Use the derivative to find the equation of a tangent line to a function;
- 3. Use the differentiation formulas to compute derivatives and use differentiation to solve applications such as related rate problems and optimization problems.
- 4. Analyze the rate of change of an implicit function using implicit differentiation.
- 5. Graph functions using methods of calculus.
- 6. Evaluate a definite integral as a limit.

**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.

## 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after Census Day: A student who is absent from class for the amount of time equal to two weeks of classes, will be withdrawn from the course, unless there are extenuating circumstances that are communicated to the instructor in a

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.

**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.

**EMERGENGY ALERT SYSTEM:** Consider registering for RAVE, the Emergency Alert System. www.getrave.com/login/redwoods

**TEXTBOOK:** Calculus, Early Transcendentals, 5th Edition, Stewart, Thompson Brooks/Cole Publishers, ISBN 0-534-39321-7. The department has purchased approximately 100 copies and have put them in the

library. If you do not have a textbook, you may check one out at the library. You are responsible to turn the book in at the end of the semester in good condition, as you would be with any other library book. You'll need to identify yourself with photo ID and CR Library card. The calculus books will only be checked out to registered calculus students. Solution manuals are not available in the library, but they are available online.

**EXPECTATIONS:** I expect that everyone is treated with respect in our class. Please go out of your way to be considerate of others since this will enhance the quality of the learning environment in our classroom. I expect that you use cell phones and computers appropriately and in a manner that does not disturb any fellow students or the instructor; this implies that at the very least there should not be any sound coming from your cell phone and you only utilize applications that have course content related material.

Additionally, you should be on time to class and avoid leaving early in order to minimize disruption. If you are asked to leave the class, then be sure to visit me in the office and be prepared to write a paper before returning to class. The Student Code of Conduct addresses many issues that arise on a college campus and you should be aware of the agreement that you have made as an enrolled student.

**MATERIALS:** Besides the mentioned text, you will need to obtain the following for this class:

- a) A TI-83+ or TI-84
- b) Graph paper
- c) A notebook to keep lecture notes, written responses, and returned work
- d) A five dollar pencil and an eraser

**GRADE SYSTEM:** Your final grade will be determined as follows

Homework	20%
Participation	5%
Exam (Two + Final)	50%
Quizzes/Activities/Project	25%

The plus/minus grade system will be utilized.

Α	93-100%	В	83-86.9%	C	70-76.9%
A-	90-92.9%	В-	80-82.9%	D	60-69.9%
B+	87-89.9%	C+	77-79.9%	F	0-59.9%

Additionally, to earn an A, all assignments must be turned in.

**HOMEWORK:** Homework will be a regular aspect of this class, and I expect that it will be done in an organized, neat and readable fashion. The quality of your homework presentation is important to me since it representative of your understanding of coursework. Your lowest homework score will be dropped and I will accept one late homework assignment one time. See **Guidelines for Homework Assignments** and make sure you label and staple your homework correctly. Allegorically, students that don't have most of their homework assignments turned in don't typically pass the class.

**EXAMS:** There are two closed book exams that will occur on **Thursday, February 19** and **Thursday, April 2**. The exams are held during the class hours published in the schedule of classes. Please be aware that regardless of the time you begin the exam, the deadline is at the end of the scheduled class time. If you are using the test proctoring services located in the ASC in the LRC, be advised that you must schedule a time that overlaps with the published course time of the class in which you are enrolled. You must schedule a time and report it to me at least 24 hours before the published exam time. If you fail to attend the exam time or the exam time that you have scheduled then you forfeit your opportunity to take the exam.

**QUIZZES/ACTIVITIES:** There will be approximately one quiz each week. The quizzes will be similar to the homework problems. At least one quiz will be dropped but make-up quizzes will not be available.

**FINAL EXAM:** The final exam will be based upon the schedule published by the college. The final is scheduled for **Monday, May 11** from 10:45-12:45pm. The final exams may consist of at least one part that

is closed book/notes and without the use of the calculator. I will give further information that clearly explains the scope of the exam.

**ATTENDANCE:** To succeed in a mathematics class you need to attend every class meeting. The CR Catalog defines the equivalent of a week's absence as excessive. If you have to miss class, make prior arrangements with a fellow student to get any notes or materials covered that day. You are responsible for the all material covered even if you don't attend class. Plan on being in class for the complete duration of the session. Any combination of two occurrences of tardiness or leaving before the end of the course will be considered an absence.

**PARTICIPATION:** The participation grade is positively affected by your involvement in the class, attendance, punctuality, and negatively affected by physical and electronic disturbances.

**OFFICE HOURS:** My office hours are dedicated to focusing on your needs. Take advantage of these hours to ask me questions that you have been unable to resolve with your study partners and other concerns you might have. The best use of your time is to come to the office with a clear idea of what you need from me in order to attain your immediate goal. I am often in my office, and you are welcome to ask me questions outside of office hours.

**DISABILITIES:** If you are a student with a disability or if you think that you could benefit from disability-related services, you may either speak to me or you may contact our Disabled Student Programs and Services Office on campus.

**ACADEMIC INTEGRITY:** If you cheat on an exam or quiz, then expect to fail the course, additionally the division dean and the vice-president of instruction will be notified. All exams are closed book/notes unless otherwise stated. During exams and quizzes student cell phones will be turned off and not physically accessible, neglecting to do this may lead to forfeiting your opportunity to earn points on the assignment.

**DISCLAIMER:** While every attempt will be made to keep minimal changes to this document during the semester, like most other things, it is subject to change.

Last update 1/20/2015