Syllabus for Differential Calculus – Eureka Campus				
Semester & Year	Summer 2016			
Course ID and Section #	Math 50A — E1583			
Instructor's Name	Brad Morin			
Day/Time	MTWTh 9:00 - 10:35 am			
Location	SC 204			
Number of Credits/Units	4			
	Office location	None		
Contact Information	Office hours	By Appointment		
Contact Information	Phone number	None		
	Email address	brad-morin@redwoods.edu		
	Title & Edition	Calculus, Early Transcendentals, 5E edition		
Textbook Information	Author	James Stewart		
	ISBN	<mark>0-534-39321-7</mark>		

#### **Course Description**

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**

**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. Analyize 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 <u>Disabled</u> <u>Students Programs and Services</u>. Students may make requests for alternative media by contacting DSPS at 707-476-4280.

# Syllabus for Differential Calculus – Eureka Campus

### Academic Support

Academic support is available at <u>Counseling and Advising</u> and includes academic advising and educational planning, <u>Academic Support Center</u> for tutoring and proctored tests, and <u>Extended</u> <u>Opportunity Programs & Services</u>, 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:

www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProcedures rev1.pdf 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:

www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProcedures rev1.pdf

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# Syllabus for Differential Calculus – Eureka Campus

### **Emergency Procedures for the <u>Eureka</u> 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:

(<u>http://www.redwoods.edu/Eureka/campus-maps/EurekaMap\_emergency.pdf</u>). For more information on Public Safety, go to <u>http://redwoods.edu/safety/</u> 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 <a href="https://www.GetRave.com/login/Redwoods">https://www.GetRave.com/login/Redwoods</a> 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 <a href="mailto:security@redwoods.edu">security@redwoods.edu</a> 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. <u>Course Equipment:</u> TI-83 Calculator or TI-84 (TI-89 won't work well for our class). Bring text, calculator, and homework on lecture days -- calculator on exam days.

### Basis for Grade:

25% Daily Quizzes on homework given at the end of class50% Semester Exams.25% Final Exam

#### Quizzes & Homework:

Daily quizzes will be either directly from the homework, or similar to a homework problem. I suggest you use a graph paper notebook for doing homework. Bring your notebook with completed homework each class period.

### Exams:

Exam questions will be directly from, or else quite similar to, the homework.

### Makeup Exams and Quizzes:

Makeup work will not provide a shortcut to getting an acceptable grade. Makeup work will be demanding — an option to be used rarely.

# <u>Grading:</u>

A 93% - 100% A- 90% - 92% B+ 87% - 89% B 83% - 86% B- 80% - 82% C+ 77% - 79% C 70% - 76% D 60% - 69% F Below 60%

# Math 50A Homework & Exams Summer Semester 2016

# Morin

The dates given below are the days the sections are covered in class. The suggested homework could be started on that day in preparation for the quiz the next day of class. Each daily quiz is one point, all or nothing. For each daily quiz, I may ask you to copy an answer from your completed homework, or I may ask you to work out a homework problem, or a slightly modified homework problem, showing your work. You will generally need access to your completed homework while taking the quizzes.

Date		Section	Potential Quiz Problems — * means extra credit possibilities for exam
May	23	1.1	1,15,19,21,23,27,39,41,45,63,65
		1.2	6,7
		1.3	1,5,27,29,35,45,51,57,63
	24	1.4	3,11,15,17,24,27,35
		1.5	1,2,3,11,13,15
	25	1.6	3-19 odd, 23-27 odd, 35-43 odd, 49,51,63,65,67,71
	26	2.1	3,5,9
		2.2	1-31 odd,6,39

	30	Memorial Day — CR Holiday
	31	2.3 1-49 odd — *57, *59 (I don't answer starred problems during class time.)
June	1	2.4 3.5.7.9.15.19.21.23.24.41 — *31.*39
	2	2.5 1.2.3.5.9.11.13.15.17.21.25.31.33.35.37.43.45.51.53 — *59
	_	26 123579
		2.0 1,2,0,0,7,0
	6	2.6 11,13,17,19,21,23,29,31,33,39,41,47,49,51,59
		27 13571315
	7	2 8 1 3 5 7 913 15 19 21 23 25 29 35
	γ Q	2.0 $1.4501116172120232720374345$ *47
	0	$2.3 \qquad 1,4,3,3,11,10,17,21,22,23,27,23,37,43,43 = 47$
	9	Exam 1 Part One — Take Home, turn in Monday
	13	Exam 1 Part Two — In Class
		3.1 1-33 odds, 39,41,45,47,51
	14	3.2
		3.3
	15	33
	10	34
	16	2.5
	10	5.5
	20	3.6
	21	3.7
	22	3.8
	23	3.9
		3.10
	27	3.10
		3.11
	28	Review
		Exam 2 Part One — Take Home, turn in Wednesday
	29	Exam 2 Part Two — In Class
		4.1
	30	4.2
July	4	Independence Day — DR Holiday
	5	4.3
	6	4.4
	7	4.5
	11	4.6
	12	47
	13	48
	10	10
	11	4.9
	14	4.9
		4.10
	18	Review
		Exam 3 Part One — Take Home, turn in Tuesday
	19	Exam 3 Part Two — In Class
	. •	5.1
	20	52
	21	5.2
	<u> </u>	

- 26 5.5
- 27 Review
- Final Part One Take Home, turn in Wednesday Final Exam
- 28