Syllabus for Math 50A – Differential Calculus – Eureka Site

Semester & Year	Summer 2018
Course ID and Section #	Math 50A ~ Section E6263
Instructor's Name	Amber Buntin
Day/Time	Mon-Thurs 9:00-10:35am
Location	SC 204
Number of Credits/Units	4 units

Contact Information	*Office location*	SC 216K
	Office hours	BY APPT (email me)
	Phone number	707-476-4207
	Email address	Amber-Buntin@redwoods.edu Include "**Math 50A**" in the email subject line
Textbook Information	*Title & Edition*	Calculus, Early Transcendentals, 5th Edition
	Author	James Stewart
	ISBN	0534393217 (10), 9780534393212 (13)

Course Description

As stated in CR's catalog: 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. Letter Grade Only. CSU and UC Transferable. *Prerequisites: Math 25 and Math 30 (or equivalent).*

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. 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 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.

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.

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.

Math 50A – Differential Calculus

Mon-Thurs – 9:00-10:35am – SC 204 (Course number 046263)

Instructor Contact Info

Amber Buntin, Assistant Professor, Department of Mathematics

Email: *amber-buntin@redwoods.edu* <mark>**Canvas message**</mark> is the preferred way to contact me!

Phone: *707-476-4207*

Office hours (SC 216K): Tues/Thurs 10:40-11:40am

Math Lab Open Hours (Located in the back of LRC): **M-Th** 9am-3pm, **Fri** closed

Note: You must be **signed up** to utilize the math lab (there is a FREE option Math 252)

Classroom Environment and Attendance

It is essential to our class that both the students and teacher behave in a manner that will provide a comfortable learning atmosphere. Be respectful to one another. You should not hesitate to ask questions nor feel embarrassed to ask for help.

Class time is valuable, and while sometimes we will work on in-class activities, I ask that you DO NOT complete homework during lecture to avoid falling behind on the current material.

You are expected to arrive on time and to leave upon dismissal. Arriving late or leaving before class is dismissed is disruptive and disrespectful to your classmates as well as your teacher. Please be prepared with your headphones put away and cell phones SILENCED. If you have a job where you must have a radio/walkie (such as an emergency responder), or your phone on, please let me know right away!

If you must miss a day, please **check with a classmate and/or Canvas** to see what you missed. Also, hand assignments in early so they are not considered late!
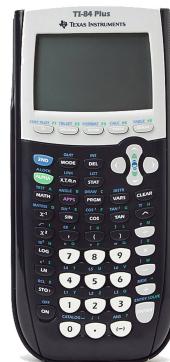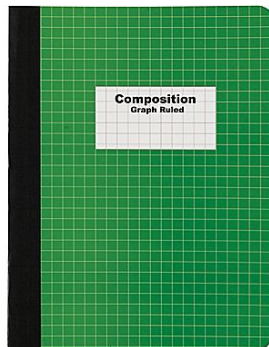
Grades

Homework/Activities……………..……..15%	93-100%...........A
Quizzes……..………………….............15%	90-92%.............A-
Exams………………..…...................45%	88-89%.............B+
Final Exam..………..……………….…..25%	83-87%.............B
	80-82%.............B-
	78-79%.............C+
	70-77%.............C
	0-69%...............D-F

*** Final grade is at the professional discretion of the instructor ***

Required Materials

Textbook: *Calculus, Early Transcendentals*
Author: Stewart, published by Cengage Learning
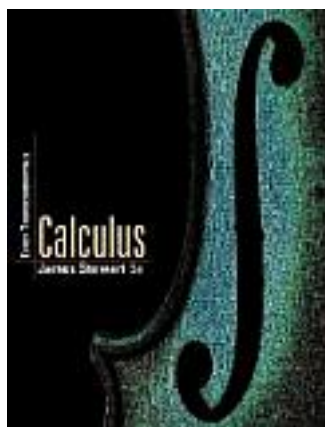
- There are plenty of textbooks available for check out **for the semester** at the library.
- Order your **textbook online for very cheap** on amazon etc. If you are going to order online, I suggest you do so ASAP since there's HW due right away.

Required Supplies:

- Lined paper and graph paper
- Pencil, erasers, and straight edge
- Notebook OR binder (used specifically as a reference book)
- A graphing calculator is **required** (TI-83+ or TI-84 recommended) and available to rent for $15 per semester (see Betsy Buchanan in the back of the LRC in the Math Lab).
- Access to a computer with internet and printing capabilities is also a requirement as there will be HW assignments submitted online.
- Binder/folder for returned work

Reference Book

You will be keeping a reference book that will contain important information you have learned throughout the semester such as definitions, formulas, and examples. This reference book is **NOT a book for you to write all your notes in.**   It is for you filter through your class notes and to **re-write up** the important information/tips/notes to yourself about important concepts. Some students already write all their in-class notes VERY nice and neat and I will accept this as your composition notebook, **but you must get my approval.** I will collect your reference book during exams and grade them as a homework assignment (see **Reference Book Guidelines** page for more info).

Homework

Homework problems will be assigned nearly each lecture period, and are handed in on the announced due date (typically the next class period) at the beginning of class. We will have about 5-10 minutes reserved for homework questions each class. You are encouraged to work collaboratively on your homework but be sure to NOT COPY and check answers to ODD numbered problems in the back of the textbook. Homework assignments are worth **5 points** each and Activities will have varying point values. Please see "Homework Guidelines" for further details about HW expectations.

At the end of the semester, your **two** lowest homework scores will be dropped from your grade. Due to this, **I will not accept late work unless one of your** <u>three</u> **late work passes is attached.** Late passes can be used if you are sick, or there is an unexpected emergency etc. It is your responsibility to ensure that you get your HW turned in on time; if you know you will be missing class, you should turn your HW in **before** the due date, send it with a friend to class, or **hand it in to the Mathematics dropbox in the hallway of the 2nd floor of the Science Building before class time on the due date. If you use this option, be sure to put MY NAME on it at the top and email me to let me know you dropped homework.** **Exam corrections** will be due after each exam is returned (if time allows) and are graded as a homework assignment.

Canvas

Our course canvas page will be updated regularly and will contain a variety of items such as: course announcements, class documents, assignments, review resources and much more. Be sure to turn on your notifications if you'd like to be notified about things like new announcements, changes to assignment due dates etc.

You will be expected to check canvas regularly and be aware of announcements made.
Link to Canvas: https://redwoods.instructure.com/

Quizzes

There will be an in-class OR take-home quiz each week there is not an exam. In-class quizzes will be announced at least one class period in advance. For take-home quizzes, you may use your composition notebook, notes and textbook. You **MAY NOT** work with other students in class or get help at the math lab, the LIGHT center or from a tutor. All work shown on quizzes should be your own and should follow the HW guidelines. If I even suspect students work together on a quiz, both parties will receive a score of zero!

Exams and the Final

There will be 2-3 in class exams (45% of grade) throughout the semester and a **required** comprehensive final examination (25% of grade). Every student is REQUIRED to take a cumulative final exam. I will notify the class **at least one week** in advance as to the date of each in-class exam. Before each exam, you will receive a study guide or practice problems. I will schedule a study session before each exam typically outside of class time.

All exams need to be taken in class ON THE DAY OF THE EXAM unless you have made prior arrangements with me to take it early. Be sure to make all travel plans accordingly as there will be <u>no make-ups</u> for missed exams except in extreme or emergency cases (must provide documentation). If you take exams in the LIGHT center, you need to make sure you make an appointment in advance so that you take the final exam at the designated time.
Final Date: Thursday, July 26th 9:00-10:35am

Accommodations

If you have a documented disability or believe you can benefit from any of the services offered by Disabled Student Programs & Services (DSPS), please contact the DSPS office at 476-4280 (phone), 476-4418 (fax), TTY 476-4284 or view their webpage: http://www.redwoods.edu/dsps

Check Your Grade

Students should check grade regularly by accessing the following webpage:

http://users.humboldt.edu/buntina/m50Agrades/grades.html

Students are responsible for checking their grade often and for accuracy. Please come to see me if you have any questions about your grade, are struggling in the course, or find that there are errors/missing assignments (keep all returned work to verify).

To check your grade, you will need to **enter information in the following format:**

> **Username:** Last name, First name
>
> **Password:**   CR student ID number (with **NO** leading zero)

Notice that you must use a capital letter for the first letter in your first and last name. There is also a **comma and a space** between your last and first name and **NO SPACES after your name or ID**. If you enter your information incorrectly, the system will not let you log on. **Email me immediately if you are having problems logging in.**

Faculty Withdrawal of Students

It is the policy of the College of the Redwoods Department of Mathematics to exercise a "Faculty Withdrawal" for any student who has missed more than 15% of the class meeting time (~5 days) due to the severely diminished likelihood of a successful course outcome.

It is important to note that, if it is the student's intention to withdraw from the course, the responsibility remains with the student to ensure the proper paperwork has been filed – that is, students are not to assume the teacher will file the "Withdrawal" automatically.

How to Succeed in this Course

- ✓ Read your text. It is best if you read the section of the text ahead of the scheduled lecture date on that topic.
- ✓ Be in class on time every day.
- ✓ Do your homework! Plan to spend at least 1-2 hours outside of class for every hour inside of class. That is the minimum investment of time for success in this course.
- ✓ Work with classmates. Mathematics is a social subject (but not a spectator sport). Working with fellow students helps in your own understanding of the ideas of the course.
- ✓ READ and KEEP your returned work. When you get work back, look for any remarks that I have made. Keep your work in a binder to keep a record of your scores. This is to make sure I correctly enter your grades.

Tutoring Options – Improve Course Success!

The Math Tutoring Lab:

The math lab is located in the ASC in back of the Library. Sign up in webadvisor & show up first week of class to fill out paperwork. **Sign up in webadvisor for one of the courses below & show up first week of class to fill out paperwork.** Course options:

- **MATH 252** Open Mathematics Lab (CRN 046246). This is a FREE, no credit option to get drop-in math tutoring in the math lab. **If you do not need units** or you want math help but cannot fulfill hour requirements for mathlab, then this is the option for you!

- **MATH 52L** Math Lab for Transfer Level Mathematics. Register in webadvisor for this for-credit drop-in tutoring course held in the math lab. Available for .5 unit (22.5 hours ~ 1.5 hrs a week req) or for 1 unit of credit (45 hours ~ 3 hrs a week req). Math lab is located in the ASC in back of the Library.

Other Tutoring Options:

- **FREE ASC tutoring** by appointment. Call **707-476-4106 or 707-476-4154.**
- **EOPS Tutors.** You must be part of EOPS (Extended Opportunity Programs and Services) to receive this tutoring. Please contact your EOPS couselor to set up tutoring. If you are unsure if you are eligible for EOPS, call them at **707-476-4270** check out their webpage: https://www.redwoods.edu/eops
- **LIGHT Center Tutoring.** Please contact the LIGHT center if you are interested in their tutoring services. There is a GUID course you must enroll in to receive services. **Phone:** 707-476-4290   **Webpage:** https://www.redwoods.edu/dsps/Light-Center
- **OPTIMATH** practice assignments give immediate feedback and written out solutions: http://msenux2.redwoods.edu/cgi-bin/online/s18/OTportal.cgi
- The **CR Math Jam** webpage is a great way to prepare for exams and contains lessons as well as OPTIMATH assignments: http://msenux2.redwoods.edu/mathjam/?s=public
- **Private tutoring** is always an option but is of course more costly. If you are interested in hiring a private tutor, let me know and I will ask around to see if I can find anyone!

Final words

A few words about my expectations for you and myself in this course: My responsibilities include coming to class prepared to teach you mathematics, giving clear lectures, assigning carefully chosen homework problems that are relevant to our course and carefully preparing exam questions that accurately measure your progress in the course. Additionally, I am responsible to be available to you outside of class for consultation in office hours (by appointment…just email me ☺).

Likewise, I believe that you are ultimately responsible for your college education and I expect you to come to class motivated to learn the material. This involves keeping up with homework assignments, seeking additional help, either from me or from the many resources available to you here on campus, before it is too late.

Announcements will be made in class and often followed up in Canvas. When absent, students are expected to check email, Canvas, and/or with fellow classmates!

<u>Useful Resources & Links</u>

Open syllabus thru canvas to click links directly

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FREE College of the Redwoods Textbooks

Prealgebra Textbook (Math 376):   http://msenux2.redwoods.edu/PreAlgText

Elementary Algebra (Math 380):   http://msenux2.redwoods.edu/ElemAlgText

Intermediate Algebra (Math 120): http://msenux2.redwoods.edu/IntAlgText

***Some of the more advanced classes have books on reserve in the library and some of them can be checked out for use for the entire semester. Ask your instructor and/or the library depending on what course you are enrolled in. ***

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Useful Online Studying/Tutorial Sites

College of the Redwoods Math Review Page (for Self-Paced Review):
http://msenux2.redwoods.edu/mathjam/

KUTA worksheets with solution keys (Prealgebra to Algebra II, & Geometry):
http://www.kutasoftware.com/

Videos on MANY math topics (Prealgebra to Calculus):
http://www.onlinemathlearning.com/calculus.html

Tutorials created by students for students (Elementary Algebra):
http://www.mathpower.com/tutorial.htm

> **Many of the above pages have topic lists down the left-hand side and you have to search for worksheets/videos by topic.**

Khan Academy
http://www.khanacademy.org/

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******************* Syllabus Subject to Change *************************
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Guidelines for Writing Homework

Please follow these guidelines when completing homework assignments.
It makes my grading experience much more pleasant ☺

1. Complete all homework assignments on a **separate sheet of paper.** You **may use both sides** of the paper. Do NOT complete assignments on the pages of your textbook.
2. **Staple** all homework in the upper left hand corner.
3. **Label** your homework with your name, course number, and section number in the upper right-hand corner (see example below).
4. **Copy down original problem and directions** (summarize word problems)!
5. Write your problems in order **DOWN** the page. Please **skip a line** between problems.
6. **Circle**, **box,** or **highlight** your answers to each exercise so I can find your answer quickly.
7. Please use **pencil** when writing your homework, and please write legibly and neatly. Presentation is a component of your homework score. NO PENS!
8. Be sure to **show your work** when solving a problem. A problem with just the answer and no work shown will receive NO CREDIT.
9. **Cut or tear off** any frilly edges on paper torn from a notebook.
10. When creating a graph, you **MUST USE GRAPH PAPER AND A RULER** or you will get a ZERO on the assignment.
11. If you are ever given two assignments due on the same day make sure complete them, and **staple them SEPARATELY**.

Staple in upper left corner.

<div align="right">
Ima Student
Math 50A
1.2
</div>

HW 1.2: 4, 11, 20, 41

4. Solve $-26x + 84 = 48$

$$-26x + 84 = 48$$
$$-26x = \text{-36}$$
$$\boxed{x = \frac{36}{26}}$$

11. Solve $19x + 35 = 10$

$$19x + 35 = 10$$
$$19x = -25$$
$$\boxed{x = -\frac{25}{19}}$$

20. Solve $-8 - 8(x - 3) = 5(x + 9) + 7$

$$-8 - 8(x - 3) = 5(x + 9) + 7$$
$$-8 - 8x + 24 = 5x + 45 + 7$$
$$-8x + 16 = 5x + 52$$
$$-13x = 36$$
$$\boxed{x = -\frac{36}{13}}$$

41. Solve $Ax + By = C$ for y

$$Ax + By = C$$
$$By = C - Ax$$
$$\boxed{y = \frac{C - Ax}{B}}$$

Reference Book Guidelines
Math 50A – Summer 2018

Purpose:

- helps you **study for exams** by *re-writing* in-class notes and determining what information is important to YOU.
- **improves overall organization** of notes.
- Include/organize class handouts
- can be very useful in your **future math courses**!

Requirements:

- You should purchase a **graph paper composition notebook** OR **binder with lined/graph paper** OR a regular spiral bound notebook with graph paper.
- This book should be **SEPARATE from your in-class notebook** (unless class notebook is approved).
- **Write your name and CONTACT INFO inside of front cover/cover page**. In case you lose your book, you should have your name and an email address or phone number or address.
- **Skip at least 3 pages** in the beginning of your book for a **Cover Page and Table of Contents** (more if you write big). You should include description of the material you have written on a page, and page number (see the table of contents of your textbook or any book).
- **Number your pages** in the top right, or lower left.
- **Summarize concepts** you have learned using your own words.   Make notes to yourself about strategies used, proper notation and your common mistakes.
- You must **write "a little something" from EACH section**. Even if you "know it already." At the end of the semester, come the last exam, things that you know in the beginning of the semester, you may no longer recollect.
- Your reference book will be **collected DURING Exams** and graded (activities category).

Helpful Hints:

- **<u>Do a little bit at a time.</u>** Do not try to cram everything in there the night before an exam. Have your book out when you are doing homework and maybe jot down a particularly challenging example you encounter. In class, sometimes I will say "you might want to put this in your comp book." Put a star by that info and copy it into book **right after** of class so you remember.
- **<u>Use colors!</u>** Maybe write/highlight definitions in green, examples in purple, important things to remember in red...and so on. Be creative!
- **<u>Don't write/highlight too much</u>** as it will be difficult to find what you're looking for when using it as a reference.
- **<u>Make it YOURS!</u>** Use colors, doodle in it, make it pretty and keep it neat :)

Late Work Pass #3

Math 50A
Summer 2018

Name _____

Assignment _____

Value   ONE homework to be handed in late without penalty before Exam

Date   _____   Authorized By   Miss Amber Buntin

***May be used to hand in one late homework assignment. Cannot be used for in-class activities, big projects, quizzes, or exams. Not transferable to other students. Must be redeemed BEFORE the exam that contains information on the homework section that is late. Limit 3 per student per semester! Staple to front of assignment!

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Late Work Pass #2

Math 50A
Summer 2018

Name _____

Assignment _____

Value   ONE homework to be handed in late without penalty before Exam

Date   _____   Authorized By   Miss Amber Buntin

***May be used to hand in one late homework assignment. Cannot be used for in-class activities, big projects, quizzes, or exams. Not transferable to other students. Must be redeemed BEFORE the exam that contains information on the homework section that is late. Limit 3 per student per semester! Staple to front of assignment!

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Late Work Pass #1

Math 50A
Summer 2018

Name _____

Assignment _____

Value   ONE homework to be handed in late without penalty before Exam

Date   _____   Authorized By   Miss Amber Buntin

***May be used to hand in one late homework assignment. Cannot be used for in-class activities, big projects, quizzes, or exams. Not transferable to other students. Must be redeemed BEFORE the exam that contains information on the homework section that is late. Limit 3 passes per student per semester! Staple to front of assignment!

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