

Syllabus for Math 50A ~ Differential Calculus

Course Information

Semester & Year:	Spring 2022
Course ID & Section #:	Math 50A ~ Section Number V2907
Instructor's name:	Amber Buntin
Day/Time of *optional* meetings:	Tuesdays/Thursdays Noon – 1pm via Zoom
Number of proctored exams:	Final Exam will be proctored.
Course units:	4 Units

Instructor Contact Information

Office location or *Online:	Zoom: https://redwoods-edu.zoom.us/j/91506713385
Office hours:	Mon/Wed Noon-1pm, via Zoom, or on Campus, OR Canvas message to meet up!
Phone number:	707-476-4207
Email address:	Amber-Buntin@redwoods.edu

Required Textbook

Textbook title:	Calculus, Volume 1 – OpenStax
URL:	https://openstax.org/details/calculus-volume-1
Author:	Gilbert Strang & Edwin Herman
ISBN:	Print ISBN: 193816802X, Digital ISBN: 1947172131

Other Requirements

Reliable access to the internet and a computer/laptop is essential to your success in this course since all course material will be delivered and all assignments will be submitted online. Graphing calculator required; TI 83/84 graphing calculator (or comparable app) recommended. See additional required course materials in syllabus below.

Catalog 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. Note: A graphing calculator is required. CSU and UC Transferable.

Course Student Learning Outcomes (*from course outline of record*)

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, and interpret the derivative as a rate of change
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. Graph functions using methods of calculus.
5. Evaluate a definite integral as a limit.

Evaluation & Grading Policy

Please see weighted grade policy in syllabus below.

Prerequisites/Co-requisites/Recommended Preparation

Student must pass MATH-30 – College Algebra **AND** MATH-25 – Trigonometry with a C or better.

Canvas Information

Our course canvas page will be updated regularly and will contain a variety of items such as: course announcements, class documents, 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. If you find you are getting too many (or too few) announcements, remember this is an individual setting that you must modify in Canvas. I can help to adjust your settings...just ask! **You will be expected to check canvas daily and be aware of announcements made.**

Log into Canvas at <https://redwoods.instructure.com>

Password is your 8-digit birth date

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas Help for students: <https://webapps.redwoods.edu/tutorial/>

Canvas online orientation workshop: [Canvas Student Orientation Course \(instructure.com\)](https://redwoods.instructure.com/canvas-orientation)

Student Feedback Policy

- The instructor will maintain frequent contact with the class and will respond to questions within 48 hours, unless announced absence to due illness, etc.
- The instructor will be part of the discussion forums, providing feedback and discussion prompts.
- Lecture videos, notes, and practice problems will be provided for learning course material. These materials will be created by me as well as off of respectable you tube channels.
- Students will receive feedback on online homework instantly.
- Homework, discussion forums, and quizzes are typically graded within 2 weeks of the due date.
- Exams will typically be graded within 3 weeks of the due date.

Student Support Services

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful.

Check out the following webpage for details about student support services at CR:

<https://www.redwoods.edu/services>

Community College Student Health and Wellness

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges [Health & Wellness website](#). **[Wellness Central](#) is a free online health and wellness resource that is available 24/7 in your space at your pace.** Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact [Admissions & Records](#) to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. It does not change your legal name in our records. See the [Student Information Update form](#).

Academic Dishonesty

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. 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](#).

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or [Disability Services and Programs for Students](#) (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

Emergency Procedures and Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones. Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up to date by logging into WebAdvisor <https://webadvisor.redwoods.edu> and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions. For more information see the [Redwoods Public Safety Page](#).

Admissions deadlines & enrollment policies

Spring 2022 Dates

- *Classes begin: 01/15/22*
- *Last day to add a class: 01/21/22*
- *Martin Luther King, Jr's Birthday (all campuses closed): 01/17/22*
- *Last day to drop without a W and receive a refund: 01/28/22*
- *Census date (or 20% into class duration): 01/31/22*
- *Last Day to file P/NP (only courses where this is an option) 02/11/22*
- *Lincoln's Birthday (all campuses closed): 02/18/22*
- *Presidents Day (all campuses closed): 02/21/22*
- *Last day to petition to graduate or apply for certificate: 03/03/22*
- *Spring Break (no classes): 03/14/22-03/19/22*
- *Last day for student-initiated W (no refund): 04/01/22*
- *Last day for faculty-initiated W (no refund): 04/01/22*
- *Final examinations: 05/07/22-05/13/22*
- *Semester ends: 05/13/22*
- *Grades available for transcript release: approximately 05/30/22*

Online Math 50A ~ Differential Calculus

Online Course in [Canvas](#) – (Course number 052907)

Instructor Contact Info

Amber Buntin, Professor of Mathematics

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

Phone: 707-476-4207

Office Hours Schedule: Mon/Wed Noon-1pm OR Canvas/Pronto message me to meet up!

Office Hours Zoom Link: <https://redwoods-edu.zoom.us/j/91506713385>

Meeting ID: 915 0671 3385

Course Delivery

This course is delivered and taught 100% online; there are NO *required* class meetings. Students are required to watch video lectures, participate in online discussions and submit coursework through [Canvas](#). There will be weekly zoom sessions **Tues/Thurs Noon-1pm (starting the second week of class)** that students are encouraged to attend for homework help and/or extra examples of recent material. These meeting will be recorded and posted for folks who cannot meet synchronously. **Assignments/schedule will be posted in our canvas shell.**

Virtual Presence and Participation

Virtual presence and participation are essential to the learning process as material builds daily in the canvas shell. Communication among you, your classmates and myself will occur almost daily in discussion forums and virtual zoom meetings. An important aspect of this course is the incorporation of active learning, including taking notes from video lectures, completing worksheets, activities, and quizzes and working with others. We will incorporate all of these in our online classroom. It is important that you communicate, participate, ask questions (lots of ‘em), dialog with classmates in discussions etc!

It is also essential to our class that both the students and teacher behave in the virtual world (Canvas) in a manner that will provide a comfortable learning atmosphere. **You are expected to be courteous to each other and to the instructor. You should not hesitate to ask questions nor feel embarrassed to ask for help in the canvas course or in live zoom sessions.**

Confirm Presence in Online Classroom

Log in to Canvas and **post to the “Introduce yourself!” discussion forum no later than 11:59pm on Wednesday January 19th, 2022, to confirm your presence in the online classroom. Doing so will confirm your enrollment in the course and avoid being dropped as a “no show.”** No exceptions will be made. A student from the waiting list may then be added in your place.

Weighted Grades

Online Homework/Activities.....	15%	93-100%.....	A
Written Homework.....	15%	90-92%.....	A-
Discussions/Video Check-ins.....	5%	88-89%.....	B+
Quizzes.....	10%	83-87%.....	B
Exams	30%	80-82%.....	B-
Final Exam.....	25%	78-79%.....	C+
		70-77%.....	C
		0-69%.....	D-F

Covid Protocols and Procedures

Although our class meets online, you may want to visit the CR campus and therefore need to ensure you are familiar with the policies and procedures related to all things Covid-19. **Things you *may* want to come to the CR Eureka Campus for include**, but are certainly not limited to, checking out resources from the library, receiving face-to-face tutoring, using resources such as computer or proctored testing in the library, attending instructor office hours face-to-face and more!

Resources:

- **Covid Quick Reference Sheet:** [Student Quickfacts Spring 2022.pdf](#)
- **Covid On-Campus Vaccine Mandate:** [Vaccine Mandate Information - Spring 2022.pdf](#)
- **Covid Rules Summary:** [College of the Redwoods COVID-19 Rules Summary.pdf](#)
- **Download the CR App:** <https://www.redwoods.edu/App?fbclid=IwAR1IZKHQCfEhMwcsRsskEKR3FneHAhuUru-bcU-x9SB8EhY8k4lnKreQICc>
- **Full COVID Announcements and Resources Page:** <https://www.redwoods.edu/Covid-19>

If you have any questions or are unsure of the protocols, please reach out to me to get your questions resolved. If you have tested positive or suspect you've been exposed to COVID-19, please notify me immediately so that proper quarantine protocols can be followed.

Required Materials

Textbooks:

Good news: your textbook for this class is available for **free online, in web view and PDF format!** You can also purchase a print version, if you prefer, via the CR bookstore or from OpenStax on [Amazon.com](#).



Calculus Volume 1, OpenStax

Print ISBN: 193816802X

Digital ISBN: 1947172131

FREE e-book (access online):

www.openstax.org/details/calculus-volume-1

Textbook as a downloadable PDF:

[Calculus Volume 1 - OpenStax.pdf](#)

Printed textbook on Amazon:

[Link to Paperback Version](#)

Other Materials:

- Reliable, daily access to internet, a computer/laptop
- Camera and/or smartphone/tablet capable of taking photos
- Lined paper and graph paper
- Pencil, erasers, and straight edge
- Binder or composition/spiral notebook (used as a **reference book** for notes),
- DESMOS Graphing APP: <https://www.desmos.com/>
- Graphing calculator is required (TI-83+ or TI-84 recommended) and available to **check out for FREE for the semester** through the library or you can download a comparable app to your device/computer.
 - **Calculate84** is a good, comparable APP that should be in the app store on both Apple and Android devices: <https://www.calculate84.com/>

Technology Requirements

You should have high-speed internet (such as broadband) service from cable, DSL, or satellite providers as there are videos that require this speed. You need to have reliable access to the internet for the duration of the course. Anticipate problems with your computer and internet access (including power outages) by not waiting until the last minute to submit assignments. It is your responsibility to meet the class deadlines.

Portable Devices vs. Computers:

Although you can use up-to-date portable devices (such as Android or iOS phones & tablets) for some things, you should plan on doing the majority of your work (especially exams and assignments) from a reasonably up-to-date notebook or desktop computer (Mac or PC). **Do NOT plan to participate in this class solely from a portable device.** If you do decide to use your portable device for *some* of your class work, use the free Canvas app (called “Canvas by Instructure - STUDENT”) available in APP Store (for iOS) and the Google Play Store (for Android). You may also connect to Canvas using a web browser on a portable device, but it can be a bit finicky. Your experience with Canvas will be a lot better using the app.

Student Commitment

Your commitment will require at least as much time as you dedicate to a traditional class. College of the Redwoods instructors are required to provide at least 54 hours of “work” during the semester for each unit of credit. Since this is a 4-unit course, you should expect to spend at least 216 hours on this course this semester. **This works out to about 15 hours of effort on average each week.** Additionally, while I try to keep the workload evenly distributed during the semester, there may be some weeks which require more time than others depending on which assignments or activities are assigned that particular week.

Types of effort required for success:

- participate in cooperative learning activities/group work
- carefully read online lectures and textbook chapters
- participate in online activities and watch online videos
- complete online and written homework
- participate in online discussions, and
- complete weekly quizzes

Conscientiousness, attention to details, and skills in reading and writing are critical for success.

Computer Skills:

Online courses require adequate computer skills. You must be able to:

- navigate the course Learning Management System ([Canvas](#))
- receive and respond to your [CR email](#)
- download and upload files to the Canvas
- convert written work to a PDF file
- use an online homework system MyOpenMath (MOM)

It is your responsibility to meet the technological demands of the course.

Homework and Activities

Online and written homework and activities will be assigned throughout the semester. Homework will be assigned and due around 3 days per week in order to get through all of the necessary material. You are encouraged to work collaboratively on your homework but be sure that you do NOT COPY other students' work. **We will have access to an APP called Pronto (download from APP store and login with CR email) where you can meet up virtually with others from class.** At the end of the semester, your 3 lowest homework scores will be dropped from your grade.

Online Homework:

Online homework will be assigned and completed in a FREE online homework site called MyOpenMath (MOM). **The online assignments will provide for the following incentives:**

- **Integrated in Canvas** for instant feedback/grading (single sign-on).
- Ability to submit answers multiple times to improve score.
- Infinite set of practice problems/solutions for studying after due date.
- I will set up individual/small group tutorials **if needed** to make sure students have ample support for MOM.
- **Late online work policy:** Late passes for online homework can be used up until the Exam that contains that lesson and will extend the assignment due date for an additional 7 days (but not past exam date).

Written Homework:

Written homework will be due with nearly every MOM assignment.

Grading Rubric for HW: Written assignments will be graded mainly on neatness, proper notation, and completeness and deductions will occur if I notice multiple incorrect answers or errors or incomplete assignments. **Please see "Written Homework Guidelines" section for further details about expectations.**

- **For *most* online MOM assignments, I will select a few MOM problems for you to write up solutions for** and scan and post by the due date as a PDF file.
- Written work will typically include material covered in recent homework/notes/activities.
- In addition to written solutions to online HW, problems may be assigned from the textbook. Check answers to ODD numbered problems in the back of the textbook and to help with even-numbered problems.
- **Late written work policy:** Written work is due the same day as the online HW. **There is a grace period to submit written assignments up to 5 days late with NO PENALTY.** After this point, no late written work will be accepted except for in the event of an emergency.

Activities:

- We will have activities in this class. Activities will consist of worksheets, activities, presentations and DESMOS activities. Some will be group activities, and some will be individual activities.
- Please create a DESMOS account using your full name: <https://www.desmos.com>

Quizzes

There will be quizzes nearly every week delivered in our canvas shell that will typically be due Sunday by 11:59pm. Quizzes will contain both an online and written portion (scan and submit written work). You **MAY NOT** work with other students from class nor get help at the math lab or from a tutor or anyone for that matter. All work shown on quizzes should be your own and should follow the HW guidelines. **If I suspect students have worked together on a quiz, all parties will receive a score of zero and may be reported to the dean of students for further consequence.**

Exams and the Final

There will be 4 class exams (30% of grade) throughout the semester and a required, proctored, comprehensive final examination (25% of grade). I will notify the class at least one week in advance as to the date of each exam. Before each exam, you will receive practice problems.

If I suspect students have worked together on an exam or used an online APP to help them solve problems on the exam, all involved parties will receive a score of zero and may be reported to the dean of students for further consequence.

All exams need to be submitted by the due date/time as announced in our class schedule and Canvas calendar. **No late exams will be accepted. It is your responsibility to ensure (and confirm) all exam problems have been completed and that the scan that is submitted includes ALL pages.**

Be sure to make all travel plans accordingly as there will be no make-ups for missed exams except in extreme or emergency cases (must provide documentation). Every attempt will be made so **Exams are graded within 3 weeks of all members of class completing the exam.**

Exams:

- 3-Hour time limit
- Online and written portion
- Open notes/book
- Not proctored

Final Exam:

- 4-Hour time limit
- Online and written portion
- Open notes/book
- Proctored

The Final Exam will be given in Canvas during finals week ~ May 9th~ 12th

Testing Accommodations

If you are already approved for accommodations through Disabled Services & Programs for Students (DSPS) then please submit your paperwork to me **during the first or second week of class** to and let me know of any accommodations you are granted. Many times, your DSPS counselor will be able to email this document directly to me!

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 (~8 days) due to the severely diminished likelihood of a successful course outcome. Missing 1 or more assignments/classes in the first two weeks of school may result in withdrawal as well. For an online course, I base this off of your participation in the course. If I notice you have stopped engaging in our course (no discussion posts, and/or no assignments being worked on), I will ask if you intend to remain enrolled in the course and *may* drop you from the course if I do not hear back. It is important to note that, if it is your intention to withdraw from the course, you are responsible to ensure the proper paperwork has been filed – that is, you **should NOT assume the teacher will file the "Withdrawal" automatically.**

Tutoring/Support Options – Improve Course Success!

- **FREE ASC tutoring!** Call 707-476-4154. Check out their webpage for more details: <https://redwoods.libguides.com/Tutoring>
- **NetTutor** is available in our Canvas shell on the menu on the left once you enter our course.
- **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>
- **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!
- **Tech Support for Students:** The student tech help desk is located at the Eureka campus inside the CR library, students may drop in during open hours for in person tech help.
Webpage: <https://www.redwoods.edu/sts>
- **Canvas Support for Students:** Get help with all things Canvas!
https://support.canvaslms.com/s/?c_role=student&c_accountId=001A000000KMmj5IAD
- **Mathjam Math Review Courses:**

These late-start, short term, **online review classes** can help to review topics in Prealgebra through Intermediate Algebra. **Search for the following courses in WebAdvisor to register.**

Late-Start Course Dates: 1/22/2021 ~ 5/1/2021

- MATH 301 – Prealgebra Review – 1 Unit
- MATH 302 – Elementary Algebra Review – 1 Unit
- **MATH 303 – Intermediate Algebra Review– 1 Unit**

*****If you'd like to review, but DO NOT want the unit/work obligation, then just look in our course Canvas shell under the module titled "Optional Review Material."**

Final Words

A few words about my expectations for you and myself in this course: My responsibilities include providing course content, assigning carefully chosen homework problems that are relevant to our course and carefully preparing quiz and exam questions that accurately measure your progress in the course. Additionally, I am responsible to be available to you 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 participate regularly, ask questions when needed and do your best to devote time to learning the course material. This involves keeping up with homework assignments, seeking additional help, either from me or from the many resources available to you, before it is too late.

Guidelines for Written Homework

Please follow these guidelines when completing homework assignments on paper/digitally.

It makes my grading experience much more pleasant ☺

1. Complete all written 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. **Label** your homework with your name, course number, and section number in the upper right-hand corner (see example below).
3. **Copy down original problem and directions** (summarize word problems)!
4. Write your problems in order **DOWN** the page. Please **skip a line** between problems.
5. **Circle, box, or highlight** your answers to each exercise so I can find your answer quickly.
6. Please use **pencil** when writing your homework, and please write legibly and neatly. Presentation is a component of your homework score. Erasable are acceptable too!
7. Be sure to **show your work** when solving a problem. A problem with just the answer and no work shown will receive NO CREDIT.
8. **Cut or tear off** any frilly edges on paper torn from a notebook.
9. When creating a graph, you **MUST USE GRAPH PAPER AND A RULER**, or you will get a ZERO on the assignment.

Ima Student
Math 50A
Section 1.2

HW 1.2: 4, 11, 20, 41

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

$$\begin{aligned} -26x + 84 &= 48 \\ -26x &= -36 \\ x &= \frac{36}{26} \end{aligned}$$

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

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

11. Solve $19x + 35 = 10$

$$\begin{aligned} 19x + 35 &= 10 \\ 19x &= -25 \\ x &= -\frac{25}{19} \end{aligned}$$

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

$$\begin{aligned} Ax + By &= C \\ By &= C - Ax \\ y &= \frac{C - Ax}{B} \end{aligned}$$

***** Syllabus Subject to Change *****

Announcements will be made in Canvas.

Students are expected to check email, Canvas, and/or with fellow classmates concerning missed work!