Calculus I
Math 170
Spring 2025; MTWTF 8:00-8:50 am

Instructor: Jennifer Nordstrom

Office: Taylor 205

Phone: x2654

Email: jfirkins@linfield.edu

Drop in hours: MWF: 1:00-3:00; R: 9:00-10:00. I am also often available outside of these hours. Please feel free to drop by, or talk to me about an alternate meeting time.

Text: Text: *Active Calculus*, M. Boelkins, et. al..

This is an open source text available as a free download at https://activecalculus.org/acs/

We will also be accessing the text through Runestone Academy, https://landing.runestone.academy/. You will need to create a free account on Runestone. When you register on Runestone you will need to enroll in our course: linfield_activecalc_spring25.

You may find the print version of the workbook helpful in class.

Tentative Schedule:

Week 1	Intro	Week 5	2.2	Week 9	3.1	Week 13	5.2
	Review		2.3		3.2		5.2
	Review		2.3		3.3		5.3
	1.1		2.4		3.3		5.3
	Quiz 1		Quiz 3		3.4		6.1
Week 2	1.2	Week 6	2.4	Week 10	3.4	Week 14	6.1
	1.2		2.5		3.4		6.2
	1.3		2.5		4.1		6.2
	1.3		2.5		4.1		5.2
	1.4		2.6		Quiz 5		Quiz 7
Week 3	1.4	Week 7	Break	Week 11	4.2	Week 15	2.8
	1.5		Break		4.2		2.8
	1.5		Break		4.3		2.8
	1.6		Break		4.3		Reading Day
	Quiz 2		Break		4.3		No class
Week 4	1.7	Week 8	2.7	Week 12	4.4	Friday	
	1.7		2.7		4.4	May 30	Final
	1.8		2.7		5.1		Time
	1.8		3.1		5.1		8:00 am
	2.1		Quiz 4		Quiz 6		

Course Objectives:

1. to introduce students to the fundamentals of differential and integral calculus and its applications in the physical and social sciences;

2. to solidify the student's abilities in the use of algebra, trigonometry, and calculus;

3. to develop in the student an appreciation for the foundations of the real number system;

4. to improve the student's problem solving abilities;

5. to increase the student's mathematical maturity and confidence in working through mathematical challenges.

Topics to be Covered: Differential and integral calculus of real functions of one variable. Differentiation techniques, the chain rule, the mean-value theorem, limits and continuity, curve sketching, integration by substitution. Applications of the derivative and integral to physics, economics, social sciences, and geometry.

Preview Activities and Participation: At the start of each section, there is a "Preview Activity." You are required to complete these BEFORE we start the section. To get credit, you need to complete these in Runestone. They are not graded for accuracy, but just for completion.

In addition, we will be working in groups of 2-3 students on in-class activities. Your participation and team-work with your group will also count toward your grade. Each section will have several activities that you will work on with your team. You will work in groups of 2-3 students on the activities. If you are unable to be in class, it is your responsibility to check with your group about what activities you missed.

Homework: Homework will be due two to three times per week. It will be due at **11:00 pm** on the due date. All homework assignments are on Runestone.
I expect you to work on this course outside of class *daily*! It is highly recommended that you work on the homework throughout the week so you have plenty of opportunity to get help. You can request an extension of any homework assignment. All extensions will be for 48 hours from the original due date and time.

Daily Questions: At the start of class almost every day you will be asked to answer (and turn in your answer to) the Daily Questions. These will be questions on previous material. The purpose of these is primarily diagnostic, not evaluative. They will be graded on a pass/ no pass (P/NP) basis. You may receive a NP on eight Daily Questions with no penalty, after that, you will lose 3% of the Daily Question grade for each NP. There are absolutely no make-up questions. A missed Daily Question counts as a NP. It is important to arrive to class on time, as these will only take a few minutes.

Quizzes: Every two weeks there is a quiz (marked on the schedule). You may take a quiz early if you need to miss class. You may retake of any quiz. To do a retake, you must meet with me to talk about the original quiz. Then we can reschedule the retake. The final deadline to retake a quiz is 3 pm on Reading Day, Thursday, May 22. However, it is strongly encouraged that you retake a quiz BEFORE the next quiz. Each quiz may be retaken only once.

Grading:

Preview Activities and Participation:	10%
Homework:	40%
Daily Questions:	10%
Quizzes:	40%

Letter grades correspond to the following percentages:

A-, A:	90-100%
B-, B, B+:	80-89%
C-, C, C+:	65-79%
D:	55-64%

However, I reserve the right to curve the scale.

Advising Information: The prerequisite for this course is Math 150, Precalculus, which is equivalent to a high school course which includes Trigonometry. This course is designed for anyone who would like to learn calculus. It is required of math, physics, chemistry, and computer science majors. It is also recommended for majors in Economics who intend to pursue graduate study and majors in Biology who intend to pursue graduate or medical school.

Cell Phone Policy: Cell phones must be off and put away during class. Laptop computers and tablets are encouraged, as we will be engaging with materials that are available electronically. However, please use them in ways that are focused on the course and the activities of the class.

Academic Integrity Policy: Linfield University operates under the assumption that all students are honest and ethical in the way they conduct their personal and scholastic lives. Academic work is evaluated on the assumption that the work presented is the students own, unless designated otherwise. Anything less is unacceptable and is considered a violation of academic integrity. Furthermore, a breach of academic integrity will have concrete consequences that

may include failing a particular course or even dismissal from the university. Violations of academic integrity include but are not limited to the following:

Cheating: Using or attempting to use unauthorized sources, materials, information, or study aids in any submitted academic work; changing answers after graded work has been returned; making unauthorized changes to an exam, quiz, or assignment.

Plagiarism: Submission of academic work that includes material copied or paraphrased from published or unpublished sources without proper documentation. This includes self-plagiarism, the submission of work created by the student for another class unless they receive consent from both instructors.

Fabrication: Deliberate falsification or invention of any information, data, or citation in academic work.

Facilitating Academic Dishonesty: Knowingly helping or attempting to help another to violate the universitys policy on academic integrity.

Any form of academic dishonesty will result in a 0 on that assignment/ quiz/ exam. Additionally, academic dishonesty may result in a failing grade in the course. See the Linfield Academic Integrity Policy (https://catalog.linfield.edu/academic-policies-procedures/undergraduate/academic-integrity/) in the Linfield Catalog for information on the procedure to be used in dealing with academic dishonesty.

Use of AI in Student-Generated Work: Students in this course are expected to avoid the use AI tools, such as Chat GPT and PhotoMath, to generate presentation, quiz, or homework solutions. Any tools used may only be in a manner that contributes to understanding math, rather than avoiding the work necessary to deepen your understanding. Use of such tools, like any other academic work that is not entirely the students own, must be cited. Work for a grade that is not primarily in the students own words and properly cited, will be considered plagiarized. Note, many of the math tools that exist use techniques that are not part of this course. Clear violations of the policy will receive a 0 on the entire assignment/ quiz/ presentation.

Disability Statement: Students with disabilities are protected by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. If you are a student with a disability and feel you may require academic accommodations please contact Learning Support Services (LSS), as early as possible to request accommodation for your disability. The timeliness of your request will allow LSS to promptly arrange the details of your support. LSS is located in Melrose Hall 020 (503-883-2562), or LSS@linfield.edu. We also encourage students to communicate with faculty about their accommodations.

Electronic Recording/ Content Sharing: I may opt to record the classroom activities for instructional purposes and post them to the cloud. The electronic recording of classroom lectures, discussions, simulations, and other course-related activity is governed by Linfields Classroom Recording Policy (Faculty Handbook, VII.26 and Student Policy Guide). Students do not have permission to record any Zoom meetings. Students do not have permission to distribute or share any recorded content from Zoom meetings.

Sexual Misconduct and Relationship Violence & Title IX: Linfield University faculty are committed to supporting students and fostering a campus environment free of sexual misconduct and relationship violence. If a student chooses to disclose to a faculty or staff member an experience related to sexual misconduct, sexual assault, domestic violence, dating violence, or stalking, all faculty and staff are obligated to report this disclosure to the Linfield Title IX Coordinator by emailing titleix@linfield.edu. Upon receipt of the report, the Title IX Coordinator will contact you to inform you of your rights and options and connect you with support services. If you would rather share information about these experiences with an employee who does not have these reporting responsibilities and can keep the information confidential, please visit confidential resources: https://inside.linfield.edu/sexual-misconduct/reporting-options/confidential.html.

For more information about your rights and reporting options at Linfield, including confidential reporting options, please visit inside.linfield.edu/sexual-misconduct/. Support services are offered to all Linfield students regardless of whether or not they report. Still have questions? Email knowmore@linfield.edu.

Commitment to Diversity and Inclusion: Linfield University honors human rights and academic freedom, celebrates diverse cultures, fosters a climate of mutual respect, and promotes an inclusive environment that affirms the value of all persons. Dimensions of diversity can include sex, race, age, national origin, immigration status, ethnicity, gender identity and expression, intellectual and physical ability, sexual orientation, income, faith and non-faith perspectives, socio-economic class, political ideology, education, primary language, family status, military experience, cognitive style, and communication style. In a multi-perspective intellectual space, challenges to our beliefs and ideas are part of the learning process and can provide opportunities for growth. Reasoning, thoughtfulness, and open dialogues that honor the dignity of everyone is expected.