

Calculus II

Math 132-03 Syllabus

Spring 2025

Instructor : Richard Bartels, PhD

Contact Information :

Office Hours: MWF 10:00 - 10:50am, 12:00 - 1:30pm
or by appointment (email to set up)

Office: MECC 227

Phone: 860-297-4244

Email: richard.bartels@trincoll.edu

Lecture : MWF 8:30 - 9:45am Seabury Hall, SH N-129

Textbook : *Calculus* by Laura Taalman and Peter Kohn

Note: The textbook from the bookstore comes bundled with Achieve access for one semester. Achieve is the online homework platform that you will use to complete graded homework assignments. If you buy the textbook elsewhere, it probably **does not** come with Achieve access. You can purchase access to Achieve from Macmillan Learning's website. I will provide more information about purchasing Achieve access once the semester begins.

Grading : Course grades will be assigned in the following way. Your final letter grade will be determined from your numerical percentage grade in the standard way. (... , B 83-86, B^+ 87-89, A^- 90-92,...)

Attendance/Participation :	5%
Homework and Quizzes :	25%
3 Exams :	15% each, 45% total
Final Exam :	25%

Office Hours : You are encouraged and expected to come to office hours whenever you have questions about the course material. This includes material covered in lecture, homework, quiz and exam problems, or related problems/examples from the textbook. If you are unable to make my office hours at any time, please email to set up a different time to meet.

Please read and sign the following declaration regarding academic integrity:

In accordance with Article II of the Trinity College Student Integrity Contract, I hereby pledge that the papers, exams, and other academic exercises I submit for this course will represent my own work; that I will properly acknowledge and attribute any and all information and ideas that I have used from other sources; and that no collaboration unauthorized by the instructor of the course will occur in the course of its completion.

Signature: _____

Date: _____

Tutoring: Drop-in tutoring is available in the Math Tutoring Center (Q-Center), located in MECC 172, Monday through Thursday 4-10pm and Sunday 7-10pm. The schedule and instructions to access tutoring will be made available in the second week of classes and linked from Moodle.

<https://www.trincoll.edu/quantitative-center/tutoring-support/>

Important Dates:

Add/Drop period ends	Tues	Jan 28
Last day to switch to Pass/Fail	Tues	Jan 28
Spring Break - no classes	Mon - Fri	Mar 17-21
Major Declaration deadline for soph.	Fri	Mar 28
Last day to withdraw	Tues	Apr 1
Final Exam period	Mon - Fri	May 5 - 9

Expectations:

- You should expect to spend at least 9-12 hours per week outside of class working on homework assignments, reading the relevant section from the textbook, reviewing your notes and supplemental materials, and seeking help during office hours or at the Math Tutoring Center.
- I expect you to participate in lectures. Your focus should be on keeping up with and understanding the material we are covering. Please ask questions when you don't understand something! If you fall too far behind, take notes and come to office hours.
- You should have a solid understanding of the material from Chapters 0-3 of the textbook (especially limits and continuity in Ch 1, and derivatives in Ch 2) and should seek help at office hours or the Tutoring Center when you identify any weaknesses in your understanding of Calc 1 or Precalc material.

Learning Goals: In this course, we will study integral calculus and its applications (Ch 4-6) as well as sequences and series (Ch 7-8). My goal for the class is to help you gain a strong intuitive, geometric, and formal understanding of important definitions, theorems, methods, and applications. You will work on and study the following:

- (Ch 4) Definite and Indefinite Integrals, The Fundamental Theorem of Calculus
- (Ch 5) Integration Techniques
- (Ch 6) Applications of the Integral
- (Ch 7) Sequences and Series
- (Ch 8) Power Series and Taylor Series
- Communicating mathematics effectively; articulating mathematical ideas and logical thinking using English in combination with proper mathematical definitions, notation, and diagrams.

Missed Exams/Assignments: Under normal circumstances, missed homework, quizzes or exams cannot be made up and will receive a grade of zero. In the event of an unforeseen unavoidable circumstance which prevents you from attending class on the day of a quiz or homework due date, a suitable make-up assignment, or excusal from the assignment will be granted on a case-by-case basis, provided there is written documentation of illness or emergency, or a note from the Dean of Students office.

Homework : One component of your homework grade will be graded problems that I will assign through the online Achieve system. A link to the Achieve course will become available on Moodle within the first week of classes. You are responsible for checking the website for due dates. Typically there will be one assignment for each 1-2 lectures, with 1-2 assignments due each week.

- In addition to the online Achieve assignments, I will assign written homework every 1-2 weeks. Written homework is due at the beginning of class on the due date.
- I encourage students to form study groups and to visit office hours or the Tutoring Center to get help with homework problems. However, you must write your own solutions to assignments.

Quizzes : In-class quizzes will take place roughly every week on Friday during the last 10-15 minutes of class. Quizzes will be announced in advance, along with the sections they cover.

Exams : There will be three **in-class** 75 minute exams during the semester, which have been tentatively scheduled as indicated on the schedule below, and one cumulative final exam. Our final exam has already been scheduled by the registrars office according to the official block schedule for Tuesday May 6, 12:00 - 2:30pm ET.

DO NOT MAKE ARRANGEMENTS TO LEAVE CAMPUS BEFORE THE FINAL EXAM PERIOD IS OVER. NO EXCEPTIONS WILL BE MADE FOR ANY REASON.

Students with Accommodations : Trinity College is committed to creating an inclusive and accessible learning environment consistent with the Americans with Disabilities Act. Students with disabilities who may need some accommodation in order to fully participate in this class are urged to contact the Student Accessibility Resource Center, as soon as possible, to explore what arrangements need to be made to assure access.

If you have approval for academic accommodations, please notify me by the end of week two of classes. For those students with accommodations approved after the start of the semester, a minimum of 10 days' notice is required. Please be sure to meet with me privately to discuss implementation.

Student Accessibility Resources can be reached by emailing SARC@trincoll.edu

Academic Integrity : In accordance with the Trinity College Student Integrity Contract, students are expected to abide by the highest standards of intellectual honesty in all academic exercises. Intellectual honesty assumes that student do their own work and that they credit properly those upon whose work and thought they draw. It is the responsibility of each student to make sure that they are fully aware of what constitutes intellectually honest work in every exam, quiz, homework, or other academic exercise submitted for evaluation in a course at Trinity College. Cheating is dealt with harshly and can result in a score of zero on the exam, quiz, or assignment in question, or a grade of F for the course.

Course Policies :

- **Low Exam Policy :** If your grade on the final exam is better than the grade on your lowest midterm exam, your final exam grade will replace your low exam grade. Note: you must take all three midterm exams.
- **Calculator Policy :** You may use a scientific or basic function calculator during quizzes and exams. You are not allowed to use a graphing calculator during quizzes or exams.
- **Use of Moodle :** I will use Moodle to post links to lecture notes, supplemental and review material, copies of homework assignments, solutions, handouts, etc. Please make sure you are able to access the Moodle site and bookmark it.
- **Use of Email :** I will use trincoll email to make mass announcements. Please make sure that your Trinity email account is working and check regularly for announcements.
- **Grade Policy :** The math department has the policy that the grade of A+ is not awarded in 100-level math courses.

Tentative Schedule :

Week	Monday date	Textbook sections
1	Jan 20	MLK Day - no classes on Monday 4.1 - Addition and Accumulation
2	Jan 27	4.2 - Riemann Sums 4.3 - Definite Integrals
3	Feb 3	4.4 - Indefinite Integrals 4.5 - Fundamental Theorem of Calculus
4	Feb 10	4.6 - Areas and Average Values 4.7 - Functions defined by Integrals
5	Feb 17	Exam 1 - Chapter 4 Trinity Days - no class Thursday - Friday
6	Feb 24	5.1 - Integration by Substitution 5.2 - Integration by Parts 5.3 - Integration by Partial Fractions
7	Mar 3	5.4 - Trigonometric Integrals 5.5 - Integration by Trigonometric Substitution
8	Mar 10	5.6 - Improper Integrals 6.5 - Separable Differential Equations
	Mar 17	Spring break - no classes Monday - Friday
9	Mar 24	Exam 2 - Chapter 5, 6.5 7.1 - Sequences
10	Mar 31	7.2 - Limits of Sequences 7.3 - Series, Divergence Test
11	Apr 7	7.4 - Integral Test 7.5 - Comparison Tests 7.6 - Ratio Test and Root Test
12	Apr 14	7.7 - Alternating Series 8.1 - Power Series 8.2 - Taylor Series
13	Apr 21	Exam 3 - Chapter 7, 8.1 8.3 - Convergence of Power Series
13+	Apr 28	8.4 - Differentiating and Integrating Power Series Last day of classes on Wednesday

The content, policies, assignments, and schedule listed in this syllabus are subject to change. I will announce any changes via Moodle.