

MATH 20100: Calculus I

Instructor: Ryan Utke

Fall, 2023

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Class Hours: M/W 4-5:40pm

Web: ryanutke.github.io/teaching

Class Room: NAC 4/130

Course Description

Limits, continuity, derivatives, differentiation and its applications, differentials, definite and indefinite integrals. Credit will be given for only one of the following courses: Math 20100 or 20500. (Part of sequence 20100, 21200, 21300.) 4 hr./wk.; 4 cr.

Textbook

Stewart: Early Transcendentals (9th ed.), Clegg and Watson. ISBN: 9781337613927.

Prerequisites

Grade of C or higher in Math 19500 or placement by the Department.

Course Objectives

Successful students:

1. Use functions to describe and model real-life situations
2. Differentiate algebraic and transcendental functions
3. Apply derivatives of functions to solve problems involving optimization, rates of change, etc.
4. Antidifferentiate algebraic and transcendental functions
5. Approximate integration with the Riemann sum construction
6. Evaluate elementary integrals using substitution.

Academic Integrity Policy

Academic dishonesty is prohibited in The City University of New York. Examples of such behavior include (but are not limited to): cheating, plagiarism, obtaining an unfair advantage over another student, and falsification of records. For more information, see

<https://www.cuny.edu/it/academic-integrity-policy>

Disability Policy

In compliance with CCNY policy and equal access laws, appropriate accommodations are administered by the Access Ability Center. Students who register with Access Ability, and are entitled to specific accommodations, must request a letter from Access Ability to present to the Professor that states what their accommodations are. If specific accommodations are required for a test, students must present an "Exam Administration Request Form" from Access Ability, at least one week prior to the test date in order to receive their accommodations.

Grading Policy

The grade will count the assessments using the following proportions:

- 5% Attendance
- 10% Homework
- 15% Quizzes
- 30% Midterms (3, drop the lowest)
- 40% Comprehensive Department Final

No calculators are allowed on exams.

Schedule of Topics

(tentative)

Chapter 1	Functions	1 week
Chapter 2	Limits	2 weeks
Chapter 3	Derivatives	4 weeks
Chapter 4	Applications	4 weeks
Chapter 5	Integration	3 weeks

We should cover almost everything, maybe skipping 2.4, 4.8, and adding on 6.1, as time permits.

Midterms are currently planned for September 27, October 30, and November 29, but these dates are subject to change.

Important Dates

Some dates relevant to our class:

- Monday, 09/04/2023 College is closed
- Monday, 09/25/2023 No classes scheduled
- Monday, 10/09/2023 College is closed
- Tuesday, 10/10/2023 Follows Monday schedule
- Wednesday, 11/22/2023 No classes scheduled
- Wednesday, 12/13/2023 No class, finals week starts.