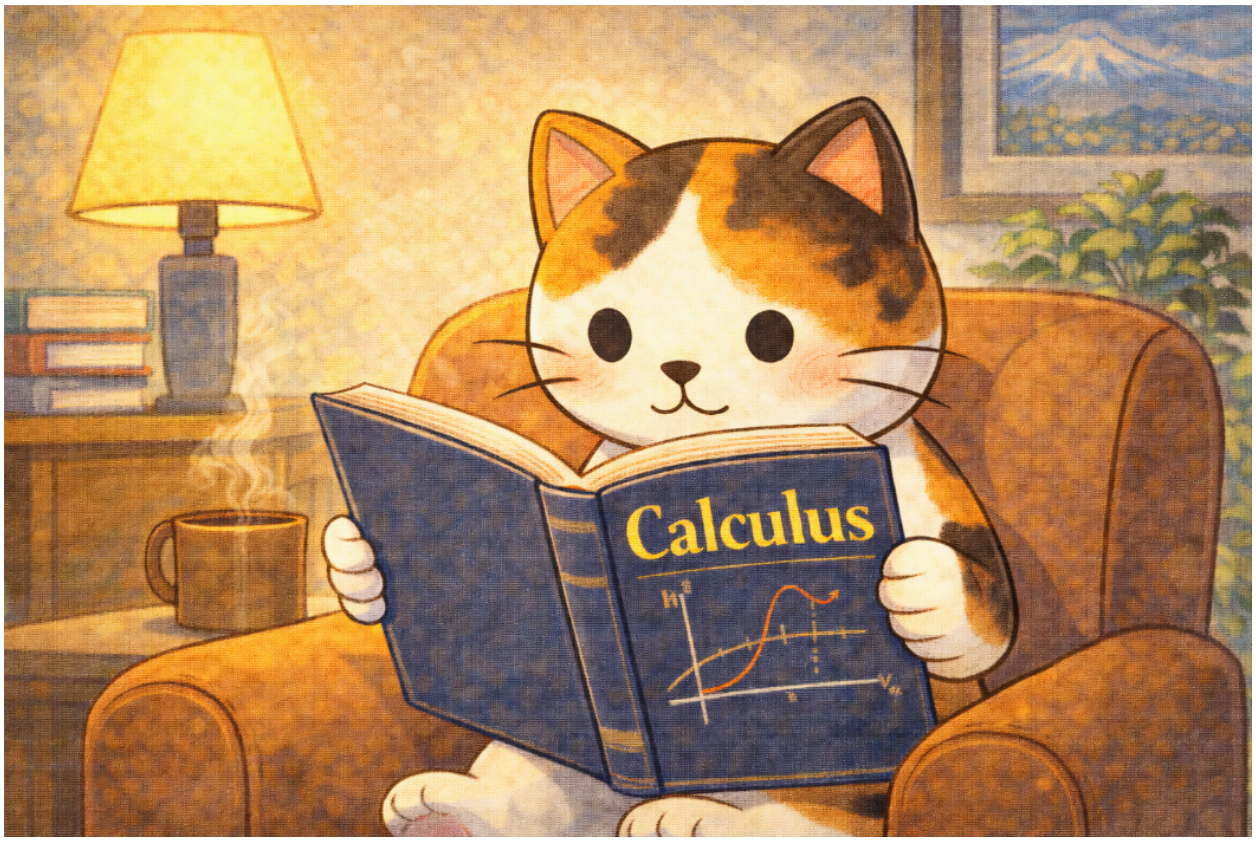
SYLLABUS

NYU

Calculus III 📈 Spring 2026



Course Information

Textbook

Stewart, J. **Essential Calculus: Early Transcendentals**. 2nd Edition w/ WebAssign.

WebAssign License

You will have a two-week grace period from the beginning of the term to purchase and activate a WebAssign license. Licenses can be purchased in one of the following ways:

- through the **NYU Follett ACCESS program**
- as part of a textbook bundle at the **NYU bookstore**,
- online through WebAssign;

Follett Access Details

This course is participating in the Follet Access program. This is an NYU Bookstore initiative that delivers required course materials at the lowest possible price.

All students are automatically enrolled in the Follett Access program. If you decide not to use this digital edition you can opt-out of the program. You must **login here to the student portal**. If you have any questions, contact the bookstore at (212) 998-4656 or **wsq.text@nyu.edu**.

INFORMATION YOU SHOULD KNOW:

- Your username is your school email address.
- If you have opted out of a course, you can opt back in.

Topics (in order)

1. Sec 10.1: Three-Dimensional Coordinate Systems
2. Sec 10.2: Vectors
3. Sec 10.3: The Dot Product
4. Sec 10.4: The Cross Product
5. Sec 10.5: Equations of Lines and Planes
6. Sec 10.6: Cylinders and Quadric Surfaces
7. Sec 10.7: Vector Functions and Space Curves
8. Sec 10.8: Arc Length and Curvature
9. Sec 11.1: Functions of Several Variables
10. Sec 11.2: Limits and Continuity
11. Sec 11.3: Partial Derivatives
12. Sec 11.4: Tangent Planes and Linear Approximations
13. Sec 11.5: The Chain Rule
14. Sec 11.6: Directional Derivatives and the Gradient
15. Sec 11.7: Maximum and Minimum Values
16. Sec 11.8: Lagrange Multipliers
17. Sec 12.1: Double Integrals over Rectangles
18. Sec 12.2: Double Integrals over General Regions
19. Sec 12.3: Integration in Polar Coordinates
20. Sec 12.5: Triple Integrals
21. Sec 12.6: Triple Integrals in Cylindrical Coordinates
22. Sec 12.7: Triple Integrals in Spherical Coordinates
23. Sec 13.1: Vector Fields
24. Sec 13.2: Line Integrals

25. Sec 13.3: The Fundamental Theorem of Line Integrals
26. Sec 13.4: Green's Theorem
27. Sec 13.5: Curl and Divergence
28. Sec 13.6: Parametrizations of Surfaces and Their Areas
29. Sec 13.7: Surface Integrals
30. Sec 13.8: Stokes' Theorem
31. Sec 13.9: Divergence Theorem

Course Structure

1. Watch PreLecture videos before class meetings. Spend time on these videos, pause frequently to try the examples on your own.
2. After the videos, complete the practice problem set at the end of each video.
3. Then complete the PreLecture quiz on Gradescope. **Steps 1-3 must be completed before class meetings at 8:00 am.**
4. If you have time, try a few WebAssign problems to continue practicing.
5. Attend class meetings prepared to start working on more examples that are slightly more difficult.
6. If you still have some WebAssign problems left, this is the time to complete them all.
7. Then complete the Written HW, which is meant to be conceptually more challenging. **It is highly recommended that you complete the Written HW after you have completed all the exercises in the WebAssign HW.**
8. Review the solutions to prepare for the quiz, in addition to all the examples done in PreLecture and Lecture.
9. Then we repeat.

Course Work

WebAssign HW (10%)

- WA homework assignments are **due Mondays at 11:59pm ET.**
- It consists of all topics covered that week.
- **Please do not wait till the last minute to do each assignment; plan ahead of time.**
- You can request an extension of 24 hours on these assignments through WebAssign, so there is no need to request them from the professor.
- Five of your lowest grades will be dropped.
- **Access**: only use the link provided on Brightspace on the left.
- **Attempts**:
    - You can work in any order and for as long as you like until the due date.
    - There are 5 attempts for each free response, 3 attempts for each multiple choice, and 1 attempt for each two-choice question.
- **Technical Issues**:
    - Contact WebAssign directly, or come to office hours to troubleshoot.

Written Homework (10%)

- Question sets will be assigned on a **weekly basis.**
- For full credit on written homework, your answers must be explained and justified, sometimes in complete English (and mathematical) sentences.
    - You may lose points for unexplained or poorly presented answers.
    - Feel free to work on homework in groups, but try the questions yourself first. Put the write-up into your own words. **Do not copy others' work or AI's work.**.

    - Please refer to the Academic Integrity specified by the university and CAS (**https://cas.nyu.edu/content/nyu-as/cas/academic-integrity.html**)

- They are due on **Thursdays at 11:59 p.m.** **via Gradescope**, unless otherwise specified.
- **Late and emailed homework will not be accepted.**
- Two of your lowest homework grades will be dropped.

Weekly Quizzes (15%)

- Quizzes will be administered via Gradescope.

Pre-Lecture Online Quizzes (5%)

- Pre-Lecture Quizzes will be administered via Gradescope.
- You are required to watch videos before each lecture.
- These videos are brief introductions to the topics of each class.
- Then there is a mini-quiz to assess what you have watched, via Gradescope, with a combination of questions graded by completeness and correctness.
- Both the pre-lecture videos and the questions must be done before each lecture.

Post-Lecture In-person Quizzes (10%)

- Post-Lecture Quizzes will take place every week during recitation.
- Quizzes are timed for 20 minutes; no resources are allowed during the quiz.
- The topics for each quiz are typically the material covered the week before.

Exams (65%)

There will be **two midterm exams (40%)**:

- **(20%) MIdterm 1**
- **(20%) MIdterm 2**

and **one final exam (25%)** that is *cumulative*:

Please mark your calendar, as these dates will not change, and make your travel plans accordingly. **Travel is NOT an excuse to miss any exam.**

Exams will be conducted in person, no exceptions.

Exams will contain a mixture of computational and conceptual problems. Some of them will resemble homework problems, while some will be brand new to you. The exams will be a mixture of multiple choice and free response problems.

Course Grade

The items above will be averaged with the following weights:

WebAssign HW	10%
Written HW	10%
PreLectures	5%
Weekly Quizzes	10%
Midterm Exam	40%
Final Exam	25%

Letter Grades

We will convert course grades to letters based on departmental scales:

Grade	A	A-	B+	B	B-	C+	C	D	F
Range	[100,93]	(93,90]	(90,87]	(87,83]	(83,80]	(80,75]	(75,65]	(65,50]	<50

Course Policy

The following are minor and technical rules and policies that will not seem necessary at the beginning of the course. I do not like to dwell on them because they distract from my goal and yours, which is engaging in the course material as soon and as much as possible. However, you should read them and we will abide by them. Some of this may sound a little snarky, and I apologize in advance for that, but all of these issues happen enough that they should be addressed.

1. Attendance:

Students are expected to attend lectures in person.

2. Assignments, extensions, and drops:

All assignment due dates are stated beforehand. You are responsible for turning in your HW on time.

In computing the final grade, we will drop:

two of the lowest (2) weekly written homework assignment

five of the lowest (5) WebAssign assignments

four of the lowest (4) pre-lecture test

two of the lowest (2) weekly quizzes.

3. Exams:

Exams will contain a mixture of multiple-choice and free response questions. The final is cumulative.

- You are not allowed to use any resources during the exam. The exams are closed-book.
- You are not allowed to use any form of calculators.

4. Makeups:

If you miss a quiz or test for medical reasons, inform me **before** the quiz/test that you will be seeking medical attention. Quizzes and tests must be made up in a timely manner (at the discretion of the instructor), except in extreme emergency situations involving extended medical care. Otherwise, the quiz or test will be scored as zero.

5. Returns and Regrades:

All assessments will be submitted, graded and returned via Gradescope.

If you have a question about how a problem was scored, please ask and I will look into it.

The score on an assignment, quiz, or test is considered **final** *three (3) university business days after it is returned*.

6. Religious Holiday:

If you need to miss class or turn in an assignment late in observance of a religious holiday please let me know in advance.

7. Extra Tutoring:

The Math Department offers free tutoring for the foundational math courses. The schedule can be found here:
http://www.math.nyu.edu/degree/undergrad/tutor_schedule.html
The University Learning Center (ULC) also provides free tutoring for a selection of math courses. More information can be found here:
http://www.nyu.edu/ulc .

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Academic Integrity

All students are expected to abide by the CAS Honor Code to be found in the Academic Policies page (**https://cas.nyu.edu/content/nyu-as/cas/academic-integrity.html**), and should be familiar with the procedures for prosecuting it and the possible consequences. The following are also considered violations of academic integrity (though there are others): obtaining help from another person or from the internet during quizzes and exams; not properly crediting others' help or discussions with others in homework submissions, and submitting work that is not your own. As much as possible, we will make our expectations clear. If you are not sure if something constitutes misconduct, please do not hesitate to ask me.

I would not list these if they had not been tried. Cheating is unfair to your fellow students, to me (I work very hard and take my job seriously, and am personally offended by cheating), and to yourself. Penalties can range from a zero on the assignment, quiz, or test, to an F in the course.

Violations will also be reported to the Dean for Students, and can lead to probation, suspension, or expulsion.

Please also abide by the NYU policy on illegal downloading of copyrighted material: don't (**A Note on Illegal Downloading**)

Diversity, Equity, and Inclusion

As an instructor, I will strive to create a safe, respectful, and inclusive environment for all students regardless of their identity. I recognize and value diversity inside and outside of the classroom, and recognize that each student has a unique contribution to make and brings with them different strengths and weaknesses. I welcome your ideas for how to promote a better understanding and deeper learning in this class as a community. Please feel free to ask questions, to participate in discussions, and to suggest new approaches to the class content. Please also feel welcome to raise any issue you may have in class or outside of class, including reporting incidents of bias or discrimination, whether intentional or unintentional, either to me, to your advisor(s)/mentor(s), or by using the **NYU Bias Response Line.**