

Information Sheet for Math 213

Course: Math 213, Calculus III with Planar Vector Analysis, Fall 2025

Time: Tue/Thu 8am–9:40am

Instructor: Professor Cleary

Office: Marshak 301C **Phone:** 650-5122

Tentative Office Hours: Tue 9:45am, Thu 9:45am and by appointment. Check my webpage for the latest information about office hours.

Text: Calculus Early Transcendentals (9th ed.), Stewart, Clegg, Watson.

Sections Covered: Primarily material in chapters 12 through 16.

Prerequisite: a thorough knowledge of the topics of calculus from 212

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Main Website: <https://profcleary.github.io/math213/>

The grading of your work during the semester will be as follows:

- **Homework: (10%)**
- **Participation/Quizzes: (10%)**
- **In-person written Exams: (40%)**
Anticipated in-person exam dates: Thu, Sept 18th; Thu Oct 23; Tue, Nov 25th.
- **In-person Final Exam: (40%)** TBA, 12/16–22, departmental 213 group final.

General Expectations: For each class hour spent in classroom lecture, I expect at least two hours spent outside of class reading and understanding notes from lecture, reading the book, and working on the homework. Math 213 is a difficult class not only because the topics are challenging, but also because there are many different topics. Furthermore, some of the topics are considerably more abstract than the topics in earlier courses and it will take more work and energy to understand them competently. I expect all students to attend all classes and attempt all the homework assignments.

Exam Policy: There are **no** make-up exams. If you are going to miss an exam, it is your obligation to let me know as soon as reasonably possible beforehand. On the exams, it will be your obligation to demonstrate that you know how to solve the problems. The exams will consist of some problems similar to those from lecture, old departmental exams, problems from the text, homework problems, and also some more difficult ones that will require some creativity to solve completely and efficiently.

Note on Grade Computation: If you do better on a subsequent exam during the term than on an earlier exam, that later exam grade can take the place of the earlier exam grade. This can happen at most once, so if there are several possibilities, it will happen only in the way which results in the highest grade for you. Be warned, though, that the later material will be difficult and depend on the earlier material, and thus it is a fundamentally bad idea to count on doing better later.

Homework Policy: Homework will be assigned each week and will be posted on the website for this class. Homework will be due before the beginning of class. I expect students to arrive

on time and submit their homework before the beginning of class. Late homework will not be accepted. Because of this policy, the lowest two homework scores will not count.

Front Row Duty: The participation grade will include Front Row Duty. Each lecture after the first week, there will be some students who will be on Front Row Duty. Student last names will be announced in advance and we will cycle through the entire class several times over the course of the semester. Students on Front Row Duty are expected to sit in the front row and answer questions about the material as it is presented. This will give everyone a chance to participate and will help as we learn each other's names.

Participation: This component of the grade will be based upon meaningful, productive participation in class. This can be during lecture or in the discussion forums for the class.

General Advice: This class will require a great deal of time because we will cover many topics over the course of the semester. Lectures, homework, and quizzes will be an essential part of this class. If you do not have adequate time to devote to this class, please consider postponing this class until a semester in which you will. Remember the words of Dostoyevsky: "Originality and a feeling of one's own dignity are achieved only through work and struggle."

Academic Honesty: All work submitted for this course should be your own unless explicitly stated or acknowledged by you. If you collaborate with other students on the homework or use reference materials other than the texts, you must acknowledge the help. If you work with other students on the homework you must mention their names and how they helped. If the homework section does not have a place to mention sources used, you must send email explaining your use of outside materials before the deadline of the assigned work. If you consult online materials, you must describe those materials and how they were used. If you find that you are not able to do the homework without consulting other students, you will have great difficulty on the exams, quizzes, and with the participation components of the course. You are permitted to work with other students in the class, but this permission only applies to cooperative work, not to work mainly done by one student and mostly copied by others. All violations will be pursued through the Academic Integrity violation process and appropriate campus mechanisms and allowing one's work to be copied is as serious a violation. Recommended sanctions for any academic integrity violations include failure for the course, and suspension or dismissal from the College.

Electronic and other assistance: Generative AI systems (ChatGPT, Claude, Gemini, Copilot, etc.), online and computational tools such as Mathematica, Wolfram Alpha, and MATLAB, online problems solution banks, online answer forums, and tutors may not be used for any submitted work unless explicitly announced in advance as permissible. In that case, such use must be acknowledged and documented. Assignments, exams and quizzes in the course are designed to be done by pencil and paper without supplemental materials.

Preparation: Note that with changes to the syllabi at CCNY for Math 201: Calculus I and Math 212: Calculus II, if you took Math 201 and 212 a while ago or if you took a course rated approximately equivalent, there may be some topics that were not covered in your earlier course that are required in Math 213. It is your responsibility to master those topics. If there are gaps in your preparation, you should address those immediately before the term starts or very early in the term, as it will not be practical to learn the prerequisite material while also trying to learn the new essential material in Math 213. Possible missing prerequisite material areas are the geometry of space, quadric surfaces, polar coordinates, and sketching surfaces in space, but there may be other gaps in student preparation as well.