

Course Syllabus

MATH 241 Vector CALCULUS Fall 2023

Meeting Information:

- Lecture time and location: **TTH 10:05AM-11:20AM, Humanities, Room 302.**

Information

Instructor: Prof. Xiaofeng Yang

Email: xfyang@math.sc.edu

Office Location: Leconte 357

Office Hours: MWF 12:00pm-1:00pm (online Zoom) or by appointment, Zoom

Meeting ID and Password: see course webpage

Teaching assistant: TBA (@math.sc.edu)

Textbook:

Thomas Calculus, Early Transcendentals, 13 th edition

Course webpage

type “people.math.sc.edu/xfyang”, click on Teaching.

Learning Outcomes: Students will master concepts and solve problems based upon the topics covered in the course, including the following: vectors and basic operations on them, including dot and cross products; vector-valued functions and their integration and differentiation; functions of several variables and their maximization, differentiation and integration; vector fields; line and path integrals; Green’s theorem.

Prerequisites:

C or better in Math 142 or qualification on placement exam.

Chapters Covered:

Chapter 12: 12.1-12.5

Chapter 13: 13.1-13.4 [and parts of 13.5 if time permits]

Chapter 14: 14.1 -14.7 [and parts of 14.8 if time permits]

Chapter 15: 15.1 - 15.7

Chapter 16: 16.1 - 16.4

Grades

Quizzes (10%)(drop 2 lowest scores)

Exam 1 (20%)

Exam 2 (20%)

Final (50%)

90-100:A; 86-89:B+; 80-85:B; 76-79:C+; 70-75:C; 66-69:D+; 60-65:D; 0-59:F

Homework and Quiz

Homework will be assigned weekly (usually Thursday or Friday), on the **course website** people.math.sc.edu/xfyang/teaching_index.html. Although homework will **not** be collected, you are supposed to do them all. REMEMBER: the more problems you do, the better you understand the material. Students are encouraged to work together on homework sets.

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Quiz: There will be approximately one quiz per week in Thursday's class, and no quiz during the exam weeks. There are 2-3 short questions in one quiz and around 10-25 minutes (subject to change with the difficulty). Two lowest quiz grades will be dropped from the final grade calculation. Notice: Quiz questions possibly are chosen from Homework or very similar to the Homework. No quiz on the first week and exam week.

Exams

There will be two midterm exams and a comprehensive final exam. The exams are "closed book" with no books, no notes, no graphing calculators, no laptop computer or equivalent technology, etc. Picture I.D. is required and must be presented upon request. *There are no early exams or make up exams.* A late exam is only possible for a written legitimate documented reason like doctor's excuse and Chair or Dean's approval in advance.

Important: The final exam is mandatory, no pre-exam and and no makeup for ANY reasons or excuses.

Exam 1	Sep. 28, 2023
Exam 2	Nov. 9, 2023
Final Exam	Dec. 12, Tuesday, 9:00 a.m.

Calculators

Calculators are not allowed during tests or quizzes. However, calculators(/computers) are useful learning devices and you are encouraged to use them outside of class to explore the material and check your answers.

Attendance and Academic Honesty

Attendance at every class meeting is important and expected. By statistics, students may miss up to 10% of the class meetings (around 4 times) can have their grades lowered. Anyone caught cheating or turning in work that is not their own will be dealt with according to University policies.