

MA 225- Fall 2024

Multivariate Calculus

Professor: Ankan Ganguly

Email: ankang@bu.edu

Office: CDS, room 303

Office Hours (tentative): TuF, 12-1 pm

TF: John Jae Hyung Sim

Office Hours: TBD

Course information: Lecture Hours: MWF, 10:10 - 11:00 am

Classroom: LSE B01

Discussion Sections:

- A2: M, 12:20-1:10 pm, CAS 228
- A3: M, 1:25-2:15 pm, CAS 218
- A4: M, 2:30-3:20 pm, CAS 426
- A5: Tu, 11:15-12:05 pm, PSY B33
- A6: Tu, 3:35-4:25 pm, STH B20

Course Website: available at <https://learn.bu.edu/>

Course Forum: Campuswire (use the link <https://campuswire.com/p/G9D286EEB>)

Prerequisites: MA 124 Calculus II, MA 129 Honors Calculus or their equivalents.

Course Description: We cover chapters 12-17 of the text. This covers topics such as vectors, lines, planes, Multiple integration, cylindrical and spherical coordinates, partial derivatives, directional derivatives, scalar and vector fields, the gradient, potentials, approximation, multivariate minimization and Stokes's and related theorems.

Textbook Calculus Early Transcendental, 3rd edition, by Briggs, Cochrane, and Schulz. The ISBN is 9780134763644 (hardcover, ch 1-17) or 9780134766799 (paperback, ch 10-17 of the full textbook above). Students must purchase Pearson MyLab access to submit homework assignments (see blackboard).

Course Structure

- All course materials and announcements can be accessed through the blackboard site.
- Homework assignments will be assigned weekly through MyLab. Assignments are uniformly weighted and worth 20% of the total grade. Students may drop two assignments. Late assignments are not accepted.
- A weekly quiz will be given during discussion worth 15% of the total grade. Students may drop two quizzes.
- Exams:

Midterm I (20%): (tentative date) Oct. 15

Midterm II (20%): (tentative date) Nov. 13

Final Exam (25%): Dec. 16 (9 am - 11 am)

Make-up exams are only given in the case of serious illness (and require a note from a doctor).

- Grades will be tentatively assigned based on the following cutoffs: 94%-100% (A), 90%-93.9% (A-) 87%-89.9% (B+), 84%-86.9% (B) 80%-83.9% (B-) 77%-79.9% (C+), 74%-76.9% (C) 70%-73.9% (C-) 60-69.9% (D) 0 - 59.9% (F)
I reserve the right to lower (but not raise) the cutoffs.
- Incompletes are rarely given and only in serious situations, typically involving health problems which prevent a student from being able to complete their course work.

Additional Suggestions

- The homework assignments give you a good indicator of how well you understand the course material. Use these problems to figure out which concepts you understand, and which ones you don't.
- While preparing for exams, focus on your weakest areas first. This will maximize the efficiency of your study time.
- CDS offers free tutoring for math students: <https://www.bu.edu/math/tutoringroom>
- You are encouraged to attend office hours for any questions you may have.