Class meetings. M,T,W,Th 9:00am - 10:50am


Prerequisites. Both Mathematics courses 10a and 10b or above will suffice. You can also satisfy these requirements by examination, please email the instructor for more info.

It is important to notice that Math 20a and 22a/b can not both be taken for credit, please email the instructor for advice in helping you choose which of these two courses will be more beneficial for you.

Syllabus. The course will cover the following sections of the text:

- **Chapter 9) Vectors and Geometry**, sections 1, 2, 3, 4, 5, 6, 7.
  Vectors, dot and cross products, lines, planes and surfaces, coordinate systems: rectangular, cylindrical and spherical.

- **Chapter 10) Vector functions**, sections 1, 2.
  Vector functions, derivatives and integrals of vector functions.

- **Chapter 11) Partial Derivatives**, sections 1, 2, 3, 4, 5, 6, 7, 8.
  Functions of several variables, partial derivatives, directional derivatives, tangent planes, extreme values, Lagrange multipliers.

- **Chapter 12) Multiple Integrals**, sections 1, 2, 3, 5, 6, 7.
  Double and triple integrals with applications.

- **Chapter 13) Vector Calculus**, sections 1, 2, 3, 4, 5, 6, 7.
  Line and surface integrals, Green’s and Stokes theorems.

Exams. There will be one midterm exam and a final exam. There will be 3 quizzes, approximately once per week.

- **Midterm**: Monday June 15th. Length: two hours during class time.
- **Final Exam**: TBD

Grades. Your grade in the course will be based on the following:

1. **Homework (25% of your grade).**
   - Homework assignments will be collected two to three times per week.
   - **No late homeworks will be accepted**, but your two lowest homework grades will be dropped.
• We encourage you to discuss homework problems with your classmates, but you must write up your own solutions. You may not use any solution manuals.

(2) Quizzes (20% of your grade).

• No make-up quizzes will be given. Missed quizzes count as zeroes. However, the lowest of your quiz grades will be dropped.

(3) Midterm exam (20% of your grade).

(4) Final exam (35% of your grade).

Calculators. You are not required to own a calculator. Calculators are not allowed during exams or quizzes.

Students with disabilities. If you are a student who needs academic accommodations because of a documented disability you should contact me and present your letter of accommodation as soon as possible. If you have questions about documenting a disability or requesting academic accommodations you should contact Beth Rodgers-Kay in the Office of Academic Services at 63470 or at brodgers@brandeis.edu. Letters of accommodations should be presented at the start of the course to ensure provision of accommodations. Accommodations cannot be granted retroactively.

Academic Integrity. You are expected to follow the University’s policy on academic integrity, which is distributed annually as section 4 of the Rights and Responsibilities Handbook (see http://www.brandeis.edu/studentaffairs/sdc/rr/index.html). Instances of alleged dishonesty will be forwarded to the Department of Student Development and Conduct for possible referral to the Student Judicial System. Potential sanctions include failure in the course and suspension from the University. If you have any questions about how these policies apply to your conduct in this course, please ask.