

Robert Gross
MATH2202
Multivariable Calculus
MATH2202.01: Gasson 202, MWF 2
MATH2202.02: Gasson 204, MWF 1
Fall, 2024

OFFICE: Maloney 515, 617-552-3758

OFFICE HOURS: Monday, noon–1; Wednesday and Friday, 3–5; and by appointment.

E-MAIL: gross@bc.edu

CLASS HOME PAGE: <http://fmwww.bc.edu/gross/MATH2202>

ALTERNATIVE: <http://sites.bc.edu/rob-gross/MATH2202>

TEXT: *Vector Calculus*, any edition, by Susan Colley

This course will cover the rudiments of the calculus of two and three variables. Topics include the geometry of two- and three-dimensional space, partial differentiation, Lagrange multipliers, vector fields, curl, divergence, gradient, double and triple integrals, change of co-ordinates, and, time permitting, Green's Theorem, Stokes's Theorem, and the Divergence Theorem. Students are presumed to have a firm grasp of single-variable calculus, including the mechanics of differentiation and integration.

Please note that the class will not use Canvas. Lectures will not be recorded. Assignments will be distributed on paper or via e-mail.

HOMEWORK: Homework will be assigned weekly, and is due at the start of class on Friday. Late homework will generally not be accepted, because solutions will typically be made available the day that the assignment is due. Homework answers must be written neatly using standard size paper. *Answers longer than a single page must be stapled. A paper clip is not acceptable.* If you do not follow these standards, your work will not receive credit.

I will record only the number of problems which you attempted to do, and that number is what will affect your course grade. You must make some progress towards a solution in order for your work to count as an attempted solution. The grader will also of course note which of your answers are incorrect, but that information is only meant to help you, not discourage you.

EXAMINATIONS: There are three in-class examinations, tentatively scheduled for Friday, October 4; Friday, November 1; and Friday, December 6. The final examination for MATH2202.01 will be on Monday, December 16, at 12:30PM. The final examination for MATH2202.02 will be on Friday, December 13, at 12:30PM. The final examination time is chosen by the Registrar and will not change.

GRADES: The three examinations count for 18%, 20%, and 22% of your grade. The final examination counts for 30% of your grade. Homework, attendance, and perhaps quizzes will account for the remainder.

LEARNING DISABILITIES: If you are a student with a documented disability seeking reasonable accommodations in this course, please contact Kathy Duggan (617-552-8093, dugganka@bc.edu) at the Connors Family Learning Center regarding learning disabilities and ADHD, or the Disability Services Office, (617-552-3470, disabsrv@bc.edu) regarding other types of disabilities, including temporary disabilities. Advance notice and appropriate documentation are required for accommodations.

ACADEMIC INTEGRITY: You may collaborate when working on homework assignments, but you should write up your solutions individually. Working together is good; copying someone else's work is plagiarism. If you work together with one or more classmates, please indicate this on your answers.

Any violations of the College's policy on academic integrity will be dealt with severely. For more information, see

https://www.bc.edu/content/bc-web/academics/sites/university-catalog/policies-procedures.html#tab-academic_integrity_policies

ASSISTANCE: There are many resources on campus for additional instruction. Help is available on a walk-in basis at the Math Learning Center in Maloney Hall, Room 536, typically between 10AM and 3PM. The precise schedule will be available a week or two into the semester. The Connors Family Learning Center on the second floor of O'Neill Library provides free tutoring during the semester. Call 617-552-0611 or use the website (<https://www.bc.edu/content/bc-web/academics/sites/connors-family-learning-center.html>) to schedule an appointment.