

Instructor: James Tipton **Time:** MTWF 9:00am-9:50am
Office: Math 107 **Classroom:** Math 103
Office Hours: TBA **E-Mail:** james.tipton@mso.umt.edu
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Textbook: Vector Calculus, 4th Edition, Susan Jane Colley. Find it online or at the UM bookstore.

Course Descripton: Calculus of functions of several variables; differentiation and elementary integration. Vectors in the plane and space.

Prerequisites: M 172 or 182

Calculators: Calculators will not be necessary in this course, and are therefore prohibited unless otherwise noted. Please understand however that in practice, calculators are a very important and useful tool, especially when it comes to visualizing the surfaces we will study.

Homework: Assigned and collected weekly. Please feel free to collaborate with your peers when solving problems, however you must write up your final solution on your own. The two lowest homework scores will be dropped to compensate for any circumstances which might have affected your ability to complete an assignment.

Late Policy: Since the two lowest homework assignments will be dropped, **no late homework will be accepted.**

Quizzes: Given at the end of each week, with the exception of exam weeks. The quizzes will be based on your homework assignments. Thus an excellent way to prepare for the quiz is to successfully complete your homework.

Exams: There will be two midterm exams and one final exam. The exams will be based on the quizzes and homework. Exam one will cover chapters one and two, while exam two will cover chapters three and four. The final exam will be cumulative.

- Midterm dates will be announced in class.
- Final - Scheduled for December 19th, 8am - 10am

Rescheduling Quizzes or Exams: Only in exceptional circumstances will a student be allowed to reschedule a quiz or exam. In such a circumstance, the student must notify the instructor at least twelve hours in advance. This notice may be waived at the instructor's discretion for emergency situations.

Grading: The weights used to determine the final grade are 15% for homework, 20% for quizzes, 20% for each midterm, and 25% for the final.

Important dates: There will be no class on the following dates

- Sep. 5, Labor Day
- Nov. 8, Election Day

- Nov. 11, Veterans Day
- Nov. 23, Student Travel Day
- Nov. 24-25, Thanksgiving Break

Course Coverage:

- Vectors: 1.1 - 1.7
- Differentiation in Several Variables: 2.1 - 2.6
- Vector-Valued Functions: 3.1 - 3.4
- Maxima and Minima in Several Variables: 4.1 - 4.4
- Multiple Integration: 5.1 - 5.6
- Line Integrals: 6.1 - 6.3
- Surface Integrals and Vector Analysis: 7.1 - 7.3

Academic Honesty: All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

Student Conduct Code: All students need to be familiar with the Student Conduct Code. You can find it in the “A to Z Index” on the UM home page.

Disability Support: The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with DSS, please contact DSS in Lommasson 154. I will work with you and DSS to provide an appropriate accommodation.