Course Contract. Math. 252
Multivariable Calculus

General:

Instructor: Skip Thompson
Office: Walker 241
Office Hours: TBA
Telephone: 831–5478
Recommended Supplementary Text: Single Variable Calc Labs with Maple, by Barrow et al. Note: You need not purchase the multivariable lab text (*Multivariable Calc Labs with Maple, by Belmonte and Yasskin*). You will find our old friend Maple quite useful in this course rather than the drag you may have found it to be in previous courses.

Course Overview:

Chapters 9 and 10 deal with properties of vectors and vector functions. In Chapters 11 and 12, we will focus on functions of several variables

\[ z = f(x_1, x_2, \ldots, x_n). \]

We will be particularly interested in functions of two variables

\[ z = f(x, y). \]

Our primary goal will be to generalize what you’ve learned about differentiation and integration for such functions. Very loosely speaking, Chapters 10 and 11 are to surfaces what Math 151-153 were to curves.

Course Topics:

1. Vector Calculus (9.1–9.6, 10.1–10.3)
2. Partial Differentiation (11.1–11.8)
3. Multiple Integration (12.1–12.7)

Course Requirements and Grading Policy:

We will have three chapter exams and a comprehensive final exam. Your lowest exam score will be dropped. Your course grade will then be determined by:
Exams - 60%
Maple Assignments - 20%
Homework Notebook - 20%

Attendance Policy:
Attendance at all class meetings is expected and strongly recommended. I think it is accurate to say that if you do not attend class regularly, you in all likelihood will not be successful in this course. One of the biggest traps you can fall into is to not attend class regularly. 10% will be added to the your final average if you miss no more than three classes. (Example: If your exam average is 76% and you miss no more than three classes, your average will be adjusted to 86%. On the other hand, if your exam average is 76% and you miss more than three classes, no adjustment will be made to your average.) It’s your responsibility to sign the class roll each day: if your name isn’t on the roll, you’re absent that day. Signing for other people or leaving class early are no-nos. I reserve the right to cancel attendance points if you disrupt class or use it as an opportunity to catch up on sleep. Please don’t blow this gimme by not coming to class regularly.

Homework:
Homework problems will be assigned for each class meeting. More honesty . . . I get really annoyed with people who don’t do homework. In addition, your homework notebook makes up 20% of your grade.

Class Format:
In a typical class, we will spend about half the time looking at questions on the homework and about half the time discussing new material. Class activities tend to be somewhat informal (especially in this course).

Calculators:
You should have a scientific graphing calculator for this course (one with the basic arithmetic functions, the trig and inverse trig functions, and logs and exponentials). Use of calculators is permitted for all homework and exams. Sharing of calculators during exams is not permitted.

Radford University Honor Code Policy:
By accepting admission to Radford University, each student makes a commitment to understand, support, and abide by the University Honor Code without compromise or exception. Violations of this academic integrity will not be tolerated. This class will be conducted in strict observance of the Honor Code. Refer to your Student Handbook for details.