

Math 2110-003 Spring 2015
TWR 5:30 - 6:55 PM, 225 Dunn Hall

Instructor Information:

Stephen Smith

Office: 205 Dunn Hall

Office Hours: I plan to sit in the tutoring center (Dunn Hall 143) Wednesdays 4:00-5:00 and at any other requested time.

Email: sgsmith1@memphis.edu

Required Texts: Multivariable Calculus - Briggs, Cochran. Solutions Manual - Woodard

Course Description: This course, the third in the Calculus sequence, is intended to provide students majoring in the physical sciences with the mathematical tools and concepts needed to complete their course work in other topics. The main emphasis of Calculus III lies in shifting from the study of analytic geometry in the plane (two-dimensional) to that of higher dimensions, involving vector-valued and multivariate functions. The first part of this course is almost purely geometric, involving hardly any differential or integral calculus, covering vectors, lines and planes in three dimensions, and graphing techniques for three-dimensional coordinate systems. The next part of the course covers vector-valued and multivariate differential calculus, and the last part of the course covers multiple integration and vector-valued integral identities. An argument could be made that the whole point of studying calculus (at least, for the engineering or applied physics major) is to get to the topics we will cover at the end of this course.

Course Content: Chapters 11-15 with a review of parametric and polar coordinates as needed.

Course Prerequisites: MATH 1910, MATH 1920

Extra Help: If you need help in the course, do not hesitate to ask me. I will gladly meet with you at convenient times for the both of us. Also, I encourage you to discuss the material with your peers and to ask other professors and instructors for help. The department also offers a free, walk-in, tutoring service in Dunn Hall 143. Please use this service as much as much as possible.

Grading Policy: There will be **five** 100 point exams and a comprehensive final worth 100 points. There will be no make up tests given unless extreme circumstances, with documentation, warrant it. This is because the final will serve to replace the lowest test grade if it is higher. Effectively, you get a drop test.

Testing Policy: No calculators will be allowed. The values of π and e do not need to be rounded to any number of decimal places. Leave them be!

Grading Scale:

Grade	Score	Grade	Score	Grade	Score
A	93.0-100	A-	90.0-92.9		
B+	87.0-89.9	B	83.0-86.9	B-	80.0-82.9
C+	77.0-79.9	C	73.0-76.9	C-	70.0-72.9
D+	67.0-69.9	D	60.0-66.9	F	<60.0

Attendance: There is no official policy for attendance except for reporting to the university and for my own benefit.

Communication: Email will be the preferred method of communication. I will send class announcements to your University of Memphis email account.