

Calculus III

Fall 2007

Mondays, and Wednesday 6:30 p.m. to 8:20 p.m.

Instructor: Sona Zaveri Swanson (please call me Sona)
E-mail: sswanson@math.ucf.edu
Office: room 202E
Office hours: Mondays, and Wednesdays 5:30 p.m. – 6:30 p.m. and by appointment
Text: Calculus 5th edition, James Stewart

Course Description:

We will study functions of several variables. In particular we will cover the study of vectors, geometric objects in space (lines, planes, surfaces), derivatives of functions of several variables, graphs of such functions and normals and tangents to surfaces, multiple integrals, line integrals, Greens and Stokes theorems amongst some other topics. Most of the sections from chapters 13 through 17 will be studied.

Grades :

Quizzes 15%, Midterm I 20% , Midterm II 20%, Midterm III 20%, Final 25%

Homework and quizzes:

Problems for hw will be assigned regularly. Though hw will not be collected it is expected and assumed that you are doing it regularly and your quizzes, tests and final will be based on this assumption. There will be regular quizzes; (this will help you to keep up with the material). I will announce the topic for the quizzes and their dates in class. The lowest quiz score will be dropped; **you cannot make up for missed quizzes** (just count it towards one to be dropped). Don't even bother asking me for a make up quiz. I will not be giving one for any reason WHATSOEVER.

Midterms and Final:

There will be three midterm tests. The first midterm will be on September 17, the second midterm will be on October 19, and the third midterm will be on November 3. The dates for these 3 tests are just tentative and may be changed if deemed necessary. Material covered on the midterms will be announced in class. The final exam is cumulative.

Final Note:

Be sure to keep up with the material covered in class. Once again I stress: it is strongly recommended that you read material *before* it is covered in class. If you miss a class, **IT IS YOUR RESPONSIBILITY** to find out all information from the class you missed, including material covered, homework assigned, and any other announcements made. So please find out names and contact information of a few others in the class. Additional factors such as class participation/improvement will be taken into account in determining the final grade. The questions on the tests/final will require you to apply your knowledge and understanding of the subject.

Please don't hesitate to ask me questions in class or outside of class, I want you to go away from this class having "learned" the material and retain it....not just for the final and I really hope that you enjoy the class.

Good luck!

There may be changes to this syllabus, changes if any will be announced in class.

List of Topics that we will cover in the course (Statistics 301):

Introduction:

Population, Sample, Data, Mean, Variance

Probability:

Events, Probability calculations-Permutations and Combinations, Laws of Probability, Conditional Probability, Independence

Random Variables and Distributions - Binomial, Normal (and maybe Poisson):

Mean, Standard Deviation, Binomial Random Variables, Normal Random Variables

Sampling Distributions

Inferences for Small and Large Samples:

Inferences about means: Point Estimation, Confidence Intervals, t distributions,

Inferences about Standard Deviation: Chi-Square Distribution

Linear Regression

Basic introduction to Bivariate Data,