Instructor: Andrzej Swiech  
Lectures: MWF 3-4 pm, Boggs-Chemistry B6A  
Office: Skiles 266  
Office Hours: MF 2-3 pm, W 4-5 pm  
Phone: (404) 894-2705  
E-mail: swiech@math.gatech.edu  

Course web page: http://www.math.gatech.edu/~swiech/2401fall03.html

Recitations:  
F1, Zhiqiang Zhao, akazhao@math.gatech.edu, TR 3-4 pm, Skiles 149  
F2, Cyrus Harvesf, charvesf@cc.gatech.edu, TR 3-4 pm, Skiles 270  
F3, Brian Swingle, gte997z@mail.gatech.edu, TR 3-4 pm, Howey-Physics S104  

Math Lab: Skiles 257


Course Description: The course introduces the students to functions of several variables and vector analysis. The detailed description of the topics to be covered is the following:

2. Functions of several variables, visualization and partial differentiation, Sections 14.1-14.6, 6 lectures.
3. Gradients, optimization, differentials, Sections 15.1-15.9, 10 lectures.
4. Double and triple integrals, Sections 16.1-16.10, 10 lectures.
5. Vector analysis - line integrals, surface integrals, and the theorems of Green, Gauss, and Stokes, Sections 17.1-17.10, 10 lectures.

Grading: There will be three tests (September 15, October 10, and November 10), homework assignments, one applied project and the final exam. Your final score will be scaled to 100% and calculated according to the following rule: Homework will count for 15% of the final score, applied project for 5%, each test for 15%, and the final exam for 35%. You will get an A, respectively B, C, and D if your final score is greater than 85%, respectively 70%, 55%, and 40%. These requirements may be lowered if the overall average score of the class is low (i.e. your grade may get curved up). Improvement will be taken into account in assigning final grades.

Applied project: You will be required to do an applied project. It is recommended that you use MAPLE (or another computer algebra system if you prefer to do so) to
work on it. The project will be done in groups of three or four people. Further details
about the project will be given later. It will be due on November 21. The School of
Mathematics Computing Lab is located in Skiles 156 and is open to all students.

Homework: Homework will be collected every other week on Thursdays in recitations
and will be graded by the TA. You are required to do all assigned problems however
only selected problems will be graded. Please check the news and announcements
section of the course web page for the precise information about what is due and
when. Late homework will not be accepted however the worst homework score will
be dropped so you can even miss one assignment.

Free tutorial help is available in the Math Lab, Skiles 257. The Math Lab is staffed
by graduate and senior teaching assistants.