Mathematics 2605 A1-A3 Fall 2003 A. D. Andrew August 2003

1. General Information. This information sheet, as well as homework assignments, computer assignments, class notes, and other course information, is available on the web at www.math.gatech.edu/~andrew.

This course meets for lectures on Mondays, Wednesdays, and Fridays from 2:05 - 2:55, and in recitation sections on Tuesdays and Thursdays from 2:05-2:55. You must attend the correct recitation section.

My office is 164 Skiles Building, my office phone is 404-894-2719, and my e-mail address is andrew@math.gatech.edu. Office hours are Monday, Wednesday, Friday 9:30 - 10:30, or by appointment.

2. Text and Material. The texts for this course is Salas, Hille, and Etgen, *Calculus - one and* several variables, eighth edition (The same edition you used for Calculus II), and class notes on topics in linear algebra that will be available from my web pages. The material includes basic geometry with vectors (Chapter 12 of Salas, et. al.), functions $f: \mathbf{R}^m \quad \mathbf{R}^n$ and optimization of functions of several variables (Chapters 14 and 15 of Salas, et. al., and web notes), computing and estimating eigenvalues (web notes), the Schur and QR factorizations of matrices, singular value decomposition, linearization, reflections, and applications (web notes), and space curves (Chapter 13 in Salas) and multiple integration (Chapter 16 in Salas). Some time before the fourth week of this semester you should review the linear algebra you studied in Calculus II.

3. Computer Projects. Each student must complete two computer projects for this course. You may work the projects either individually or in pairs. Complete instructions, due dates, and several projects from which you are to select your two, will be posted soon on my course web pages.

4. Homework and Tests. Homework will be assigned and will be discussed in the recitation sections. I strongly urge you to do all of the assigned problems, as well as additional problems. Problems from the homework assignments will be collected at some recitation meetings and graded. The problems to be collected are marked on the assignment sheet. Late homework problems will not be accepted, but the lowest score will be dropped.

In addition to the two computer assignments and the graded homework, there will be occasional quizzes, three hour tests, and a final exam. Quiz dates are indicated on the homework assignment sheet. Dates for hour tests are

Hour Test 1	18 September
Hour Test 2	23 October
Hour Test 3	20 November

I discourage make-ups. There will be no make-up quizzes, but the lowest quiz score will be dropped. Any student with a valid reason for missing an exam **must obtain permission, from Professor Andrew, not from a Teaching Assistant, well before the examination date**. Please let Professor Andrew know of any conflicts **immediately**.

5. Honor Code. Please review the Georgia Tech Honor Code. All examinations in this course are closed book. No notes may be used, but calculators are permitted. Guidelines for collaborative work on computer projects appear above. You must work independently on the homework problems that are collected for grading.

6. Grading. The hour tests, computer assignments, and final examination will be counted with the following weights.

Recitation score (from TA) Homework		(lowest score dropped)
Quizzes Hour Tests		(lowest score dropped) (15% each test)
Computer Assignments Final Examination	10% 35%	

Letter grades will be based on the overall average at the end of the quarter, according to the scheme

90	Х	А
80	Х	at least B
70	Х	at least C
60	Х	at least D
x < 50		F

That is, I may "curve up", but scores below 50 will not be curved up to pass.

Students with questions regarding the grading of a test must return the test to Prof. Andrew (**not** to the Teaching Assistant), with a note **on a separate piece of paper** explaining the complaint, **within one week of the date the test was given**.

7. Midterm Grades Midterm grades (S or U) are to be reported in all Freshman and Sophomore courses, including this one, by 10 October. Your midterm grade will be based on the weighted average, as in Section 6 above, of all course work due on or before 3 October, with the S/U cutoff set at 60%. While this "grade" will give you an indication of your performance, please keep in mind that it will be based on only a small fraction of the course. I encourage you to consult with me frequently during the semester.