

Math 3500 Syllabus

Dr. Jason Cantarella

1. Course times and locations.

9:05 – 9:55 MWF, Boyd 303.

2. (Approximate) Schedule.

Weeks	Chapter	Material
1	1.1-1.2	Vectors and the dot product.
0.5	1.3	Subspaces of \mathbb{R}^n .
1	1.4	Linear Transformations and Matrix Algebra.
1	1.5	Determinants and Cross Product.
1	2.1-2.2	Vector-valued functions/Topology in \mathbb{R}^n .
First Midterm: Monday September 16, 2002		
1	2.3	Limits and Continuity.
2	3.1-3.4	Partial Derivatives and the Gradient.
1	3.5-3.6	Curves and higher derivatives.
Second Midterm: Monday October 14, 2002		
1	4.1-4.2	Linear systems and inverse matrices.
3	4.3-4.5	Linear Independence-Nonlinear Systems.
Third Midterm: Monday November 11, 2002		
1	5.1-5.2	Compactness and Max-Min problems.
1	5.3-5.4	Quadratic Forms – Lagrange Multipliers.
2/3	5.5	Projections and Least-Squares methods.

Final Exam Wednesday, December 11. 8:00 am – 11:00 am. Boyd 303.

3. Textbook.

Ted Shifrin, *Multivariable Mathematics: Linear Algebra, Multivariable Calculus, and Manifolds*. (See Julie McEver on the 4th floor of Boyd to buy your copy).

4. Grading.

The class is graded out of 1000 points. There will be 25 homework assignments, each worth 12 points, for a total of 300 points of homework credit. Three midterms, each worth 150 points, for a total of 450 points of midterm credit. And one final exam worth 250 points.

5. How to reach me.

Office: Boyd 603. Phone: 542-2610. Home phone: 227-0824.

Email: jason@math.uga.edu. Office hours: M 10 am – 12 pm and by appointment.

6. Academic Honesty.

All students are responsible for maintaining the highest standards of honesty and integrity in every phase of their academic careers. The penalties for academic dishonesty are severe and ignorance is not an acceptable defense.