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Web page for the class at [http://www.math.uga.edu/~shifrin/MATH4250](http://www.math.uga.edu/~shifrin/MATH4250).

Office Hours: to be decided. They will be announced in class and posted on the web page.

The prerequisites for this class are MATH 2270/2500 and MATH 3000 (or MATH 3500(H)–3510(H)), i.e., a solid knowledge of multivariable calculus and linear algebra. We will study the geometry of curves and surfaces in $\mathbb{R}^3$, culminating in the Gauss-Bonnet Theorem (one of the crowning results of the early twentieth century) and a discussion of hyperbolic geometry.

There will be two midterm exams (15% each), a final exam (30%), and nine graded homework assignments (40%). Homework will be collected approximately every third class. On each assignment, I will give a selection of problems, of which you must ordinarily work five; typically I will specify one or two problems of central interest that everyone must do. Graduate students must do at least one “pyramid” problem on each assignment.

As a UGA student taking a mathematics class, you are entitled to a copy of *Mathematica* to use while you’re at UGA. I will require everyone to do at least three homework problems using *Mathematica*; you are welcome to explore it more on your own. You can find a “primer” to help you learn your way around the program on the course webpage.

N.B.: No late homework or makeup exams. Although I encourage you to work on homework with a few other students, you must write up your assignments by yourself. You must comply with UGA’s Academic Honesty Policy; see items 3, 4, 5, and 6 at [http://ovpi.uga.edu/academic-honesty/academic-honesty-policy](http://ovpi.uga.edu/academic-honesty/academic-honesty-policy).

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; note that “lack of knowledge of the provisions of this policy is not an acceptable response to an allegation of academic dishonesty.”

Midterm exams (covering approximately the chapters listed) are tentatively scheduled for

- Thursday, February 12, 2015 (Chapter 1)
- Tuesday, April 7, 2015 (Chapter 2)

and the comprehensive final exam will be Tuesday, May 5, 2015, 8:00–11:00 a.m.