Course Webpage
The course webpage will have postings of announcements and materials, as well as a log of daily activities.

Course Goals
The main goals of the course are to strengthen your mathematical background for teaching Geometry. We will focus on fundamental concepts of Euclidean geometry, with explorations of non-Euclidean geometry for contrast. We will make extensive use of manipulatives and the dynamic geometry software GeoGebra.

Expectations
You are expected to attend all class meetings, complete assigned readings, take your work seriously, complete all assignments to the best of your ability and turn them in on time, and complete daily evaluation forms.

You will get more out of the course if you display a positive attitude, are curious and ask questions, are a team player, work to improve yourself as a mathematician, help others, and are patient with yourself (it takes time to master new ideas).

Homework
Homework is assigned each day. Your 3-ring binder can be used to create a course notebook that includes copies of your work, including both in-class and homework assignments. At least initially, your course notebook might include both draft solutions and final solutions to problems you work as well as your End of Course Problem Set. The goal is to provide documentation of your work and your intellectual growth as a participant in Math 896, as well as a sense of closure regarding your work in this course. We also encourage you to include personal reflections on the mathematical skills and concepts that are clear to you and those which may still be confusing. This work should have two phases:

1. A preliminary draft of your work on (in-class and homework) problems. We will want to see evidence that you have worked on a problem you dont need an exact or complete answer to include a problem in your notebook and your comments on successes or difficulties.

2. A final version of your work on a problem (sometimes a draft is good enough to be a final solution). This should be a complete solution that you can read and understand a year later. We also encourage your reflections in which you identify what you have learned and what you are still working on understanding.

We also will offer a quick assessment of your solutions of the homework problems assigned the previous day. If your draft solution for an assigned problem is satisfactory (i.e., with the benefit of public discussion of the problem you should be able to write up your final solution), the problem will be marked “OK” or with a check. Particularly impressive solutions will be assessed as “superb” or check-plus, and solutions with a few minor deficiencies will be indicated with a check-minus. If we believe it is important for you to rework the problem; we will indicate “please revise”. Revisions may be submitted as part of a subsequent days homework.
End-of-Course Assignment
To bring Math 896 to a close, you will prepare an End-of-Course Assignment that includes a selection of problems you have worked during the course, an End-of-Course Problem Set and a Final Reflection on what you have learned. Your End-of-Course Assignment is:

Your Fabulous Five Provide a “textbook solution” for five homework problems. Select problems that you are proud of or “like best.” (Perhaps they help demonstrate what you have accomplished).

Your End-of-Course Problem Set This will be assigned on the last day of class.

Your Final Reflection Write a 2 page self-assessment of your knowledge of Precalculus. Discuss the knowledge you had prior to beginning the course, what you have learned in this course, and what you still want to learn in future courses.

The End-of-Course Assignment will be due on Tuesday, June 28, 2011.

Grading Scale
Grading is based both on mathematics learned and on effort and teamwork. My expectation is that all grades will be at least a B, and, I hope, many grades will be well above that.

B- (or lower) A grade below B is a statement that the instructors do not believe that the teacher made a reasonable effort to use the opportunity provided by this course to develop into a stronger teacher. Possible issues are attendance, uncooperative behavior, and assignments that incomplete, late, or lacking in effort to learn.

B Regular class attendance, reasonable participation, most assignments submitted on-time, cooperative with peers, good effort to complete assignments and to learn mathematics.

B+ Regular class attendance, active participation, assignments submitted on-time, supportive and helpful to peers, admirable effort to complete assignments, good progress in learning mathematics

A- All of the work from the B+ grade, plus strong participation or strong progress in learning mathematics,

A All of the work from the B+ grade, plus outstanding participation or outstanding progress in learning mathematics,

A+ All of the work from the B+ grade, plus outstanding participation and outstanding progress in learning mathematics,

If you would like a personal assessment of your work or your progress towards earning a particular grade, please ask and I will be happy to meet with you privately.

Geometry is the noblest branch of physics.
—William Osgood (1864–1943), Professor and Chair of Mathematics at Harvard University