

Spring 2008 MATH 2009 Sophomore Seminar

Prerequisites: Math 1112 or 1113.

Instructor: Dr. Van Minh Nguyen

Office: Boyd 319

Phone: 678-839-4130; Fax: 678-839-6490

Email: vnguyen@westga.edu (through campus e-mail (MyUWG) only)

Office Hours:

Mon	10 am - 12 pm (in Office)	1 - 2pm (in Office)	Or by appointment
Wed	10 am - 11 am (in Office)	12 - 2 pm (in Office)	
Fri	10 am - 12 pm (in Math Tutoring Center)		

Course Objectives: The impact of mathematics in the real world will be presented in the form of lectures, computer labs and seminars. The course includes problem solving sessions involving competition problems (e.g. Putnam, MCM, IMO, ...) and the use of the technology and computer Algebra systems, such as Maple. The course also explores applications of mathematics to the real world, its history and connection to other sciences through projects and reports. Each of the various tracts offered by the department will be discussed to help students choose the appropriate one.

A final exam will assess their understanding of the subject matter discussed throughout the course.

Students are expected to: attend class regularly, and take class notes to study for the final exam.

Text: No textbook

Learning Outcomes:

The students will be able to:

1. Identify the major areas in mathematics and their respective contributions to solving real-world problems (L1, L4, L5).
2. Describe the various inter-relationships and differences between applied, computational, discrete and pure mathematics.(L5)
3. Identify a variety of strategies for problem solving, and apply appropriate basic mathematical techniques and models to solve specific elementary problems (L2, L4, L9).
4. Use basic symbolic computer algebra systems in problem solving (L1, L2).
5. Communicate various mathematical topics and problems in written and oral form (L4).

Project: Each student will present a new area of mathematics, its history, developments, and problems it addresses, and how it influenced other areas. Most famous mathematicians and their discoveries.

Grading Methods:

Projects 100 points and a Final Exam (200 points).

Grading Scale: A= 90-100%, B= 80-90%, C= 70-80%, D= 60-70%, F= below 60%.

