# SYLLABUS: MTH 363 - Euclidean Geometry Summer II 2008

3 credit hours

**INSTRUCTOR:** Dr. Mark Klespis

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Phone: 936-294-1577 Email: klespis@shsu.edu

Office Hours: Daily, 10:30 – 12:00 noon

**CLASSROOM AND SCHEDULE:** LDB 401, Daily, 8:00 – 10:00 AM

No classes 7/25 and 8/1

# **COURSE DESCRIPTION:**

This course consists of the modern development of Euclidean geometry and, time permitting, a limited introduction to non-Euclidean Geometry. Prerequisite MTH 364.

## **COURSE OBJECTIVES:**

In this course the student will

- O Develop a more sophisticated concept of the nature of Euclidean geometry through a careful and mature postulational development.
- Acquire knowledge of the relationships among the standard geometric figures as sets of points in a 2-dimensional space as well as a reasonable ability to construct geometric proofs.
- o Become familiar with dynamic geometry software (such as Geometer's Sketchpad) and use it to facilitate the development of proofs.

#### TEXT AND MATERIALS:

Kay, D. C. (2001). *College Geometry: A Discovery Approach* (2nd ed.). Reading, MA: Addison-Wesley Longman. (Required)

Geometer's Sketchpad. (Student version) Key Curriculum Press (2002). (Computer software. Required.)

The instructor may provide additional materials.

# **ATTENDANCE:**

Regular and punctual attendance is expected of every student. This is especially true for summer classes. Attendance will be taken. Should you miss a class, it is **your responsibility** to find out what you missed. If you are unable to attend class regularly, drop the course.

## **TESTS AND ASSIGNMENTS:**

Tests will include problems that are similar to problems assigned and worked in class. Unless approved by the instructor prior to the date of a test, there will be no make-up for a missed test. For the first test a student misses, then the final exam grade (adjusted to a 25-point scale) will be used. Should a student miss a subsequent test, the grade will be zero. A missed final examination can be made up only by approval of the Dean of the College of Arts and Sciences or a higher administrative official.

Late assignments will not be accepted. Zero points will be recorded for any assignment not turned in when it is due (even if you are absent that day).

#### **GRADING:**

Your grade will be based on the following criteria:

4 Tests — 25 points each

4 Homework assignments — 20 points each

4 Geometer's Sketchpad assignments — 20 points each

2 Projects — 20 points each

1 Final – 40 points total

Total: 340 points

**A:** Greater than or equal 306 points

**B:** 272 to 305 points inclusive

C: 238 to 271 points inclusive

**D:** 204 to 237 points inclusive

F: Less than 204 points

While there is no extra credit given per se, students can earn extra points by presenting solutions to assigned problems in class or by answering certain questions asked by the instructor. These extra points are usually worth ½ of a point that can be added to your final exam grade, up to a maximum of 4 points.

# **Homework procedures**

Homework assignments are due as noted on the course calendar (page 3). Your textbook divides homework problems into three categories, A, B, C. Category A problems are straightforward applications of examples in the text whereas category B and C problems require applications of text material in different ways. For each homework assignments, 10 problems will be listed, some from each category. Students are required to turn in 5 problems total – with no more than three from category A.

# **ACADEMIC DISHONESTY**

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

# COMPLIANCE WITH THE 1990 AMERICANS WITH DISABILITIES ACT

Sam Houston State University does not discriminate on the basis of disability in admission to, access to, or operations of its programs, services, or activities. I would like to help students with disabilities to achieve their highest potential. In order to receive accommodations on exams and/or assignments, students must alert me to their situation as soon as possible and also must go to the Counseling Center and Services for Students with Disabilities (SSD) on campus for proper documentation of their needs.

# Tentative course calendar – MTH 363 Summer, 2008

Monday	Tuesday	Wednesday	Thursday	Friday
July 7	8 Course intro Geo Sketchpad 2.3	9 2.4	10 2.5	11 2.6 GSP #1 due
14 HW #1 due Test #1	15 3.1, 3.3	16 3.4 - 3.6	17 3.7	18 3.8 GSP #2 due
21 HW #2 due Test #2	22 4.1, 4.2 Project #1 due	23 4.2, 4.3	24 4.3, 4.4 GSP #3 due	25 No classes
28 4.5, 4.7	29 HW #3 due Test #3	30 5.2 GSP #4 due	31 5.3 GSP #4 due	August 1 No classes
4 5.4	5 HW #4 due Test #4	6 Review for final Project #2 due	7 Final	8

### **Comments:**

- 1. Taking a mathematics class during the summer requires a great deal of class preparation on the part of both the instructor and the student. Please note that we are starting the course in section 3 of Chapter 2. While you will not be tested on sections not listed in the course calendar, you should read the material.
- 2. Please read the section being covered prior to class. It is OK if you have trouble understanding the material, but reading the text prior to class is a good way to focus your attention during class.
- 3. Be an active learner. More than just about any subject, mathematics requires you to think as well as listen (or read) as you learn.
- 4. Make sure you visit your instructor if you have questions.