

**MATHEMATICS 3100-1. Spring 2003**  
**Foundations of Geometry**

**Text:** *Geometry for the Classroom*, by H. Clemens and M. Clemens. Other recommended reading: M. Berger, "Geometry", Springer Verlag.

**When/Where:** TH, 10:45 – 12:05, LCB 222.

**Instructor:** Prof. Michael Kapovich.

**Office:** JWB 303; **phone:** 581-7916; **e-mail:** kapovich@math.utah.edu

**Office hours:** TH 12:10–1:00 p.m. or by appointment.

**Course web page:** <http://www.math.utah.edu/~kapovich/teaching12.html>

**Sections of the textbook to be covered:** Sections I1–I40, C1–C23, P1–P17.

**Exams:** There will be a comprehensive final examination, and three 60 minutes long midterm exams:

Exam 1: February 6.

Exam 2: March 13.

Exam 3: April 17.

**Final Exam:** Monday, April 28, 10:30 a.m. – 12:30 p.m. in LCB 222.

**Overview:** This is a basic course in Geometry, we will follow the textbook of Clemens and Clemens. The textbook is divided into *intuitive sections* (I), *construction sections* (C) and *proof sections* (P). For each topic we first cover the intuitive sections, then constructive sections and then proofs. Towards the end of the semester, to the extent the time will permit, I will cover more detailed material on spherical and hyperbolic geometry that is not in the textbook.

**Calculators, ruler and compass:** You will need a calculator for computation of trigonometric functions, straight-edge and compass for the solving the construction problems.

**Homework:** Each Tuesday I will assign homework (on the homepage), which is not to be handed in. The following Tuesday we will discuss some of the homework problems in the class.

**Tutoring center:** The Math Department Tutoring Center is located in T.Benny Rushing Math. Student Center (between JWB and LCB), and is open for free tutoring from 8 a.m. to 8 p.m. on M-Th, and from 8 a.m to 2 p.m. on Friday. Some, but not all of the math tutors welcome questions from Math 3100 students. To see the times and specialities of various tutors, consult the web address [www.math.utah.edu/ugrad/tutoring.html](http://www.math.utah.edu/ugrad/tutoring.html)

**Grading:** I will drop one lowest midterm. The final grade will be based on the following numerical score:

2 midterms: 60 %

Final exam: 40 %.

**Make ups:** Since I will drop the lowest midterm there will be no make-ups.

**ADA Statement:** The American with Disabilities Act requires that reasonable accommodations be provided for students with physical, sensory, cognitive, systemic,

learning, and psychiatric disabilities. Please contact me at the beginning of the semester to discuss any such accommodations for the course.

**Ask questions** both during the class, after the class if I have time, by email and during my office hours!

The first day of classes is Tuesday, January 7. The last day of classes is Tuesday, April 22. There will be no classes during the Spring break: March 17–21.