Instructor: Matt Alexander	Office: MSB 106			
Website: http://www.math.kent.edu/~malexand/	Email: malexan5@kent.edu			
<b>Office Hours:</b> M & W 2-3:30pm, T 11am-1pm	<b>Phone:</b> (330) 672-9100			

**Course Description:** Geometry of Euclid extended to advanced topics of the triangle, quadrilaterals and circles: cross-ratio, groups, constructions, geometric generalizations; inversion.

Learning Outcome: In this course we will explore the classical geometry of Euclid with theorems and constructions focusing on triangles, quadrilaterals, and circles. We will then cover additional topics including geometry in three dimensions and polyhedra, isometries and symmetries of the plane, and combinatorial geometry with further topics as time permits. For detailed learning outcomes for this course, please click here.

**Course Prerequisite:** MATH 21001 with a minimum grade of C (2.0); or special approval of instructor. Students are expected to have general skills in proofs and basic mathematical reasoning.

Class Times: Class meets from 3:45-5PM on Mondays and Wednesdays in MSB room 106.

Class Schedule: A tentative schedule can be found on the course website here.

## **Course Materials:**

Our text is *Geometry: Theorems and Constructions*, by Allan Berele and Jerry Goldman.

A **Straight Edge** and **Compass** will aid you in faithfully reproducing constructions by hand. However, we will also use **Geogebra**, a free computer program (also accessible by browser), to make constructions.

**Grading:** Grades will be determined as follows unless otherwise stated during class. Grades may be adjusted upwards on an individual basis with the final exam score being the determining factor. There will be homework, quizzes, 2 midterm exams, and a final project. See below for a distribution of the grade for each type of assignment.

Grading				Grading Scale					
	Homework	20%		Α	93-100	A-	90-92		
	Participation	10%			87 - 89				
	Quizzes	10%		C+	77 - 79	$\mathbf{C}$	73 - 76	$\mathbf{C}$ -	70-72
	2 Exams	40%		D+	67 - 69	D	60–66	$\mathbf{F}$	0–59
	Final Project	20%							

Attendance: Good attendance and participation in the class discussion are important for success in this course. If you miss a class, you are responsible for making up the work you missed. If you anticipate a lengthy illness or hospital stay, please contact your instructor or your college dean as soon as possible. Any scores given out during class can be affected if you arrive to class late or leave class early. Any unexcused absences after the third may result in a 5% reduction in grade per day.

**Homework:** Homework will be posted on the course website along with the due date for each assignment. Some problems will be presented by the student in class, while others will be turned

in to the instructor. Additionally, you should spend some time during each week to review what has been covered and preview future lessons.

Final Project: Our final projects will be presented on during the last week of class and during finals week on Wednesday May 10, from 7:45am-10:00am in MSB 106.

Make-Up Exams: Given only under extraordinary circumstances of a university-accepted excuse (documented illness, death in immediate family, university-sponsored event). Please, notify me in advance, if possible, if an exam is to be missed.

**Classroom Courtesy:** As a courtesy to myself and your classmates, please refrain from causing any undue distraction. This includes silencing or turning cell phones off, limiting conversation with those around you, and not using electronic devices while in class for any purpose other than class work.

**Registration Requirement:** Please refer to the official registrar calendar here for the last day to register for classes. University policy requires all students to be officially registered in each class they are attending. Students who are not officially registered for a course by published deadlines should not be attending classes and will not receive credit or a grade for the course. Each student must confirm enrollment by checking his/her class schedule (using Student Tools in FlashFast) prior to the deadline indicated. Registration errors must be corrected prior to the deadline.

Withdrawal Deadline: Please refer to the official registrar calendar here for the last day to withdraw from class with a grade of a "W".

**Cheating and Plagiarism:** It is expected that the majority of your work will be done independently. Working together is not forbidden, however, each student should prepare and understand their own solutions to turn in. University policy 3342-3-01.8 deals with the problem of academic dishonesty, cheating, and plagiarism. None of these will be tolerated in this class. The sanctions provided in this policy will be used to deal with any violations. If you have any questions, please read the policy here or ask me.

**Students with Disabilities:** University policy 3342-3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Student Accessibility Services (contact 330-672-3391 or visit www.kent.edu/sas for more information on registration procedures).

Notice of My Copyright and Intellectual Property Rights: Any intellectual property displayed or distributed to students during this course (including but not limited to powerpoints, notes, quizzes, examinations) by the instructor remains the intellectual property of the instructor. This means that the student may not distribute, publish, or provide such intellectual property to any other person or entity for any reason, commercial or otherwise, without the express written permission of the instructor.