Math 456: Geometry for Teachers, Spring 2018   **Section 1:** M,T,Th,F, 12:00 – 12:50, Hertz 120

Professor Peter Klosterman
Bouillon 107A,   peter.klosterman@cwu.edu
Office Hours: Mon – Fri 11:00 – noon *(If you have a conflict with this time, email or talk to me)*

Text: *Elementary Geometry for College Students* by Alexander and Koeberlein ISBN-13: 978-1-285-19569-8

Course Topics: This course includes an exploration of plane, coordinate, and transformational geometry. Students will develop an understanding of mathematical structure, method, and application while exploring topics such as axiomatic systems, constructions, and transformations.

Exams: There will be 2 midterm exams throughout the quarter. Final exam is <u>Tuesday, June 5th, noon – 2:00 PM</u>. All exams are closed book, no calculator. Your final exam score can be used to replace your lowest midterm score (if it is beneficial to do so).

Makeup Exams will be given only in extreme cases for legitimate *documentable* reasons. If, for some legitimate reasons, you cannot make it to one of the exams, please contact the instructor *before* the exam.

Grading:

		The following grading scale will be used:		
Homework (best 9 @ 15 points)	135 pts	A	93-100%	C	73-78
Questionnaire	5 pts	A-	90-93	C-	70-73
2 midterm exams	200 pts	B+	87-90	D+	67-70
Final exam	100 pts	B	83-87	D	60-67
Total Possible:	440 pts	B-	80-83	F	0-60
		C+	77-80		

Homework Sets will be posted/updated throughout the week on the class Canvas site, and collected the following Tuesday. You are responsible for doing your own homework, but it is appropriate and often advantageous to work with a study partner or a small study group. Show enough work so that your reasoning is obvious. Your best 9 sets will be counted—other sets will be dropped. **Late homework is not accepted.**

http://canvas.cwu.edu (the CWU Canvas website) will have course information, powerpoint slides, class activities, HW sets, exam info, and other miscellaneous information. Look under the "files" tab.

Cheating will not be tolerated. Cheating will result in a <u>zero</u> grade for the exam and possibly a failing grade for the course. See the CWU Academic Dishonesty statement for more info: https://www.cwu.edu/resources-reports/cwup-5-90-0104-academic-dishonesty

Students with disabilities who wish to arrange for academic adjustments in this class are encouraged to provide me with a copy of their Confirmation of Eligibility for Academic Adjustments and meet with me as soon as possible to discuss their needs and the manner in which their accommodations will be delivered.

Other Helpful Information:

- http://www.cwu.edu/learning-commons/university-math-center has information about the University Math Center (Brooks Library 190). This is a place to start if you're looking for extra help.
- Don't be afraid to stop by office hours if something isn't making sense
- I'll post grades on Canvas and update as the quarter progresses (http://canvas.cwu.edu).
- Mark the final exam on your calendar right away so you don't make vacations plans before you're done with the quarter

Order of Topics
Geometry terms, tools, notation
Different types of reasoning; deductive reasoning
Parallel and perpendicular lines
Overview of Polygons
Transformations
Triangles
Quadrilaterals
Proportions and Similarity
Circles
Areas of Polygons and Circles
Locus of Points *(if we have time for this)*