Geometry

MATH 2360Q S11

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Office: MSB 324
Lectures: Tuesday & Thursday 11:00-12:15 in MSB 319,
Office Hours: Tuesdays and Thursdays 1:00-2:00, Wednesdays 5:00-6:00pm.

Description: Deductive reasoning and the axiomatic method, Euclidean geometry, parallelism, hyperbolic and other non-Euclidean geometries, geometric transformations.
Prerequisites: MATH 1121(113) or 1131(115) or 120. MATH 1121(113) may be taken concurrently.

Textbook: Geometry from Euclid to Knots Geometry from Euclid to Knots (1st Ed.) by Stahl Dover (ISBN: 978-0486474595)

Exams:
Exam 1: Thursday ~~2/24~~ 3/3
Exam 2: Thursday 4/7 Exam2-solution.pdf
Final: Tuesday 5/3, 10am-12:30pm M319

Grading: No late homework will be accepted and there will be no make-up exams. I will drop your lowest homework score.

Homework/Class participation	20%
Exam 1	23 %
Exam 2	23 %
Final	34 %

The final exam is cumulative. However we will focus slightly more on ch.2-5.
Practice Problems: Practice-final.pdf
Solution to Practice Problems: solutions.pdf
Review Sheet: Review-sec 6.1-2

Exam 2 is on: Sec 3.1-3.3, and Sec 3.5, Sec 4.1, 4.2, Sec 5.1, and 5.2.
Practice Problems for exam 2: Practice-Exam2.pdf, 2360_completing_the_proof.pdf
Review Sheet: 2360s11 Review 2.pdf
Solution to Practice Problems: 20110405163528727.pdf (# 7. the two circles that circle p intersects should be CONCENTRIC circles.)

Practice Problems for exam 1: Practice-Exam1.pdf (Correction for #2: it should be a=1, not a=2.)
Solutions to Practice Problems: P-E1 solutions.pdf

Approximate coverage: Chapters 1-8. We will take a quick look of non-Euclidean Geometry in Chapter 1 so that we would get some motivation why we need to prove "obvious" propositions in Euclidean Geometry. After that we will focus on axiomatic development of Euclidean Geometry for a while, and will move onto transformation geometry and symmetry, which is quite cool. Just take a glance over chapter 6. (You would see why.)

Homework Assignments: This class will involve a lot of reading and writing math proofs, and

Exercise 2.3H (Pg. 60): 2,3,4,5(Just list what's given and what to prove)

Homework 1: Due date Tues., ~~Feb. 1.~~ Feb. 8.
Exercise 1.1(Pg. 7): 1.(a),(c), 2.(d), 4.(a), 6.(a),
Exercise 1.2(Pg. 19): 1.(b),(e), 2.(d), 4.(a), 6.(a),13.