

**THE UNIVERSITY OF TEXAS AT EL PASO**  
**COLLEGE OF SCIENCE**  
DEPARTMENT OF MATHEMATICAL SCIENCES

- Course Number:** MATM 3304-18336
- Course Title:** Fundamentals/Geometry from an Advanced Standpoint
- Credit Hrs:** 3
- Term:** Fall 2016
- Course Meetings & Location:** Tuesdays & Thursdays 4:30PM – 5:50PM  
LART 207
- Prerequisite Courses:** Departmental Approval
- Course Fee: (if applicable)** None
- Instructor:** Kien Lim
- Office Location:** Bell Hall 301
- Contact Info:** E-mail Address: [kienlim@utep.edu](mailto:kienlim@utep.edu)  
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- Office Hours:** Tuesdays 1:30PM – 2:50PM & By Appointments
- Course Description** An axiomatic treatment of Euclidean geometry including some historical perspectives. Informal treatment of other geometries such as distance and hyperbolic geometry. Prerequisite: MATH 1508 or MATH 1411, and MATH 2304 each with a grade of "C" or better.
- Textbook(s), Materials:** *Geometry Connections: Mathematics for Middle School Teachers* by John K. Beem. Boston: Pearson.
- Course Objectives:** Students will
- experience Euclidean geometry as an axiomatic system
  - investigate and explore shapes, measures, properties, and relationships
  - conceive mathematics as a problem solving endeavor that involves visualizing, investigating, and analyzing
  - develop the habit of attending to meaning, of analyzing problem situations, and of making conjectures and providing justifications
  - develop good learning skills like reading math text actively, posing questions, making connections, creating notes, and using representations
  - use technology, such as GeoGebra, to investigate ideas, generate conjectures, and solve problems.

**Activities/Assignments:** This course uses the flipped instructional model. Students are expected to self-study some of the course materials (read the textbook, watch video lessons, work on problems, and make notes), complete online work and take online quizzes. During class meetings, students will clarify their understandings, apply their knowledge to solve challenging problems, and take an in-class assessment. Homework will be assigned after each class meeting. Students will need to have internet access to sites like Blackboard and EDpuzzle, and bring a mobile device to class so that they can participate via REEF Polling.

- Assessment:**
- In-class assessments are administered at the beginning of a class.  
The questions in these assessments are designed to assess your understanding of the assigned readings and online work.
  - Homework is posted via Blackboard after each class and is to be turned in once a week at the beginning of a Tuesday class.
  - Online assessments and online work are to be completed or submitted via Blackboard
  - Examinations are based on your understanding of the concepts. Some exam problems are similar to those in the textbook, online work, and in-class activities. Most problems require you to think and apply your understanding. To compensate for the higher-cognitive demand questions, the following scale is used for exams:

A	≥ 80%
B	70% - 80%
C	60% - 70%
D	45% - 60%
F	< 45%

- The final examination is comprehensive.

**Important Dates:**

Census Day (Last day to drop without a “W”)	Sep 13
Course Drop Deadline (Last day to drop with a “W”)	Nov 3
Final Examination	Dec 12, 4pm

**Grading Policy:**

Pre-class & In-class Assessments	15%
Homework Assignments	20%
Mid-term Examination 1	20%
Mid-term Examination 2	20%
Final Examination	25%

**Tentative Schedule:**

Weeks	Chapter	Topics
1 – 3	1	Euclid’s Geometry
4 – 7	2	Congruent Figures
8 – 10	3	Similar Figures
11 - 13	4	Rigid Motions and Symmetry
14 – 15	6.1	Taxicab Geometry

- Make-up Policy:**
- There will be no make-up for assignments and assessments. The lowest score of your assignments and the lowest score of your quizzes will be dropped to allow for one missed assignment/assessment.
  - If you should miss the exam, the possibility of a make-up will be determined on an individual basis. If you cannot provide documentation to support your reason, your exam grade will be counted as the missed-exam grade.

**Attendance Policy:** Attendance will be taken.

**Incomplete Policy:** All grades of Incomplete must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the dean. The College of Science allows a period of one month to complete this contract. A grade of Incomplete is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

**Academic Integrity Policy:** Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Refer to the UTEP's Policy at <http://sa.utep.edu/osccr/academic-integrity/>.

**Civility Statement:** Be punctual. If you are late for class you will not be given extra time to complete your quiz and 20% of your score will be deducted.

**Disability Statement:** If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to [cass@utep.edu](mailto:cass@utep.edu), or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass).

**Military Statement:** If you are a military student with the potential of being called to military service and/or training during the course of the semester, please inform your instructor as soon as possible.