

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

Course Number: MATM 3304 (CRN 15783)

Course Title: Fundamentals/Geometry from an Advanced Standpoint

Credit Hours: 3

Term: Fall 2022

Course Meetings & Mondays 4:30 PM - 6:20 PM

Location: LART 210

Prerequisite Courses: MATH 1508 or 1411, and MATH 2304
each with a grade of "C" or better

Instructor: Kien Lim (He/him)

Office Location: Bell Hall 301

Contact Info: E-mail Address: kienlim@utep.edu

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Emergency Contact: (915) 747-5761

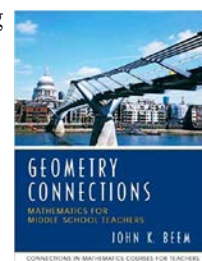
Office Hours: 3:30 – 4:30 PM Mondays (BH 301)

5:00 – 6:00 PM Tuesdays (Zoom at <https://tinyurl.com/LimHours>)

4:00 – 5:00 PM Fridays (Zoom at <https://tinyurl.com/LimHours>)

Course Description An axiomatic treatment of Euclidean geometry including some historical perspectives. Informal treatment of other geometries such as distance and hyperbolic geometry.

Recommended Textbook: *Geometry Connections: Mathematics for Middle School Teachers*
by John K. Beem. Boston: Pearson.



Course Objectives: Students will

- 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
- cultivate a growth mindset where the focus is learning and effort rather than looking good
- reflect on one's learning and thinking, find ways to overcome challenges, and build self-confidence

- Activities/Assignments:**
- This course uses the flipped instructional model. You learn some materials ahead of time by reading the textbook, watching math videos via Edpuzzle (join at <https://edpuzzle.com/join/mukmagu>), answering embedded questions, and participating in discussion board.
 - During class meetings, you ask questions to affirm your understanding, take an in-class assessment, and apply your knowledge to solve problems.
 - You are expected to put in an average of 9 hours per week for a 3-credit hour course.

Coursework & Grading Scheme:

Participation & Engagement (10%)

- Class participation via i-Clicker, group work, and idea sharing
- Completion of Edpuzzle videos with embedded questions

Homework (30%)

- Homework is administered using OneNote Class Notebook.
- Complete Part 1 of the homework by Thursday to receive a score (up to 10 points) for completion and effort.
- Complete the entire homework by Saturday 11pm.
- You are encouraged to work collaboratively but you must write your answers in your own work. (If 3 responses are very similar, each response will only receive 1/3 of the score).

Discussion Board (0% or 10%)

- Create a thread in each discussion forum (about 2 per week) by Thursday 11pm.
- For each forum, read at least 5 threads and respond to at least 1 by Saturday 11pm.
- Zero points for copying others' idea or writing similar responses.
- We will try discussion board for 2-3 weeks. We will decide as a class whether to keep or abandon discussion board.

In-class Assessments (20% or 10%)

- 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.

Mid-term Exam (15%)

- 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.

Final Exam (25%)

- Our comprehensive final examination is on Dec 5 (Mon) at 4 PM.
- You are allowed a calculator, compass, protractor, and a cheat sheet (8½-by-11) with notes on both sides.

Grading Scheme: To compensate for the higher-cognitive demand in assessments and exams, the following scale is used:

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

Tentative Schedule:	Weeks	Chapter	Topics
	1 – 4	1	Euclid’s Geometry
	5 – 7	2	Congruent Figures
	8 – 10	3	Similar Figures
	11 - 13	4	Rigid Motions and Symmetry
	14 – 15	6.1	Non-Euclidean Geometry

Important Dates: Census Day (Last Day to Drop without W): Sep 7
 Course Drop Deadline (Last Day to Drop with a “W”): Oct 28

If you feel that you are unable to complete the course successfully, please let me know and then contact the [Registrar’s Office](#) to initiate the drop process. If you do not, you are at risk of receiving an “F” for the course.

Culture-of-Care Statement: UTEP espouses a culture of care and excellence. In this course, I strive to model kindness and do my best to support your learning while maintaining high expectations and learning outcomes.

Make-up Policy:

- The lowest score on your homework and the lowest score on your assessments will be dropped because there will be no make-up for missed homework and in-class assessments.
- If you should miss the exam, the possibility of 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.

Incomplete Grade 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: Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

Accommodation Policy: The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#) (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the [CASS portal](#).

Copyright Statement for Course Materials: All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

Covid-19 Precautions Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID 19 testing.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the first week of classes. For more information about the current rates, testing, and vaccinations, please visit <https://www.epstrong.org/>.

Services & Resources: [Help Desk](#)

Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

[UTEP Library](#)

Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.

[Math Tutoring Center \(MaRCS\)](#)

Ask a tutor for help and explore other available math resources.

[University Writing Center \(UWC\)](#)

Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.

[RefWorks](#)

A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

[Military Student Success Center](#)

Assists personnel in any branch of service to reach their educational goals.

[Center for Accommodations and Support Services](#)

Assists students with ADA-related accommodations for coursework, housing, and internships.

[Counseling and Psychological Services](#)

Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.