

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

- Course Number:** MATH 2304 - 12372
- Course Title:** Geometry & Measurement
- Credit Hours:** 3
- Term:** Fall 2018
- Course Meetings & Location:** Tuesdays & Thursdays: 4:30 PM – 5:50 PM
LART 307
- Prerequisite Courses:** MATH 2303 with a grade “C” or better
- Course Fee: (if applicable)** None
- Instructor:** Kien Lim
- Office Location:** Bell Hall 301
- Contact Info:** E-mail Address: kienlim@utep.edu
Office Phone: (915) 747-6772
Fax Number: (915) 747-6502
Emergency Contact: (915) 747-5761
- Office Hours:** 3 PM – 4:15 PM on Tuesdays except Feb 13, Mar 6, Apr 10, May 1
12 PM – 1:15 PM on Feb 13, Mar 6, Apr 10, May 1
- Course Description:** This course focuses on geometry and measurement for prospective elementary and middle school teachers. Topics include measurement as a process of units of measurement for quantities such as length, area, volume, angle size, and speed; conversions of units of measurement; properties and formulas for basic geometrical shapes such as polygons, circles, polyhedra, and cones; transformations such as translations, rotations, reflections, and dilations to geometric relationships and constructions using straight edge, compass, and technology. The focus is on spatial reasoning, logical reasoning, and making connections among geometric ideas and measurement, number concepts, and algebra.
- Course Objectives:** Students will
- (a) deepen their understanding of geometry as a study of space and shapes, and measurement as a process of determining size;
 - (b) make connections and distinction among between concepts, e.g., congruent figures and rigid motion, similarity and proportionality;
 - (c) conceive mathematics as a problem solving endeavor that involves visualizing, investigating, and analyzing;
 - (d) develop the habits of attending to meaning, of analyzing problem situations, and of making conjectures and providing justifications; and
 - (e) develop the skills of active reading and understanding mathematical texts.

Textbook(s), Materials: Mathematics for Elementary Teachers with Activities (5th Ed) by Sybilla Beckmann (use the 20% code “MPS20” for online purchase at www.mypearsonstore.com).

Course Activities/Assignments:

- Students will participate in in-class activities, read and understand the textbook, watch math videos, create notes, turn-in weekly homework assignments, take online quizzes or surveys, and prepare for in-class assessments and exams.
- Students are expected to put in an average of 9 hours of study time per week for a 3-credit hour course.
- Students will need to have internet access to Blackboard and Edpuzzle (class id is “utamojg”).

Assessment of Course Objectives:

- 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.
- Online assessments are done via Blackboard.
- Homework assignments are posted via Blackboard after each class and are to be turned in at the beginning of the class on Tuesdays.
- 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 $\geq 80\%$
B 70% - 80%
C 60% - 70%
D 45% - 60%
F $< 45\%$
- The final examination is comprehensive, and you are allowed a 2-page of notes for the final exam.

Course Schedule:

Weeks	Sections	Topic
1 – 3	10.1 – 10.4	Geometry
3 – 6	11.1 – 11.4	Measurement
7 – 9	12.1 – 12.9	Areas & Perimeters
10 – 11	13.1 – 13.4	Volumes & Surface Areas
12 – 15	14.1 – 14.7	Geometry of Motion & Change

TExES Competencies: Competencies 16 & 18 (Generalist EC-6)
Competencies 20 & 22 (Bilingual Generalist EC-6)
Competencies 17, 18, 19, 20 & 24 (Generalist 4-8)
Competencies 21, 22, 23, 24 & 28 (Bilingual Generalist 4-8)
Competencies 8, 9, 10, 11, 15 & 16 (Mathematics 4-8)

Important Dates:

Census Day (Last day to drop without a “W”)	Sep 12
Course Drop Deadline (Last day to drop with a “W”)	Oct 26
Final Exam	Dec 11

Grading Policy:	In-class & Online Assessments	15%
	Homework Assignments	20%
	Mid-term Examination 1	20%
	Mid-term Examination 2	20%
	Final Examination (Dec 11, 4pm)	25%

- 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.

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 <https://www.utep.edu/student-affairs/osccr/student-conduct/academic-integrity.html>.

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, 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.

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 by the end of the first week of class.