THE UNIVERSITY OF TEXAS AT EL PASO

COLLEGE OF SCIENCE

DEPARTMENT OF MATHEMATICAL SCIENCES

Course Number:	MATH 2304 – CRN 22161
Course Title:	Geometry & Measurement
Credit Hrs.:	3
Term:	Spring 2020
Course Meetings & Location:	Mondays & Wednesdays: 10:30 AM – 11:50 AM LART 206
Prerequisite Courses:	MATH 2303 with a grade "C" or better
Instructor:	Martha Delgado
Office Location:	Library 218 (inside MaRCS)
Office Hours:	Monday - Thursday 12:00 PM-1:30 PM, or by appointment.
Textbook, Materials Required:	• Mathematics for Elementary Teachers with Activities (5^{th} Ed) By Sybilla Beckmann (for online purchase: use the 20% discount code "MPS20" at www.mypearsonstore.com). • Compass, straight edge and protractor.
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;
(e) develop skills of active reading and understanding mathematical texts.

Course Activities/Assignments: Students are required to read and understand the textbook before each class meetings. During class, students are expected to have an active participation to clarify their understandings and later be able to do classroom activities and take in-class assessments. Daily homework will be assigned and posted via Blackboard after class meetings.

Assessment of Course Objectives:

- In-class activities (Classwork) will be given **ONLY** before/during class instruction and should be turn in next class for credit. (each completed activity is 10 points)
- In-class quizzes will be administered at the beginning of class meeting. Questions in these quizzes are designed to assess student understanding of the assigned textbooks readings. (each quiz is 10 points)
- Homework assignments will be scored for completeness and correctness. It is expected that students will re-work all incorrect homework assignments.
- Exams will be scored for correctness. It is expected that students will re-work and re-submit exams. (except final exam).
  - Students with original exam score of 85 or above will receive full credit for corrected work.
  - Students whose original exam score is between 75 and 84, inclusive, will be allowed to raise their scores to a maximum score of 90.
  - Students whose original exam score is between 65 and 74, inclusive, will be allowed to raise their scores to a maximum score of 80.
  - Students whose original exam score is below 64, will be allowed to raise their scores to a maximum score of 70.
- Examinations are based on your understanding of the concepts. Some exam problems are similar to those in the textbook, in-class quizzes, and in-class activities. Most problems require you to think and apply your understanding.
- Final examination is comprehensive.

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")	February 5th
Course Drop – (Last Day to Drop with a "W")	April 3rd
Final Exam	To be announced

Grading Policy:

Grades will be calculated using the following weights:

In-class Activities and Reading Quizzes	15%
Homework Assignments	20%
Exam 1	20%
Exam 2	20%
Final Examination	25%

Make-up Policy:

- Late homework will not be accepted. Make-up homework will only be given for students attending university sponsored events (such as student athletes traveling to meets), and only with prior notification and appropriate documentation.
- A make-up exam will only be given in extraordinary circumstances (severe illness, death in immediate family), and with appropriate documentation (e.g. doctor's note). Exams can be made up with the permission of the instructor on an individual basis.

Attendance Policy:

Attendance is required. Roll will not be taken. But, if you do not attend to a class meeting, you will miss that day in-class activity causing the Classwork portion of your overall grade to drop.

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, the 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: This course requires positive, polite behaviors. Please do not distract yourself or others with food, telephones, or music. In particular, telephone use will not be allowed in class. If your phone becomes audible or visible in class, you will be asked to leave class and you will receive no credit for that day's classwork. If your phone becomes audible or visible during an exam I will immediately collect the exam and you will be required to leave. Further note: Your phone is not a calculator; please do not pretend that it is one.

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 service and/or training during the semester, contact me as soon as it appears that your service will interfere with your progress in this course. I will work with you to ensure that your service will not adversely affect your academic progress.