Course Number: MATH 2304 -16622  
Course Title: Geometry & Measurement  
Credit Hrs: 3  
Term: Fall 2014  
Course Meetings & Location: Tuesdays 4:30PM – 5:50PM (50% online & 50% Face-to-face)  
LART 304  
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: Thursdays 4:30PM – 6:00PM & By Appointments  
Textbook(s), Materials: Text: Mathematics for Elementary Teachers with Activities (4th Ed) By Sybilla Beckmann (use the 20% code “utepmath2014” for online purchase at www.mypearsonstore.com). With an access code, register at pearsonmylabandmastering.com with course id “lim92847”.  
Materials: Compass, Protractor, and Rulers  
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 habit of attending to meaning, of analyzing problem situations, and of making conjectures and providing justifications; and
(e) develop good learning skills like reading math text actively, posing questions, making connections, and create own notes using graphic organizers.

Course Activities/Assignments: This is a hybrid course where the class meets once a week. The flipped instructional model is used for this course. Students are expected to self-study the course materials (watch math videos, read the textbook, engage analytically), complete online work, take pre-class assessment, and/or submit reflection prior to each class meeting. During class meetings, students will clarify their understandings, apply their knowledge to solve challenging problems, and take short in-class assessment. Homework will be assigned after each class meeting. Students will need to have internet access to sites like Blackboard, MyMathLab, and Edpuzzle.

Assessment of Course Objectives:
- In-class assessments are administered at the beginning of a class. Pre-class assessments are to be taken by Monday 4pm. The questions in these assessments are designed to assess your understanding.
- Homework assignments are posted via Blackboard after each class and are to be turned in at the beginning of the next class.
- Online work are posted on Blackboard and are due Monday 4pm.
- Examinations are based on your understanding of the concepts. Whereas several exam problems are similar to those in the textbooks, 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.

Tentative Schedule:

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<tr>
<th>Weeks</th>
<th>Sections</th>
<th>Topic</th>
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<tr>
<td>1 – 4</td>
<td>10.1 – 10.5</td>
<td>Geometry</td>
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<td>5 – 7</td>
<td>11.1 – 11.4</td>
<td>Measurement</td>
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<td>8 – 10</td>
<td>12.1 – 12.9</td>
<td>Areas &amp; Perimeters</td>
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<td>13.1 – 13.3</td>
<td>Volumes &amp; Surface Areas</td>
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<td>13 – 15</td>
<td>14.1 – 14.6</td>
<td>Geometry of Motion &amp; Change</td>
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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 W (Sep 10)
Last Day to Drop with a “W” (Oct 31)

Grading Policy: Pre-class & In-class Assessments 15%
Homework 15%
Online Assignments 20%
Mid-term Examination 20%
Final Examination (May 9, 4:00pm) 25%
Online Reflections 5%

Make-up Policy: • There will be no make-up for assignments and assessments. The lowest score of your homework assignments and the lowest score of your assessments will be dropped.
• 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, 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 http://sa.utep.edu/osccr/academic-integrity/.

Civility Statement: Be punctual.

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 as soon as possible.