

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

Course Number: MATH 3305 - CRN 21756

Course Title: Proportion and Algebra

Credit Hrs: 3

Term: Spring 2020

Course Meetings & Location: Tuesdays and Thursdays 9:00 AM – 10:20AM

Location: 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

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

Course Description: This course focuses on proportional and algebraic reasoning for prospective elementary teachers. Topics include ratios as measures, ratios as multiplicative comparisons, proportions, rates of change, patterns, linear functions and solving linear equations, inequalities and systems. The focus is on identifying relationships between quantities in contextualized problems, using inductive reasoning to identify patterns and express them algebraically making connections among verbal, graphic, numeric and symbolic representations, solving problems, using concrete numeric, tabular, graphic and algebraic methods, and addressing student's misconceptions and errors.

Course Objectives: Students will

- (a) deepen their understanding of ratios, proportions, change, and functions by explaining why and making connections;
- (b) strengthen their quantitative reasoning and algebraic reasoning;
- (c) conceive mathematics as a problem solving endeavor that involves sense-making and thinking; and
- (d) develop the habit of attending to meaning, of analyzing problem situations, and of making conjectures and providing justifications.

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	6.1 – 6.6	Division
	4 – 6	7.1 – 7.5	Ratio & Proportional Relationships
	7 – 9	9.1 – 9.4	Expressions, Variables, Equations
	10 – 12	8.1 – 8.6	Number Theory
	13 – 15	9.5 – 9.7	Sequences & Functions

TEExES Competencies: Competencies 15, 18, & 14 (Generalist EC-6)
 Competencies 19, 22, & 18 (Bilingual Generalist EC-6)
 Competencies 12, 13, 14, 15 & 24 (Generalist 4-8)
 Competencies 16, 17, 18, 19 & 28 (Bilingual Generalist 4-8)
 Competencies 3, 4, 5, 15 & 16 (Mathematics 4-8)

Important Dates: Census Day – (Last Day to Drop without a “W”) February 5th
 Course Drop Day – (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.