

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

- Course Number:** MATH 3308 - 20767
- Course Title:** Proportion and Algebraic Reasoning I
- Credit Hrs:** 3
- Term:** Spring 2023
- Course Meetings & Location:** TR 12:00 pm – 1:20 pm  
LART 101
- Prerequisite Courses:** MATH 2303 with a grade “C” or better
- Instructor:** Jeremy L. Ramirez
- Office Location:** Library 515 or ONLINE
- E-Mail:** jlramirez3@utep.edu
- Office Hours:** After class or by appointment  
TR 1:45 pm to 2:45 pm  
MW 12:15 pm to 1:15 pm
- Textbook(s), Materials:** Required: Mathematics for Elementary Teachers with Activities (6<sup>th</sup> Ed)  
By Sybilla Beckmann  
**MANDATORY: MyLabMath code: ramirez43529**
- 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.
  - (d) develop the habits of attending to meaning, of analyzing problem situations, and of making conjectures and providing justifications.
- Course Activities/Assignments:** Course activities will include classroom activities/discussions, homework assignments, quizzes, midterm exams and a comprehensive final exam.

**Assessment of Course Objectives:** All class activities and homework assignments will be assessed for completeness and correctness. All exams and quizzes will be assessed for correctness.

<b>Course Schedule:</b>	<b>Weeks</b>	<b>Sections</b>	<b>Topic</b>
	1 – 4	7.1 – 7.6	Ratio & Proportional Relationships
	5 – 8	8.1 – 8.7	Number Theory
	9 – 12	9.1 – 9.4	Expressions, Variables, Equations
	13 – 15	9.5 – 9.8	Sequences & Functions & Series

**TExES Competencies:** Competencies 14 & 18 (Generalist EC-6)  
Competencies 18 & 22 (Bilingual Generalist EC-6)  
Competencies 10, 11, 12, & 24 (Generalist 4-8)  
Competencies 14, 15, 16, & 28 (Bilingual Generalist 4-8)  
Competencies 1, 2, 3, 15 & 16 (Mathematics 4-8)

**Important Dates:** Census Day – Last Day to Drop without a “W” (Feb 1<sup>st</sup>)  
Last Day to Drop with a “W” (March 30<sup>th</sup>)  
It is the student’s responsibly to fill out the necessary paperwork if they wish to drop the course.

<b>Grading Policy:</b>	Quiz Average	15%	A=90 and above
	Homework Average	15%	B=80-89
	Exam 1	20%	C=70-79
	Exam 2	20%	D=60-69
	Final Exam*	30%	F=59 and below

**Final Exam Tuesday, May 12<sup>th</sup>, 1:00 pm – 3:45 pm**

**Make-up Policy:** Late homework/quizzes may be accepted with permission from the instructor, within one week of their deadlines. There may be a penalty of 5 points per day the assignment is late. If a student misses an exam, it can be made-up with permission from the instructor.

The lowest homework and the lowest quiz grades will be dropped at the end of the semester. The final exam and the lower exam grade will be averaged and replace a student’s lowest exam grade at the end of the semester, only if it is to the student’s advantage.

**Attendance Policy:** Attendance is encouraged and will be taken each day.

**Drop Policy:** According to UTEP Curriculum and Classroom Policies, “When, in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, the instructor may drop the student from the class with a grade of “W” before the course drop deadline and with a grade of “F” after the course drop deadline.” See academic regulations in the UTEP Undergraduate Catalog for a list of excuse absences.

If you are not attending class nor are you turning in assignments, you may be dropped from the course.

**Incomplete 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:** 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:** Calculators may not be shared during exams. Please do not use any electronic devices during class. Cell phones should be set to silent or vibrate, and any calls should be taken outside of class. Please do not wear headsets or blue tooth devices during class. Please don’t talk during lectures. Cell phone calculators may not be used on exams. Active participation in class is expected, teamwork in class will be implemented.

**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](mailto: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](http://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 semester, please contact me by the end of the first week of class.