

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

Course Number: MATH 3305-35266

Course Title: Proportion and Algebra

Credit Hrs: 3

Term: Summer I 2021 (June 7 – July 1)

Online Course Meetings MTRF 12:00 PM – 1:30 PM (Live Zoom Sessions)
Watch Zoom recordings if you cannot attend live sessions

Office Hours: MTRF: 1:30 PM – 2:00 PM

Prerequisite Courses: MATH 2303 with a grade “C” or better

Instructor: Kien Lim

Office Location: Bell Hall 301 (not in my office because of Covid-19 pandemic)

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Emergency Contact: (915) 747-5761

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;
- (e) develop the skills of active reading and understanding mathematical texts; and
- (f) cultivate a growth mindset where the focus is learning and effort rather than looking good and performance.

- Textbook(s), Materials:**
1. Mathematics for Elementary Teachers with Activities (5th Ed) by Sybilla Beckmann (<https://www.pearson.com/store/p/mathematics-for-elementary-teachers-with-activities/P100002322280>).
 2. A laptop or computer for Zoom sessions with webcam & microphone
 3. A smart phone for i-Clicker Reef (register using your UTEP email)
 4. EdPuzzle.com (join at <https://edpuzzle.com/join/lafufuf>)
 5. Respondus Lockdown Browser & Respondus Monitor
 6. Class Notebook (via OneNote)

- Course Activities/Assignments:**
- You are expected to read and understand the textbook, watch math videos, and answer homework questions.
 - Active learning is critical for understanding math deeply. Live sessions allow you to participate in poll questions, work in breakout groups, and engage in class discussions.
 - You should attempt live sessions whenever possible. If you cannot attend live sessions, you must inform your instructor and watch all recorded sessions.
 - In order to succeed in this course, students need to invest an average of 6-7 hours of study time each day for 5 days per week. Inform the instructor if you can put in at least 30 hours per week for this course from June 7 to July 5.

- Assessment of Course Objectives:**
- Online assessments are done via Blackboard with Respondus Lockdown Browser and Respondus Monitor.
 - You will do their homework on OneNote. Each homework is due by 2 hours before the next class.
 - Examinations are based on your understanding of the concepts. Most exam items require you to think and apply your understanding.
 - The final examination is comprehensive. You are allowed a 2-page of notes for the final exam.
 - To compensate for the higher-cognitive demand, reasoning and sense-making in this course, the following scale is used:

A	≥ 80%
B	70% - 80%
C	60% - 70%
D	45% - 60%
F	< 45%

	<u>Option 1</u>	<u>Option 2</u>
Grading Policy: Online Participation & Engagement	10%	0%
Edpuzzle Videos & Embedded Questions	10%	10%
Homework	25%	30%
Online Quizzes	15%	20%
Mid-term Examination (June 21)	15%	15%
Final Examination (July 5)	25%	25%

- Important Dates:**
- | | |
|---|---------|
| Census Day (Last Day to Drop without W): | June 9 |
| Course Drop Deadline (Last Day to Drop with a "W"): | June 25 |
| No drop is allowed after June 25 | |

- TEExES Competencies:**
- TExES 391 (Core EC-6): Math (802) Competencies 2, 3, 6, 1
 - TExES 161 (Special Ed EC-12): Competency 9

Tentative Schedule:

June 7	Sections 6.1 – 6.3 (covered in MATH 2303)
June 8	Section 6.4
June 10	Sections 6.5 – 6.6
June 11	Section 7.1
June 14	Sections 7.2 – 7.3
June 15	Sections 7.4 – 7.5
June 17	Section 7.6
June 18	Sections 9.1 – 9.2
June 21	Section 9.3
June 22	Sections 9.4 – 9.5
June 24	Sections 8.1 – 8.2
June 25	Sections 8.3 – 8.4
June 28	Sections 8.5 – 8.6
June 29	Section 9.6
July 1	Section 9.7

- Late-work & Make-up Policy:**
- No late work will be accepted if the reason is not considered excusable.
 - There will be no make-up for homework and quizzes.
 - The lowest score of your homework 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 for students who attend live sessions.

- In Case of Technical Issues:**
- Back-up and submit your work with plenty of time to spare in the event that you have a technical issue with the course website, network, and/or your computer.
 - If you are experiencing difficulties submitting your work through the course website, please contact the UTEP Help Desk. You can email me your back-up document as a last resort.

Academic Integrity Policy: Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

- Test Proctoring Software:** Quizzes and exams will make use of Respondus Lockdown Browser and Respondus Monitor inside of Blackboard to promote academic integrity.
- A reliable Internet connection is essential to completing the exam. If you must go to a location to take the exam (such as the library), be sure to follow their health and safety requirements.
 - Once the window closes, your answers will be saved, and no changes can be made.
 - Respondus Lockdown Browser will require that all internet tabs are closed prior to the start of the test.
 - Respondus Monitor requires a webcam.
 - You will be required to show the webcam your student ID prior to the start of the test.
 - Your face should be completely visible during the test. Blocking the camera will disable the test.
 - No textbook materials (except a two-page cheat sheet for final exam) are permitted during the test. Respondus Monitor requires you to take a video of your surrounding area (desk, chair, walls, etc.).
 - You should not have conversations with other people and/or leave and return to the area during the test.
 - You are not allowed to use other mobile or electronic device (except a calculator).

Incomplete Grade 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.

Accommodation Policy: The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#) (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the [CASS portal](#).