

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

- Course Number:** MATH 3308 - 11281
- Course Title:** Proportion and Algebraic Reasoning I
- Credit Hrs:** 3
- Term:** Fall 2020
- Online Course Meetings:** 75% Synchronous (Thursdays 4:30–6:30PM)
25% Asynchronous
- Prerequisite Courses:** MATH 2303 with a grade “C” or better
- Course Fee:** None
- Instructor:** Kien Lim
- Office Location:** Bell Hall 301 (not in my office because of Covid-19 pandemic)
- 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:** Tuesdays 4:30 PM – 5:30 PM
Thursdays 4:00 PM – 4:30 PM & By appointments
- 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 for active reading and understanding mathematical texts;
 - (f) cultivate a growth mindset where the focus is learning and effort rather than looking good and performance; and
 - (g) learn how to create short videos to explain math concepts.

- Textbook & Technology:**
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. EdPuzzle.com (join at <https://edpuzzle.com/join/podalus>)
 3. iClicker Reef (register using your UTEP email)
 4. Zoom with webcam & microphone
 5. Respondus Lockdown Browser & Respondus Monitor

- Course Structure:** We are using a flipped learning model.
- For synchronous sessions, students will participate in virtual class activities and engage in group work and whole class discussions.
 - For asynchronous learning, students read and understand the textbook, watch math videos, and/or generate questions to ask during synchronous sessions.
- You are expected to put in an average of 9-12 hours per week for a 3-credit hour course.

Tentative Schedule:

Week 1	Welcome & Review 6.1 & 6.2
Week 2	Section 6.4 & 6.5
Week 3	Sections 6.6 & 7.1
Week 4	Section 7.2 & 7.3
Week 5	Sections 7.4 & 7.5
Week 6	Sections 7.6 & 9.1
Week 7	Sections 9.2 & 9.3
Week 8	Mid-term Exam
Week 9	Sections 9.4 & 9.5
Week 10	Sections 8.1 & 8.2
Week 11	Sections 8.3 & 8.4
Week 12	Sections 8.5 & 8.6
Week 13	Section 9.6
Week 14	Section 9.7
Week 15	Math video projects

- TEXES Competencies:**
- TEXES 114 (Math/Science 4-8): Competencies 2, 3, 4, 5, 15, 16
 - TEXES 115 (Mathematics 4-8): Competencies 2, 3, 4, 5, 15, 16

Important Dates:

Census Day (Last Day to Drop without W):	Sep 9
Course Drop Deadline (Last Day to Drop with a "W"):	Oct 30
No drop is allowed after Oct 30	

Grading Scheme:

Participation & Engagement	20%
Homework	20%
Math video projects	10%
Quizzes	10%
Mid-term Exam	15%
Final Examination (December 8, 4pm-7pm)	25%

Coursework and Grading: Participation & Engagement (20%)

- Attend synchronous sessions via Zoom
- Participate in class discussion with webcam and microphone
- Participate in classroom voting via i-Clicker on a mobile device (90% completion & 10% correctness)
- Engage via shared Google slides
- Watch math videos via Edpuzzle and answer embedded questions (90% completion & 10% correctness) before Thursday classes
- Participate in discussion board

Math Homework (20%)

- Download weekly homework in Blackboard on Friday and upload completed homework (1st attempt) by Sunday 11pm
- Submit a revised homework (2nd attempt) by Wednesday 11pm if you wish to replace the original homework score by the average of the original score and the resubmitted homework score

Group projects (10%)

- Produce, as a group, math videos to explain/compare/relate concepts.
- Use classmates' suggestions to improve your video.
- The final video will be graded using a rubric.

Quizzes (10%)

- Take quizzes 15 minutes before classes on Thursday.
- Quiz items assess your asynchronous learning.

Examinations (40%)

- Take mid-term exam during class time in Week 8 (subject to change).
- Take the final exam on the scheduled time on finals week. The final examination is comprehensive.
- A two-sided cheat sheet and a calculator are allowed for each exam.
- Exam items are designed to assess your conceptual understanding and problem-solving. To compensate for the higher-cognitive demand questions, the following scale is used for exams:

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

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.

- 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.

Test Proctoring Software: Quizzes and exams will make use of Respondus Lockdown Browser and Respondus Monitor inside of Blackboard to promote academic integrity.

- Quizzes and exams will only be available at the testing times.
- 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 and microphone.
- 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 one-page cheat sheet) 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).

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](#).

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](#).

COVID-19 Precautions: You must STAY AT HOME and REPORT if you (1) have been diagnosed with COVID-19, (2) are experiencing COVID-19 symptoms, or (3) have had recent contact with a person who has received a positive coronavirus test. Reports should be made at screening.utep.edu. If you know of anyone who should report any of these three criteria, you should encourage them to report. If the individual cannot report, you can report on their behalf by sending an email to COVIDaction@utep.edu.

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website (screening.utep.edu) prior to arriving on campus. The website will verify if you are permitted to come to campus. Under no circumstances should anyone come to class when feeling ill or exhibiting any of the known COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. Students are advised to minimize the number of encounters with others to avoid infection.

Wear face coverings when in common areas of campus or when others are present. You must wear a face covering over your nose and mouth at all times in this class. If you choose not to wear a face covering, you may not enter the classroom. If you remove your face covering, you will be asked to put it on or leave the classroom. Students who refuse to wear a face covering and follow preventive COVID-19 guidelines will be dismissed from the class and will be subject to disciplinary action according to Section 1.2.3 *Health and Safety* and Section 1.2.2.5 *Disruptions* in the UTEP Handbook of Operating Procedures.

Services & Resources: [Help Desk](#)

Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

[UTEP Library](#)

Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.

[Math Tutoring Center \(MaRCS\)](#)

Ask a tutor for help and explore other available math resources.

[University Writing Center \(UWC\)](#)

Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.

[RefWorks](#)

A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

[Military Student Success Center](#)

Assists personnel in any branch of service to reach their educational goals.

[Center for Accommodations and Support Services](#)

Assists students with ADA-related accommodations for coursework, housing, and internships.

[Counseling and Psychological Services](#)

Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.