

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

Course Number: MATM 2303-17085

Course Title: Number Concepts

Credit Hrs: 3

Term: Fall 2019

Course Meetings & Location: Mondays & Wednesdays 10:30AM – 11:50AM

Liberal Arts Building (LART) 203

Prerequisite Courses: Departmental Approval

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: Tues & Thurs: 2PM – 3PM & By Appointments

Textbook(s), Materials: Text: 1. Mathematics for Elementary Teachers with Activities (5th Ed) by Sybilla Beckmann (use the 20% code “MPS20” for online purchase at www.mypearsonstore.com).
2. MyMathLab access. With an access code, register at pearsonmylabandmastering.com with course id “lim 69059.”

Course Description: This course focuses on numbers and operations for prospective elementary and middle school teachers. Topics include place value, whole numbers, rational numbers, signed numbers, arithmetic operations and algorithms, divisibility tests, multiples and factors. The focus is on conceptual understanding, quantitative reasoning, number sense, multiple representations and ways of thinking, mathematical justification and communication, problem solving, connection making and addressing students' common misconceptions and errors.

- Course Objectives:** Students will
- deepen their conceptual understanding of numbers and operations by explaining why and making connections;
 - make connections and distinction among between concepts, e.g., division, ratio, fraction, and percent, and decimal;
 - conceive mathematics as a problem solving endeavor that involves sense-making and thinking; and
 - develop the habits of attending to meaning, of analyzing problem situations, and of making conjectures and providing justifications; and
 - develop the skills of active reading and understanding mathematical texts.

Course Activities/Assignments: This course uses the flipped instructional model. Students are expected to self-study some of the course materials (watch math videos, read the textbook, work on problems, and make notes), complete online work, take online quizzes, 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 an in-class assessment. Homework will be assigned after each class meeting. Students will need to have internet access to sites like Blackboard, MyMathLab (course id is "im50776") and Edpuzzle (class id is "minohro").

- Assessment of Course Objectives:**
- In-class assessments are administered at the beginning of a class. The questions in these assessments are designed to assess your understanding of the assigned readings and online work.
 - Online assessments are done via MyMathLab, which requires you need to have an access code.
 - Homework assignments are posted via Blackboard after each class and are to be turned in at the beginning of the class on Mondays.
 - Examinations are based on your understanding of the concepts. Some exam problems are similar to those in the textbook, online work, and in-class activities. 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	≥ 80%
B	70% - 80%
C	60% - 70%
D	45% - 60%
F	< 45%
 - The final examination is comprehensive, and you are allowed a 2-page of notes for the final exam.

Grading Policy:

Online & In-class Assessments	15%
Homework Assignments	20%
Mid-term Examination 1	20%
Mid-term Examination 2	20%
Final Examination	25%

Important Dates:

Census Day (Last day to drop without a "W")	Sep 11
Course Drop Deadline (Last day to drop with a "W")	Nov 1
Final Examination (10am on Thursday)	Dec 12

Tentative Schedule:	Weeks	Sections	Topic
	1 – 2	1.1 – 1.4	Numbers & Base-Ten System
	3 – 5	2.1 – 2.5	Fractions & Problem Solving
	6 – 8	3.1 – 3.5	Addition & Subtraction
	9 – 10	4.1 – 4.6	Multiplication (Whole numbers) Multiplication
	11 – 12	5.1 – 5.4	(Rational & Signed numbers) Division (Whole
	13 – 15	6.1 – 6.6	numbers)

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)

- Make-up Policy:**
- There will be no make-up for assignments and assessments. The lowest score of your assignments and the lowest score of your quizzes will be dropped to allow for one missed assignment/assessment.
 - 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.

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 <http://sa.utep.edu/osccr/academic-integrity/>.

Civility Statement: Be punctual. If you are late for class you will not be given extra time to complete your quiz and 20% of your score will be deducted.

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.