THE UNIVERSITY OF TEXAS AT EL PASO COLLEGE OF SCIENCE

DEPARTMENT OF MATHEMATICAL SCIENCES

Course Number: MATH 2303- 25586

Course Title: **Number Concepts**

Credit Hrs:

Spring 2016 Term:

Course Meetings & Tuesdays and Thursdays from 12:00 pm to 1:20 pm

> Location: **LART 122**

Prerequisite Courses: MATH 0311 or an adequate score on a placement exam

Course Fee: (if applicable) None

> Rocio Gallardo, Ph.D Instructor:

Office Location: Bell Hall 130E

Contact Info: E-mail Address: regallardo@utep.edu

> Office Phone: **TBA** Fax Number: TBA

Emergency Contact: (915) 747-5703

Tuesdays 9:30 am to 11:30 am or by appointment Office Hours:

Required: Mathematics for Elementary Teachers with Activities (4th Ed) Textbook(s), Materials:

By Sybilla Beckmann (purchase online with a discount code)

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.

Students will Course Objectives:

(a) deepen their conceptual understanding of numbers and operations by

explaining why and making connections;

(b) conceive mathematics as a problem solving endeavor that involves

sense-making and thinking; and

(c) develop the habits of attending to meaning, of analyzing problem situations, and of making conjectures and providing justifications; and

(d) develop the skills of active reading and understanding mathematical

texts.

Course Activities/Assignments:

This course uses the support of learning communities and the active participation of students to create, enhance, and support conceptual mathematical understanding. Students should be able to make connections between mathematical concepts and their out of school application. Students are expected to analyze course materials in a genuine search for further mathematical clarification, complete individual online homework, and 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 and MyMathLab.

IMPORTANT: Students must read the material before the class to understand the material taught in class and be ready to take the quiz.

- Assessment of Course •In-class assessments are administered at the end of the sections. The Objectives: questions in these assessments are designed to assess your understanding of the assigned readings and online work.
 - •Online assignments are done via MyMathLab, which requires to have an access code. MymathLab homeworks will be not accepted on paper (there is no excuse).
 - Group and individual projects are posted via MyMathLab or Blackboard and will be presented the date indicated by the teacher.
 - Online assignments are posted on MyMathLab and are due the date indicated by the teacher.
 - •Examinations are based on your understanding of the concepts. Some exam problems are similar to those in the textbook, in-class assessments, and inclass 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

Course Schedule:

Weeks	Sections	Торіс
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)
11 - 12	5.1 - 5.4	Multiplication (Rational & Signed Numbers)
13 - 15	6.1 - 6.3	Division (Whole 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)

MATH 2303 Page 2 of 3 Important Dates: Census Day – Last Day to Drop without a "W" (Wednesday, February 3th)

Last Day to Drop with a "W" (Friday Apr 1th).

Students will not be dropped by the instructor. Students who decide to drop the course must process a drop form, in person, at the Registrar's Office, by

April 1th.

UTEP will be closed on Wednesday, February 17th due to Pope Francis's

visit.

Grading Policy: In-class Assessments 15%

Group and Individual Projects15%Project Presentations10%Assignments20%Mid-term Examination15%Final Examination25%Total100%

Make-up Policy: There will be no make up for homework assignments, quizzes or exam. If

you should miss the exam, quiz or homework, the possibility of a make-up them will be determined you can provide documentation to support your reason. If it is not documented, your exam, quiz or homework grade will be

counted as the missed grade.

Attendance Policy: Attendance will be taken.

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

http://admin.utep.edu/Default.aspx?PageContentID=2083&tabid=30292.

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 <u>cass@utep.edu</u>, 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.

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