Course Number: MATH 2303- 21374

Course Title: Number Concepts

Credit Hrs: 3

Term: Spring 2018

Course Meetings & Location: Mondays and Wednesdays from 10:30 a.m. to 11:50 a.m. LART 209

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

Course Fee: (if applicable) None

Instructor: Dr. Rocio Gallardo

Office Location: Bell Hall 130E

Contact Info: E-mail Address: regallardo@utep.edu
Office Phone: 915-747-5703
Fax Number: TBA
Emergency Contact: (915) 747-5703

Office Hours: Tuesday 10:00 a.m. to 11:50 a.m. or by appointment

Textbook(s), Materials: Required: Mathematics for Elementary Teachers with Activities (5th Ed) By Sybilla Beckmann (purchase online with a discount code) NOTE: Discount code: The 20% code is “MPS20” for online purchase at www.mypearsonstore.com.

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
(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.

**Assessment of Course Objectives:**
- In-class assessments are administered at the end of the sections. The 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 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

**Course Schedule:**
<table>
<thead>
<tr>
<th>Weeks</th>
<th>Sections</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 2</td>
<td>1.1 – 1.4</td>
<td>Numbers &amp; Base-Ten System</td>
</tr>
<tr>
<td>3 – 5</td>
<td>2.1 – 2.5</td>
<td>Fractions &amp; Problem Solving</td>
</tr>
<tr>
<td>6 – 8</td>
<td>3.1 – 3.5</td>
<td>Addition &amp; Subtraction (Exam I)</td>
</tr>
<tr>
<td>9 – 10</td>
<td>4.1 – 4.6</td>
<td>Multiplication (Whole numbers)</td>
</tr>
<tr>
<td>11 – 12</td>
<td>5.1 – 5.4</td>
<td>Multiplication (Rational &amp; Signed Numbers)</td>
</tr>
<tr>
<td>13 – 15</td>
<td>6.1 – 6.3</td>
<td>Division (Whole numbers) (Exam II)</td>
</tr>
</tbody>
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**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” (Wednesday, January 31th)
Last Day to Drop with a “W” (March 29th).
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 March 29th.

Grading Policy: In-class Assessments 15%
Assignments
  Homework at Mymathlab 10%
  Homework at hard copy 10%
Exam I 20%
Exam II 20%
Final Examination 25%
Total 100%

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 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 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.