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

Course Number: MATH 2303 - 25164  
Course Title: Number Concepts  
Credit Hrs: 3  
Term: Spring 2022  
Course Meetings & Location: Tues & Thurs 1:30 PM - 2:50 PM  
LART 304  
Prerequisite Courses: Departmental approval  
Course Fee: None  
Instructor: Kien Lim  
Office Location: Bell Hall 301  
Contact Info: E-mail Address: kienlim@utep.edu  
Office Phone: (915) 747-6772  
Emergency Contact: (915) 747-5761  
Zoom Office Hours: Mondays: 3:00 PM – 4:00 PM  
(Zoom: https://tinyurl.com/LimHours)  
Tuesdays: 3:00 PM – 4:00 PM  
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) make connections and distinction among between concepts, e.g., division, ratio, fraction, and percent, and decimal;  
(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; and  
(f) cultivate a growth mindset where the focus is learning and effort rather than looking good and performance.
Textbook & Technology:
1. We are piloting a textbook and the publisher Cengage will be giving free access to an eBook and related online resources for this semester.
2. A WebAssign account (provided free of charge by Cengage)
3. A smart phone for i-Clicker Reef (register using your UTEP email)
4. OneNote for Class Notebook (free for UTEP students)

Course Structure:
We are using an active learning model.
- During class meetings, students will participate in class activities, work in group, and engage in whole class discussions.
- After class meetings, students will read specific sections of the eBook, reflect on class discussions, watch math videos, answer homework questions on OneNote, and complete online activities on WebAssign.
- There is a group project where you and your groupmates will actively look for instances that can be used to exemplify a particular mathematical practice.

You are expected to put in an average of 9 hours per week for a 3-credit hour course.

Tentative Schedule:

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Course Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>2-7</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>8-11</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>12-15</td>
<td>Chapter 4</td>
</tr>
</tbody>
</table>

Coursework and Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework (OneNote &amp; WebAssign)</td>
<td>20%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Group Project</td>
<td>10%</td>
</tr>
<tr>
<td>Participation &amp; Engagement</td>
<td>5%</td>
</tr>
<tr>
<td>Two Mid-term Exams</td>
<td>30%</td>
</tr>
<tr>
<td>Final Examination (May 10, Mon, 4-7pm)</td>
<td>25%</td>
</tr>
</tbody>
</table>

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%

TExES Competencies:
- TExES 391 (Core EC-6): Math (802) Competencies 2, 6, 1
- TExES 211 (Core 4-8): Math (807) Competencies 1, 2, 3, 15, 16
- TExES 115 (Math 4-8): Competencies 1, 2, 3, 15, 16
- TExES 161 (Special Ed EC-12): Competency 9

Important Dates:
- Census Day (Last Day to Drop without W): Feb 2
- Course Drop Deadline (Last Day to Drop with a “W”): Apr 1

If you feel that you are unable to complete the course successfully, please let me know and then contact the Registrar’s Office to initiate the drop process. If you do not, you are at risk of receiving an “F” for the course.
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.

Make-up Policy: • There will be no make-up for homework and assessments. The lowest score of your homework and the lowest score of your assessments 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.

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.

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.

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.

Copyright Statement for Course Materials: All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.
Covid-19 Precautions

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID 19 testing.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the first week of classes. For more information about the current rates, testing, and vaccinations, please visit https://www.epstrong.org/.

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.