

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

- Course Number:** MATH 4302 – 21808
- Course Title:** Fundamental Mathematics Concepts Taught in Grades 4-8
- Credit Hrs:** 3
- Term:** Spring 2022
- Course Meetings & Location:** 4:30 PM - 5:50 PM (Tues & Thurs)  
LART 208
- Prerequisite Courses:** MATH 3308 with a grade “C” or better
- Course Fee:** None
- Instructor:** Kien Lim
- Office Location:** Bell Hall 301
- Contact Info:** E-mail Address: [kienlim@utep.edu](mailto:kienlim@utep.edu)  
Office Phone: (915) 747-6772  
Emergency Contact: (915) 747-5761
- Office Hours:** Mondays: 3:00 PM – 4:00 PM (Zoom: <https://tinyurl.com/LimHours>)  
Tuesdays: 3:00 PM – 4:00 PM (Bell Hall 301)
- Course Description:** Fundamental Mathematics Concepts Taught in Grades 4-8: Mathematics taught in grades 4-8 will be examined from an advanced standpoint. This course is intended to help preservice middle school mathematics teachers make connections between their undergraduate mathematics education and the mathematics they will teach. Topics will be chosen from: number concepts and relationships, fundamental ideas of number theory, discrete mathematics, probability and statistics, numerical literacy, Euclidean and non-Euclidean geometry, transformational geometry, patterns, variables, and functions, multiple representations of functions, mathematical modeling, and concepts of calculus.
- Textbook(s):**
1. Developing Essential Understanding of Expressions, Equations & Functions: Grades 6-8, NCTM.
  2. (Supplementary) Mathematics for Elementary Teachers with Activities by Sybilla Beckmann
- Course Objectives:** Students will
- (a) deepen their understanding of math concepts by comprehending math texts, interpreting symbols and representations, making connections, explaining and communicating their understanding;
  - (b) develop problem solving skills (making sense of problems, using visual representations, trying multiple strategies, and persevering);
  - (c) view mathematics as a discipline that requires sense-making, reasoning, modelling, conjecturing, and justifying;
  - (d) cultivate a growth mindset through reflection and self-awareness; and
  - (e) experience the benefits and challenges in creating a positive learning atmosphere.

**Activities/Assignments:** Students will participate in in-class activities, read and understand assigned readings, watch math videos, create notes, turn-in weekly homework assignments, and prepare for in-class assessments & exams. Students are expected to put in an average of 9 hours of study time per week for a 3-credit hour course.

- Assessment:**
- Homework is administered using OneNote Class Notebook.
    - Work on Tuesday’s part of the homework before class on Thursday to receive a score (up to 10 points) for completion and effort.
    - Complete the entire homework by Sunday 11pm.
  - In-class assessments are administered at the beginning of a class. Assessment questions are designed to assess your understanding of the assigned readings, math videos, and concepts covered in class.
  - Pre-class assessments are administered using Respondus Lockdown Browser.
  - Edpuzzle videos with embedded questions (80% on time completion & 20% correctness)
  - 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.
  - The final examination is comprehensive. You are allowed a calculator, compass, protractor, and a cheat sheet (8½-by-11) with notes on both sides.
  - To foster mathematical thinking and problem solving, this scale is used:

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

**Grading Scheme:**

Edpuzzle & i-Clicker & Attendance	10%
Pre-class & In-class Assessments	10%
Homework	25%
Mid-term Examination 1 (Feb 15)	15%
Mid-term Examination 2 (Apr 5)	15%
Final Examination (May 10)	25%

- Technology & Resources:**
1. A smart phone for iClicker Reef (register using your UTEP email)
  2. OneNote for Class Notebook (free for UTEP students)
  3. EdPuzzle.com (join at <https://edpuzzle.com/join/nosahub> )
  4. Respondus Lockdown Browser & Respondus Monitor

**TExES Competencies:** TExES 115 (Math 4-8): Competencies 1, 2,, 3, 4, 5, 6, 7, 15, 16

**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.

**Attendance Policy:** Attendance will be taken.

**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](mailto: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](mailto: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.