Foundations of Elementary Mathematics I
MTH 3308

Instructor: Dr. Denisse M. Ramos, Ph. D

✉ dagu290@sulross.edu
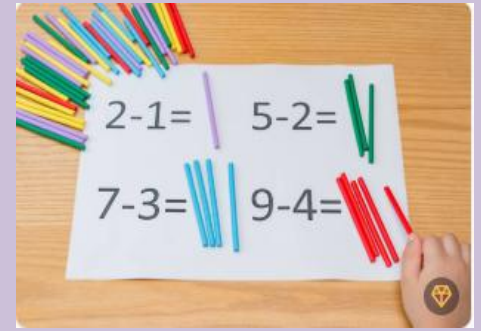
🕐 Appointments: Can be scheduled as needed

💻 Office: Virtual/Remote by appointment

👨‍🏫 Class Meetings: Virtual through Blackboard Mondays 5:00-7:30pm

Course Description

This course is the first in a series of two Math courses offered to education students seeking a teaching position in elementary and middle school. This course outlines the study of fundamental mathematical concepts, focusing on core building blocks to effectively teach mathematics. The topics covered will include the following from TEA Math competencies: whole numbers, fractions, sets, basic geometry, problem-solving strategies, and number theory with the purpose of strengthening the mathematical background of prospective elementary teachers. This class is highly interactive and emphasizes group work and cooperative learning. This class will promote pedagogical approaches and lesson plans that will be appropriate to various Math content.

Student Learning Objectives

- Apply knowledge of basic mathematics principles.
- Identify and provide valid proofs or solutions for theorems or problems.
- Recognize and dispute invalid mathematical statements by using counter-examples.

Required Textbook

Mathematics for Elementary Teachers with Activities, 5th Edition, Sybilla Beckman. ISBN 13: 978-0134392790

Mathematics for Elementary Teachers with Activities, 4th Edition, Sybilla Beckman. ISBN 13: 978-0-321-82572-8
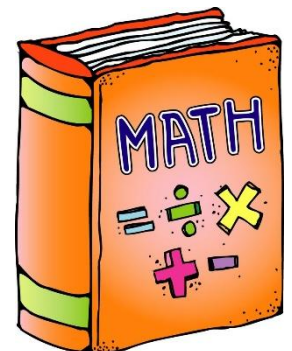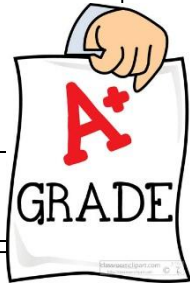
*** We will cover mostly Chapters 1-8

Course Grading

Grading Scale

A= 90-100 %
B = 80-89%
C= 70-79%
D= 60- 69%
F= less than 69%

Assignments

Participation: 100 points
Attendance: 100 points
Discussion Board: (5) 20 points each
Assignments: 10 points each
Mini Projects: 25 points each
Class Observation: 100 points
Math Journal: 50 points
Quizzes: (11) 20 points each
Exams: (2) 100 points each

Participation
The student is required to participate
vocally or in the chat through the class. This includes participating during class by demonstrating strategies or solutions to problems from the textbook.

Attendance
The student is required to turn on the CAMERA during class to earn credit for attendance on that day

Article Reflection Discussion Board
You will read an article based on the competency we are studying you will then reflect on the question and then answer to two of your classmate's reflection.

Math Journal
The student will be required to keep a content journal for the topics covered for the class as they relate to the TEKS for this subject. At the end of the semester you will turn in a video flip through of your journal showing proof of your notes or any other course work.

Class Assignments/Homework
Class assignments will be assigned throughout the semester and will be turned in through Blackboard by the due date. They will be graded on completion and accuracy. Copying answers out of the back of the book is plagiarism and will be penalized.
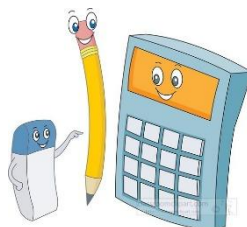
Quizzes

The student is expected to complete quizzes at the end of each module. Quizzes will be posted as we go throughout the semester. Quizzes will be worth time you will have an hour to complete each quiz. They will be due Sunday by 10:00 pm

Due Date: All Quizzes, Assignments, and Discussion Boards will be due by Sunday at 10:00 pm the day prior to class.

Mini Projects: These are assignments that you will do that requires you to apply your learning from the lesson being taught. This is something that will either be downloaded through a black board and may be presented in class.

Math Lesson Observation

The student is required to observe a Math lesson where the students are using hands on manipulatives to learn the content. This lesson can be observed in your local school district with permission from the principal. After observing the lesson, you will evaluate the lesson based on your observations and submit it to Blackboard.

Exams

There will be 2 assessments, a Mid-term Exam and a Final Exam. Reviews will be provided for these exams

Other Equipment Needed

Textbook (either virtual or hardcover), Math Journal, Pencil, other equipment may be needed as the course progresses.

TEXES EXAM Practice Questions We will be reviewing some sample questions from the TEXES Teacher Exam. We will be analyzing the question and discussing the answers in class. I will upload the questions to your Blackboard prior to class time.

** Syllabus is subject to change as the course progress I will keep updating it if needed

Classroom Procedures & Expectations

Academic Integrity

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden. The use of artificial intelligence (AI) tools and applications (including ChatGPT, etc) to produce content for course assignments is a violation of academic integrity

Lecture Courtesy

The general rules of classroom etiquette are below.
1) Please do not talk to others in class while the instructor is lecturing. If you have a question, ask the instructor, that is what I am here for.
2) Please turn cell phones to silent while in class. They are disruptive to the entire class, and detract from learning.
3) For remote connections, please attend class as professionally as one would do in person (ie. wearing proper clothes, not being disruptive or disrespectful to your peers, minimizing interruptions etc.)

Marketable Skills

Program – Interdisciplinary Studies BS

1. Students will acquire public speaking skills to a variety of audiences.
2. Students will acquire writing skills for lesson plans and other scholarly documents.
3. Students will acquire organizational skills to effectively manage time and meet deadlines.

Program - Mathematics BS

1. Students Demonstrate Logical and Analytical Skills.
2. Students Demonstrate Problem-Solving Using Analytic and Algebraic Methods
3. Students Use Technology in Problem-Solving and Presentation.
4. Students Use Communication and Pedagogical Skills.

Attendance Policy

Students missing 20% of lectures may be dropped from the class per the SRSU catalog. Any student dropped for excessive absences will receive an F for the course grade. Students are expected to attend every class. Please notify your instructor BEFORE missing class for authorized activities, death in the family, or illness. Assignments missed for any reason must be made up within one week of the originally scheduled date. REGARDLESS OF WHY AN ABSENCE OCCURS, YOU MAY BE GIVEN AN F FOR THE COURSE GRADE IF YOU ACCUMULATE SIX ABSENCES. Attendance is part of your grade. Students are expected to log in to class on time. If tardiness becomes a problem, then it will affect your attendance final grade.

Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues

Americans with Disabilities Act

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director or Ronnie Harris, LPC, Counselor, at 432-837-8203 or email mschwartze@sulross.edu or ronnie.harris@sulross.edu. RGC students can also contact Alejandra Valdez, at 830-758-5006 or email alejandra.valdez@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

Student Responsibility Statement

All full-time and part-time students are responsible for familiarizing themselves with the Student Handbook and the Undergraduate & Graduate Catalog and for abiding by the University rules and regulations. Additionally, students are responsible for checking their Sul Ross email as an official form of communication from the university. Every student is expected to obey all federal, state and local laws and is expected to familiarize themselves with the requirements of such laws.

SRSU Distance Education Statement

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires a secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

Libraries

The Bryan Wildenthal Memorial Library in Alpine offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

Supportive Statement

I aim to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, socioeconomic class, age, nationality, etc.). I also understand that the crisis of COVID, economic disparity, and health concerns, or even unexpected life events could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create an inclusive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you

COURSE SCHEDULE

Date	Class Activity	Assignment Due * All Assignments, Quizzes, and Discussions are Due Sunday by 10:00 pm
January 20	MLK Holiday NO CLASS	
January 27	Class and Course Introduction Module 1: Numbers and Base Ten System	**Module 1: Assignment** **Number Sense Discussion Due** **Quiz Module 1: Place Value** **Quiz Module 1: Comparing and Rounding Numbers**
February 3	Module 2: Fractions and Problem Solving	**Module 2: Assignment** **Fractions Discussion Due** **Mini Project: (Problem Solving Assignment)** **Quiz Module 2**
February 10	Module 3: Addition and Subtraction	**Module 3: Assignment** **Key Words Discussion Due** **Quiz Module 3**
February 17	Module 4: Multiplication (4.1-4.3)	**Module 4: Assignment** **Quiz Module 4 Part I**
February 24	Module 4: Multiplication (4.4-4.6)	**Module 4: Assignment** **Quiz Module 4 Part II**
March 3	Module 5: Multiplication of Fractions, Decimals, and Negative Numbers	**Module 5: Assignment** **Quiz Module 5** **Properties of Multiplication**
March 10	**Mid-term Exam**	**Mid- term due**
March 17	**SPRING BREAK MARCH 17-21**	
March 24	Module 6: Division (6.1-6.3)	**Module 6: Assignment I** **Division Discussion Due**

March 31	Module 6: Division (6.4-6.6)	**Module 6: Assignment II** **Quiz Module 6**
April 7	Module 7: Ratio and Proportional Relationships (7.1-7.2)	
April 14	Module 7: Ratio and Proportional Relationships (7.3-7.5)	**Module 7: Assignment** **Quiz Module 7**
April 21	Module 8: Number Theory (8.1-8.4)	**Module 8: Assignment** **Quiz Module 8**
April 28	Module 8 Number Theory (8.5-8.7)	**Quiz Module 8** **Math Journals Due** **Number Theory Discussion Due**
May 5	**Final Exam**	**Final Exam** **Math Lesson Observation Due**

*** NOTE: This outline is subject to change for reasons of course interest, time constraint etc. Assignments will be administered on the dates given, unless material relevant for a given assignment has not been covered yet. Due dates may be moved if need.