

Math 3308

Survey of Basic Math Theory I

Sul Ross State University
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Office Hours
M: 8:00-10:00 AM, 1:30-2:00 PM
T: 1:00 PM-4:00 PM
W: 8:00-10:00 AM, 1:30-2:00 PM
Th: 1:00 PM-4:00 PM
F: 9:00-10:00 AM

Catalog description: Sets and Whole Numbers, Numeration Systems, Number Theory and Integers.

Pre-requisites, co-requisites, and other requirements: College Algebra

Required: MyMathlab Access Code for Long/Long/DeTemple - Mathematics for Elementary Teachers - Media update 7/e (access to mymathlab + ebook). The ISBN is 978-013-5903650
(Course ID: **davis33802**)

Readings and Lecture Topics will include the following

CHAPTER 2 – SET AND WHOLE NUMBERS

- 2.1 Sets and Operations on Sets
- 2.2 Sets, Counting and the Whole Numbers
- 2.3 Addition and Subtraction of Whole Numbers
- 2.4 Multiplication and Division of Whole Numbers

CHAPTER 3 – NUMERATION AND COMPUTATION

- 3.1 Numeration Systems Past and Present
- 3.2 Algorithms for Addition and Subtraction of Whole Numbers
- 3.3 Algorithms for Multiplication and Division of Whole Numbers
- 3.4 Mental Arithmetic and Estimation
- 3.5 Nondecimal Positional Systems

CHAPTER 4 –NUMBER THEORY

- 4.1 Divisibility of Natural Numbers
- 4.2 Tests for Divisibility
- 4.3 Greatest Common Divisors and Least Common Multiples

CHAPTER 5 – INTEGERS

- 5.1 Representations of Integers
- 5.2 Addition and Subtraction of Integers
- 5.3 Multiplication of Integers

Course requirements and policies:

A. Grade Requirements

Grading Procedure:	Tests (2 Tests-100 points each)	200 points
	Homework (2 Homeworks-100 points each)	200 points
	Final Exam	100 points
Due Dates	Chapters 2 & 3 Homework	October 12 (by midnight)
	Chapters 2 & 3 Test	October 12 (by midnight)
	Chapters 4 & 5 Homework	November 23 (by midnight)
	Chapters 4 & 5 Test	November 23 (by midnight)
	Final Exam	December 7 (by midnight)

PowerPoint Audio Files	Course Content will be delivered through Audio PowerPoint Lecture Notes, which are available on Blackboard. Each section listed on page one of the syllabus will have an associated Audio PowerPoint Lecture file. These notes, along with the etext, will contain all material sufficient to complete the homework and the tests.
MyMathLab	MyMathLab is an online homework and testing system that will be used for assessment (homework and tests) in this course. You must purchase an access code directly from Pearson via the MyMathLab website (online price is \$69.99 for 18-week subscription) or through the Sul Ross Bookstore. Be advised you will need a credit or debit card to purchase the code online. If you are purchasing the access code via the MyMathLab website, please see the Blackboard MyMathLab link for complete instructions. If you are purchasing the access code through the Sul Ross Bookstore, please make sure you purchase the correct access code. See page one of the syllabus for full Mymathlab information.
Homework Policy	The homework grade is based on the homework score on MyMathlab. Test 1 Homework will contain questions from Chapters 2 and 3. Test 2 Homework will contain questions from Chapters 4 and 5. Each homework set is worth 100 points toward your final grade. Homework due dates are stated above and on MyMathLab. These are due dates; you do not have to wait until that date to finish the homework. Please be advised that NO EXTENSIONS WILL BE GRANTED.
Test Policy	Each test grade is based on the test score on MyMathlab. Test 1 will contain questions from Chapters 2 and 3; specifically I will select questions from Test 1 homework. Test 2 will contain questions from Chapters 2 and 3; specifically, I will select questions from Test 2 homework. Each test is worth 100 points toward your final grade. Test due dates are stated above and on MyMathLab. These are due dates; you do not have to wait until that date to finish the test. Please be advised that NO EXTENSIONS WILL BE GRANTED.

Grade Determination:	<u>Total Points</u>	<u>Letter Grade</u>
	450-500	A
	400-449	B
	350-399	C
	300-349	D
	0-299	F

B. Policies:

Technology Requirement: Calculators can be used in class and on all homework assignments.

ADA Statement: “As per Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, if accommodation is needed notify me as soon as possible. Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student’s responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Mary Schwartze, M. Ed., L.P.C., in Counseling and Accessibility Services, Ferguson Hall, Room 112. The mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Telephone: 432-837-8691. E-mail: mschwartz@sulross.edu .

Academic Dishonesty: Students may be subject to disciplinary proceedings resulting in an academic penalty or disciplinary penalty for academic dishonesty. Academic Dishonesty includes, but is not limited to, cheating on a test, plagiarism and collusion.

Zoom Meetings: Zoom meetings will be held every Monday from 2:00-3:00 PM. These sessions are available for you to ask questions concerning course content and the homework. These meetings are not mandatory; they are available as an additional resource to help you be successful in the course. If available, I will upload the Zoom meeting recordings to Blackboard.

C. Student Learning Outcomes

1. Student Learning Outcomes- See Department of Education outcomes- The preservice teacher understands how students learn mathematical skills and uses that knowledge to plan, organize and implement instruction and assess learning. The preservice teacher understands concepts related to numbers, operations and algorithms and the properties of numbers. The preservice teacher understands concepts related to patterns, relations, functions and algebraic reasoning. The preservice teacher understands concepts and principles of geometry and measurement. The preservice teacher understands concepts related to probability and statistics and their applications. The preservice teacher understands mathematical processes and knows how to reason mathematically, solve mathematical problems and make mathematical connections within and outside of mathematics.
2. Course Competencies—See TExES Competencies for Math EC-6 on the following pages