

Math 3309

Survey of Basic Math Theory II

Sul Ross State University
Rio Grande College.
2623 Garner Field Road
Uvalde, TX 78801

Richard Davis
SWTJC (Richardz-3)
(830) 591-7369
radavis@swtjc.edu
rxdl5sw@sulross.edu

Office Hours
M: 8:00-10:00 AM, 3:15-5:00 PM
T: 8:00-9:30 AM
W: 8:00-10:00 AM
Th: 8:00-9:30 AM, 1:00-3:00 PM
F: 8:00-10:00 AM

Catalog description: Geometric concepts, probability, statistics, estimation, problem solving, and other related topics.

Pre-requisites, co-requisites, and other requirements: Math 3308

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: davis94308

Readings and Lecture Topics will include the following

CHAPTER 6 – FRACTIONS AND RATIONAL NUMBERS

- 6.1 The Basic Concepts of Fractions and Rational Numbers
- 6.2 Addition and Subtraction of Fractions
- 6.3 Multiplication and Division of Fractions
- 6.4 The Rational Number System

CHAPTER 7 – DECIMALS, REAL NUMBERS, AND PROPORTIONAL REASONING

- 7.1 Decimals and Real Numbers
- 7.2 Computation with Decimals
- 7.3 Proportional Reasoning
- 7.4 Percent

CHAPTER 8 –ALGEBRAIC REASONING, GRAPHING, AND CONNECTIONS WITH GEOMETRY

- 8.1 Variables, Algebraic Expressions, and Functions
- 8.2 Graphing Lines, Points, and Elementary Functions
- 8.3 Connections with Geometry

CHAPTER 9 – GEOMETRIC FIGURES

- 9.1 Figures in the Plane
- 9.2 Curves and Polygons in the Plane

CHAPTER 10 – MEASUREMENT: LENGTH, AREA, AND VOLUME

- 10.1 The Measurement Process
- 10.2 Area and Perimeter
- 10.3 The Pythagorean Theorem
- 10.4 Volume

CHAPTER 11 – TRANSFORMATIONS AND SYMMETRIES

- 11.1 Rigid Motions and Similarity Transformations
- 11.2 Patterns and Symmetry

CHAPTER 13 – STATISTICS: THE INTERPRETATION OF DATA

- 13.1 Organizing and Representing Data
- 13.2 Measuring the Center and Variation of Data
- 13.3 Statistical Inference

Course requirements and policies:

A. Grade Requirements

Grading Procedure:	2 Tests Homework Final Exam	100 points each 100 points 100 points
Test Schedule	Test 1 (Chapters 6, 7, and 8) Test 2 (9, 10, 11, 13) TEA Practice Test Math 3309 Final Exam	October 7 November 18 November 23 December 7
Make-up Policy:	Makeup exams will be granted only in cases of medical and legal obligations. Student must provide a medical or legal document. It is at the discretion of the instructor whether to grant the request.	
Final Exam	The final exam grade will be based on the better score of the following: 1) TEA Practice Test 2). Math 3309 Comprehensive Final Exam	
Homework	The homework grade is based on the Mymathlab homework score.	
Extra Credit	There will be one extra credit opportunity throughout the semester. Extra Credit Assignment will be worth 10 points.	
Section Registration Policy	Students must take each exam at the site in which they are registered.	
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. But calculators will not be allowed on the tests or the final exam.

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 Schwartz, 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.

Electronic Devices: Students are required to silence all electronic devices (cellular phones, etc.) when in classrooms, laboratories and the library.

Attendance: A student absent for any reason is responsible for all work missed.

PowerPoint Lecture Notes: PowerPoint Lecture notes will be made available through Blackboard. A copy of the syllabus is also available via 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

Distance Education Statement: Students enrolled in distance education courses have equal access to the university’s academic support services, such as Smarthinking, library resources, such as 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 secure login information to verify students’ identities and to protect students’ information. **[If the course requires students to take proctored exams or to purchase additional software or equipment, please describe those requirements here.]** The procedures for filing a student complaint are included in the student handbook. 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.