



RANGER COLLEGE
RANGER, TEXAS

COURSE SYLLABUS

FOUNDATIONS OF MATHEMATICS

MATH 0342

3 credit hours

FALL 2021

INSTRUCTOR:

REBBECA PLOWMAN

MATH 0342

INSTRUCTOR: Rebbecca Plowman

EMAIL: rplowman@rangercollege.edu

OFFICE: Stephenville Faculty Offices and Elsom Building Rm 6, Ranger Campus

PHONE: 254-595-2008 (text before calling)

HOURS: Main Campus: M/W 8:40 to 9:10am and 1:40 to 2:40pm

Erath Center: T/TH 8:30 to 10:30 and Tues 1:30 to 3:00

I. Texas Core Curriculum Statement of Purpose

Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

II. Course Description

0342 – Foundations of Math I (3-0) 32.0104.51 19 This course is an academic resource for students enrolled in the STAT path or quantitative literacy path. Its purpose is to help the student prepare to meet the requirements of the Texas Success Initiative, and to help the student gain the skills necessary to be successful in mathematics classes at the college level. Students are placed in it based on holistic placement procedures of both quantitative and qualitative data, including, but not limited to: TSI scores, high school GPA, prior coursework, motivation, and TSI diagnostic profiles. Students in this course are advised to enroll concurrently in MATH 1332 or 1342. This course is non-transferable college credit and may not be counted or used as hours towards graduation. Course content includes: reviewing of factoring and special structures; functions and equations as followings; rational, radical, root, and quadratics; systems of linear equations and inequalities in two and three variables; and non-linear inequalities. Credit 3 semester hours

III. Required Background or Prerequisite

Student has credit for Algebra I and Algebra II and has met the passing standard for the Algebra I End of Course exam. The student has also scored less than a 340 on the TSI.

IV. Required Textbook and Course Materials

- Lumen Learning: Developmental Math Emporium (ebook)
- Handheld calculator (TI-30XS, TI-30, or TI-84 are recommended).
- Notes printed from Blackboard

V. Course Purpose

MATH 0342

Courses in Mathematics focus on quantitative literacy in logic, patterns, and relationships. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

At the completion of this course, the student should be prepared to succeed in Statistics, Contemporary Mathematics, or Intermediate Algebra.

VI. Learning Outcomes

Upon successful completion of this course, students will:

1. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.
2. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.
3. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.
4. Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.
5. Use graphs, tables, and technology to analyze, interpret, and compare data sets.
6. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions.

VII. Core Objectives

This course meets the following of the six Core Objectives established by Texas:

- Critical Thinking Skills (CT)** – Creative thinking, innovation, inquiry, and analysis; evaluation and synthesis of information
- Communication Skills (COM)** – effective development, interpretation and expression of ideas through written, oral, and visual communication
- Empirical and Quantitative Skills (EQS)** – The manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- Teamwork (TW)** – The ability to consider different points of view and to work effectively with others to support a shared purpose or goal
- Social Responsibility (SR)** – Intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
- Personal Responsibility (PR)** – The ability to connect choices, actions, and consequences to ethical decision-making

VIII. Methods of Instruction

The instructional delivery of this class may be face-to-face, online, or hybrid. Students may be expected to watch instructional videos outside class, attend Zoom class sessions, work in groups via Zoom, or attend regular class in person. Students are also expected to complete assignments online through Blackboard and Pearson.

IX. Methods of Assessment

In order to be successful in Foundations of Math, a student must achieve a 70% OR successfully pass the TSI Math assessment. Failure to obtain either academic stipulation will result in repeating the course.

You overall grade will be composed as follows:

5% - In class Participation: You will be encouraged to work on problems in class. This portion of your grade will be determined by your attendance and participation. Refusal to work on in class problems will result in no credit in this category.

25% - Homework: Homework will be accessed through the Unit modules in Blackboard. You will be given unlimited attempts on homework. You will have two weeks to complete the homework.

20% - Unit Quiz: After most Units are covered, you will have a short quiz. The quiz will be available through the Unit modules in Blackboard. The quizzes will be timed for 30 minutes and you will have only 2 attempts per question. You will have two weeks to complete the quizzes.

25% - Exams: There will be two in class paper exams. On the exams, your grade will be determined by your work shown and your final answer.

25% - Final Exam: The final exam will be cumulative. The final exam will be a multiple choice paper exam, if possible.

Grading scale: A = 90-100% B = 80-89 C = 70-79 D = 60-69 F = Below 60

X. Course/Classroom Policies

Class participation is strongly encouraged for optimal learning.

Absences – A student WILL be dropped from the course after the sixth absence from class.

Make up assignments – Make up assignments will be given on a case-by-case basis.

Test Corrections – No test corrections will be given unless otherwise stated by instructor.

Homework – Homework due dates will not be extended. Anything completed after the initial due date has a 10% late penalty deducted.

Tests – Tests may be administered in class or online. You will know ahead of time which method is being used. No cell phones may be used on the test. If a student is caught using a cell phone, the instructor may take the test and deduct points from the score.

Academic Dishonesty - A student found to be cheating or copying on an exam or quiz will be given a grade of “0”. Repeated acts of cheating may result in being dropped from class with a grade of “F”.

Student Behavior - Students will behave as mature adults and exhibit proper classroom decorum. Students will not cause any distractions that might prevent other students from learning. Students that deviate from this policy will not be permitted to remain in class.

Cell phones - students are encouraged to step outside when receiving phone calls. Cell phones CANNOT be used on a test and are discouraged during notes and practice.

Calculators – please purchase a handheld calculator to use in class (you may not use your phone as a calculator). A TI-84+ is recommended for use in this class. If you cannot purchase your own calculator, you may borrow one from the school.

Available Support Services - the Learning Resource Center has books, videos, and computer software that may be used as a supplement for this class. Tutors are also available (see counselor).

Instructions and assessment methods may change due to complications caused by the ongoing Covid-19 pandemic.

XI. Course Outline/Schedule

Week	Material
Week 1: Aug 23rd	Fractions
Week 2: Aug 30th	Probability Basics
Week 3: Sept 7th	Monday: No Class (Labor Day) Basic Statistics
Week 4: Sept 13th	Integers
Week 5: Sept 20th	Order of Operations Exam 1-Sept 22nd

MATH 0342

Week 6: Sept 27th	Evaluating Expressions
Week 7: Oct 4th	Simplifying Algebraic Expressions
Week 8: Oct 11th	Adding Polynomials and Distributive Method
Week 9: Oct 18th	Multiplying Polynomials and Special Cases
Week 10: Oct 25th	GCF and Trinomials
Week 11: Nov 1st	Solving, Graphing, and Converting Linear Equations
Week 12: Nov 8th	Continue Solving, Graphing, and Converting Linear Equations Exam 2 - Nov 10th
Week 13: Nov 15th	Solving Systems of Equations
Week 14: Nov 22nd	Thanksgiving Break
Week 15: Nov 29th	Caught Up and Review
Week 16: Dec 6th	Monday: Review FINAL EXAMS

XII. Non-Discrimination Statement

Admissions, employment, and program policies of Ranger College are nondiscriminatory in regard to race, creed, color, sex, age, disability, and national origin.

XIII. ADA Statement

Ranger College provides a variety of services for students with learning and/or physical disabilities. Students are responsible for making initial contact with the Ranger College Counselor, Gabe Lewis (glewis@rangercollege.edu). It is advisable to make this contact before or immediately after the semester begins.