COURSE SYLLABUS
Math 1314-EP1 (College Algebra, Dual Credit)
Spring 2025

Class Meetings: Monday-Friday 8:30-10:00
Room: C-13 (Eagle Pass High School)
Instructor: Marites Romero
Email Address: marites.romero@sulross.edu or mromero@eaglepassisd.net
EPHS Phone Number: 830-773-2381
Office Hours: M-F 3:05-4:20

Description of Course Content:

Quadratic and higher order polynomial equations and inequalities solved algebraically, graphically and numerically; graphs and operations on relations and functions; real and complex zeros of polynomials and rational functions; exponential and logarithmic functions; systems of linear equations; matrices. (Prerequisite: Two years of high school algebra and a passing score on TSIA2)

Textbook: Sisson, Paul. *Algebra and Trigonometry*, Hawkes Learning
ISBN: Software and eBook 978-1-64277-527-3
Other Equipment Needed: Paper and pencils. Computer access.

Course Objectives:
The student should be able to:

- solve linear, quadratic, rational and radical equations and inequalities using various methods;
- graph functions by plotting points and performing transformations on certain parent functions;
- graph polynomial functions by finding roots using synthetic or long division and distinguish the end behavior of graphs;
- model growth and decay problems using exponential functions;
- solve systems of linear equations in 2 or 3 variables.

Mathematics Program Learning Objectives:
The graduating student should be able to

- demonstrate content knowledge of basic mathematical principles
- manifest proficiency in logic, able to negate statements, provide counterexamples to false statements, and determine the validity of arguments
- communicate mathematical content clearly and with valid reasoning

Student Learning Outcomes:
Students will develop

- critical thinking skills to include creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information
- communication skills to include effective development, interpretation, and expression of ideas through written, oral, and visual communication

- empirical and quantitative skills to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Marketable Skills-Mathematics BS:

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

EC-6 Teaching Competencies

- Competency 013 (Mathematics Instruction) The teacher understands how students learn mathematical skills and uses that knowledge to plan, organize, and implement instruction and assess learning.
- Competency 014 (Number Concepts and Operation) The teacher understands concepts related to numbers, operations and algorithms and the properties of numbers.
- Competency 015 (Patterns and Algebra) The teacher understands concepts related to patterns, relations, functions and algebraic reasoning.
- Competency 016 (Geometry and Measurement) The teacher understands concepts and principles of geometry and measurement.
- Competency 017 (Probability and Statistics) The teacher understands concepts related to probability and statistics and their applications.
- Competency 018 (Mathematical Processes) The teacher understands mathematical processes and knows how to reason mathematically, solve mathematical problems and make mathematical connections within and outside of mathematics.

Grading Policy:

Course grade will be based on the following components.

Homework/Classwork	10%
Quizzes	20%
Tests	30%
Projects	15%
Final Exam	25%

Grading Scale:

A	90 – 100
B	80 – 89
C	70 – 79
D	60 – 69
F	0 – 59

Class Policies

Regular attendance is expected of all students, come to class on time. Students are expected to log in to blackboard and Hawkes on a regular basis and they are also responsible for all materials and assignments missed because of absence or tardiness. Extended absence (due to illness or injury) should be reported immediately. **Students who have excessive absences will be reported to the Dual Credit coordinator and might be dropped from the class.**

Be attentive and engaged in class. Refrain from using the cell phones and other electronic devices during class. You will be required to turn in your cell phone during an exam.

Class participation is a very important part of the learning process in this course. Although it is not explicitly graded, you will be evaluated on the quality of your contributions and insights. I will use the assessment of your participation to manage borderline grades.

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.

Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity. Students should also avoid using open AI sources ***unless permission is expressly given*** for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

If you are caught cheating on the exam, you will get a grade of 0 and no make-up test will be given for that exam. You are expected to conduct yourselves in accordance with the Student Code of Conduct, which prohibits cheating, plagiarism, and other forms of academic dishonesty. Academic integrity is expected from all students.

Classroom Climate of Respect: 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.

Homework and classwork will consist of problems from the textbook, and may include other activities/problems as well. You are encouraged to work with study partners. Collaboration and checking answers on classwork is allowed and encouraged. Copying homework/classwork is not tolerated. You still must work through the details of the problem after you have gotten help, write the final solutions yourself, and understand them fully. Online homework that are done through Hawkes Learning System is graded on mastery. All online homework along with due dates will be posted on the Hawkes Learning System. You can attempt an online homework assignment until you complete it, but you will be forced to go back to the practice mode if you miss too many problems. Sometimes, homework/classwork will be checked in class for completeness, not for accuracy. Most classwork (worksheets), however, will be graded for accuracy. Turning in work late will receive a penalty. No late work will be accepted 3 days after the due date. Exceptions can be made for exceptional reasons beyond your control or at my discretion if you let me know in advance.

You will have **quizzes** over material covered every 2-3 sections. These quizzes will be graded out of 100 points and are designed to only take 10-15 minutes. These could also contain questions concerning the material you have read to prepare for class.

No make-up exams will be given unless there is a school-related reason. If an exam is missed with a valid excuse, the grade on the final can replace this exam. Any exams missed beyond one will be an automatic zero. Exams will be closed notes and closed book. No calculator will be allowed unless otherwise stated by your instructor. Once you start an exam, you have to finish it.

Seek help if you do not understand a concept or problem. Math is a subject in which each new concept builds on previous concepts. Therefore, it is very important that you understand every concept, or you will be unable to understand later concepts. Do not fall behind.

If you need extra help, I can be available outside of class during school hours if you give me enough advance notice.

Technical Support

The Support Desk is where you can direct your more technical questions. For example, the Support Desk can help you if you are having issues submitting a document, getting videos to play, or using BlackBoard. The support desk is open 24 hours a day/7 days a week for your convenience. You can reach the support desk 24 hours a day/7 days a week by calling 888.837.6055 or via email blackboardsupport@sulross.edu

You also have access to Hawkes Tech Support: online 24/7 at Hawkeslearning.com https://support.hawkeslearning.com/supportcenter/ This link is provided in Blackboard & Google Classroom.

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.

Couseling: Sul Ross has partnered with TimelyCare where all SR students will have access to nine free counseling sessions. You can learn more about this 24/7/356 support by visiting Timelycare/SRSU. The SR Counseling and Accessibility Services office will continue to offer in-person counseling in Ferguson Hall room 112 (Alpine campus), and telehealth Zoom sessions for remote students and RGC students.

Library Services: The BryanWildenthal 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 LobolD and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).

No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.

Eagle Pass Library: Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL) and ScanIt to get materials delivered to you at home or via email.

Distance Education Statement: Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, 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 secure login information to verify students' identities and to protect students' information. 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.

January 15	First Day of Classes
January 21	Last Day for Late Registration and Schedule Changes
January 31	Last day to drop a course without creating an academic record
March 17-21	Spring Break
April 4	Last Day to Withdrawal from University or Drop Classes with a Grade of "W" (by 4 pm)
April 30	Last Day of Classes before finals
May 1	Dead Day
May 2, 5-7	Final Exams

Lesson Schedule (Dates are subject to change.)

Date	Lesson Name	Exams & Quizzes
Week 1 Jan 7-10	Real Numbers, Algebraic Expression, Exponents, Radicals, Polynomials (Sections 1.1-1.5)	Quizzes 1.1-1.2; 1.3-1.4
Week 2 Jan 13-17	Factoring, Rational Expression, Complex Numbers (Sections 1.6-1.8)	Quizzes 1.5-1.6; 1.7-1.8 Chapter 1 Exam
Week 3 Jan 20-23	Linear Equation & Inequality, Quadratic & Polynomial Eqtns in 1 variable (Sections 2.1-2.4)	Quizzes 2.1-2.1; 2.3-2.4
Week 4 Jan 27-31	Rational & Radical Equations (Sections 2.5-2.6)	Quiz 2.5-2.6 Chapter 2 Exam
Week 5 Feb 3-7	Coordinate System, Circles, Linear Eqtn in 2 variables, Slope, Forms of Linear Eqtn, Parallel & Perpendicular Lines (Sections 3.1-3.5)	Quizzes 3.1-3.2; 3.3-3.4
Week 6 Feb 10-14	Linear Inequalities in 2 variables, Linear & Quadratic Functions (Section 3.6-Section 4.3)	Quizzes 3.5-3.6; 4.1-4.2 Chapter 3 Exam
Week 7 Feb 17-21	Other Common Functions, Variation, Mathematical Models (Sections 4.4-4.6)	Quizzes 4.3-4.4; 4.5-4.6
Week 8 Feb 24-28	Transformations and Properties of Functions (Sections 5.1-5.2)	Quiz 5.1 Chapter 4 Exam
Week 9 Mar 3-7	Combining Functions, Inverses of Functions, Polynomial Functions, (Sections 5.3-5.4, Section 6.1)	Quiz 5.2-5.4
Week 10 Mar 10-14	Polynomial Inequalities, Polynomial Division, Zeros of Polynomial Func, Fundamental Thm of Algebra (Sections 6.1-6.4)	Quizzes 6.1; 6.2-6.4 Chapter 5 Exam

Week 11 Mar 24-28	Rational Function, Rational Inequalities (Section 6.5)	Quiz 6.5 Chapter 6 Exam
Week 12 Mar 31-Apr 4	Exponential Func: Graphs and Models, Logarithmic Functions and Their Graphs (Sections 7.1-7.3)	Quiz 7.1-7.2
Week 13 Apr 7-11	Log Properties & Models, Expo & Log Eqtns (Sections 7.3-7.5)	Quizzes 7.3-7.4; 7.5 Chapter 7 Exam
Week 14 Apr 14-17	Systems of Linear Equations, Matrix Notation & Determinants (Sections 12.1-12.3)	Quiz 12.1-12.2
Week 15 Apr 22-25	Basic Matrix Operations, Inverses of Matrices, Partial Fraction Decomposition (Sections 12.4-12.6)	Quizzes 12.3-12.4; 12.5-12.6
Week 16 Apr 28-May 2	Systems of Linear Inequalities, Systems of Nonlinear Equations (Sections 12.7-12.8)	Quiz 12.7-12.8 Chapter 12 Exam
Week 17 May 5-9	Final Exam Review	Final Exam (Comprehensive)
Week 18 May 12-16	Systems of Nonlinear Inequalities (Section 12.8)	