

### SUL ROSS STATE UNIVERSITY Math Department Statistics Course Syllabus MATH 1314

COURSE TITLE: Math 1314 SECTION, CRN, CLASS DAYS & TIME: Math 1314: C01, CRN 11720, TR 9:30am CLASSROOM: BAB 304 INSTRUCTOR: Mrs. Lamar INSTRUCTOR'S Office: FH 204 INSTRUCTOR'S PHONE #: 8338 INSTRUCTOR'S E-MAIL: elba.lamar@sulross.edu INSTRUCTOR'S OFFICE HOURS: M to F: 8:30-9:00, MW: 11:00-13:00 pm , TR: 12:30-1:15pm or by appointment CREDIT HOURS: 3 LECTURE HOURS: 3

### **COURSE DESCRIPTION:**

This is a College Algebra course designed to review and operate with different type of Equations and Functions necessary to solve different type of problems. Topics include, Real and Complex Numbers, Linear, Quadratic, Polynomial, Rational, Radical, Logarithmic and Exponential Equations and Functions. Use of technology is integrated throughout the course.

## **COURSE PREREQUISITES:**

Undergraduate level Math 0314 Minimum Grade of C or passing TSI or Concurrent Enrollment.

### **STUDENT LEARNING OUTCOMES:**

After completing this course, the student should be able to demonstrate competency in the following:

- (1) Real and Complex Numbers
- (2) Properties of Exponents and Radicals
- (3) Linear Equations and Inequalities
- (4) Quadratic, Polynomial, Radical and Rational Equations
- (5) Linear, Quadratic and other Common Functions
- (6) Transformations, Properties, Combination and Inverse of Functions
- (7) Polynomial Division, Locating Real Zeros and The Fundamental Theorem of Algebra

### **EC-6 CORE TEACHER COMPETENCIES:**

- CO 013 (Mathematics Instruction) The teacher understands how students learn mathematical skills and uses that knowledge to plan, organize and implement instruction and assess learning.
- CO 014 (Number Concepts and Operation) The teacher understands concepts related to numbers, operations and algorithms and the properties of numbers.
- CO 015 (Patterns and Algebra) The teacher understands concepts related to patterns, relations, functions and algebraic reasoning.
- CO 016 (Geometry and Measurement) The teacher understands concepts and principles of geometry and measurement.
- CO 017 (Probability and Statistics) The teacher understands concepts related to probability and statistics and their applications.
- CO 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.

#### **COURSE REQUIREMENTS:**

## 1. PURCHASE SOFTWARE Hawkes COLLEGE ALGEBRA 3<sup>rd</sup>. Edition

• First time Math 1314 Students: Student set up their online account in Hawkes, and accept the temporary access provided. Before the temporary access expires (approximately three weeks), the student must purchase their own access code (~\$89.00). Students without Hawkes access will be dropped from MATH 0314 and MATH 1314 with an F in each course.

\*Hawkes accounts are connected to MATH 1314 only, and students will need only one Hawkes account.

Repeating Students: If you already have Hawkes access to College Algebra 3<sup>rd</sup> Edition, remember it's for life.

NOTE: Permanent Hawkes codes are gifted to students in attendance during the third week of class. Students not in attendance when permanent codes are given out will be required to buy their own code. Students whose temporary access expires will be required to buy their own code. NO GIFTED CODES WILL BE GIVEN AFTER FRIDAY SEPTEMBER 13, 2024.

• Hawkes Tech Support:

Chat available 24/7 <u>https://www.hawkeslearning.com/</u> Phone support Monday-Friday 7:00 am to 8:00 pm 800-426-9538

2. SCIENTIFIC CALCULATOR: A scientific calculator is required for this curse, you must purchase your own. It has buttons with denotations such as  $\sqrt{y}$ ,  $y^x$ ,  $a^b$ , log, ln,  $e^x$ . Appropriate scientific calculators cost around 7-35 dollars each.

### GRAPHING CALCULATORS or Phone Calculators ARE NOT ALLOWED

**SUPPLIES:** In addition to your own Hawkes access code, you must have a notebook dedicated to MATH class. Recommended: a binder with dividers, pockets, and lots of paper; pencils and erasers.

### Grading Scale:

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

### **Grading Policy:**

Assignments: 30% (Due dates are on Hawkes) Exams: 70% (There will be 3 equally weighted exams, including the final exam.)

### Late Penalties:

10% for up to 1 day late 20% for up to 2 days late 30% for up to 3 days late 40% for up to 4 days late 50% for up to 5 days late 100% for more than 5 days late

#### **ACCELERATION:**

You determine how quickly or slowly you complete the work associated with this course. The sooner you complete your College Algebra math course, the better off you will be, so please feel free to work hard and quickly.

### ACADEMIC ETHICS:

Please remember that real success comes from learning how to do the work yourself. Your instructors believe that you are an honest individual and expect that all the work that you do results from your own efforts. You know that a college education costs too much for you to waste your time trying to beat the system rather than figuring out how to learn the material. You know that any form of cheating is dishonest, and it makes you look very bad. Your instructor will have specific responses to any academic dishonesty that s/he may encounter. A repeated instance of academic dishonesty may result in your situation being forwarded to the Dean of Student Life. Please see the *SRSU Student Handbook* for a more complete discussion of academic honesty.

## ATTENDANCE POLICY:

An absence is defined as non-attendance in fifty minutes of class; for example, nonattendance in a one and one-half hour class will constitute one and one-half absences and non-attendance in a three-hour class will constitute three absences. The instructors may, at their discretion, drop a student from a course when the student has a total of nine absences. Any student dropped for excessive absences will receive either an "F" or a "W" depending upon the faculty member's discretion.

An absence due to participation in an official University activity is considered an authorized absence. When a student must miss a class due to an authorized University activity, it will be the responsibility of the student to notify the instructor of the class in advance and to complete all assignments on time. Being more than five minutes late or leaving before class is over will be counted as an absence. If you are absent from class, it is your responsibility to get the notes that you missed.

### **CELL PHONES:**

Cell phones going off during class are disruptive. Be a considerate class member. Turn off your cell phone before class begins and keep it turned off throughout the class period. If you feel that you have an emergency that requires your phone being left on, speak with me before class. Should you fail to silence (including the "vibrate" function) your phone, you risk being asked to leave class and being counted absent.

### **COURSE COMMITMENT:**

You will make the decision about how long it takes you to clear your developmental math requirement. Please keep these thoughts in mind:

- 1. It costs as much to take this class (at least \$830) as it does to take any other SRSU three-hour course. Yet you know that this course does not count towards your degree. You will save a lot of money and time if you decide to clear your developmental math requirement as quickly as possible.
- 2. You are the only one who can make the commitment to be successful in this class. You will decide how much time you end doing homework, asking your instructor questions, and visiting with a tutor.

#### **STUDENT ASSISTANCE:**

Tutors are available in the Tutoring and Learning Center, 1<sup>st</sup> floor of the library, free of charge. Please check with the Tutoring and Learning Center for hours and days of tutor availability. You can also contact me during office hours or by appointment.

**ADA Statement:** ADA (Americans with Disabilities Act) Sul Ross State University (SRSU) is committed to equal access in compliance with 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 Rebecca Greathouse Wren, LPC-S, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email rebecca.wren@sulross.edu. Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas, 79832.

#### **TEXAS SUCCESS INITIATIVE (TSI) ADVISING:**

As a developmental education student, you have a TSI hold on your records. In order for you to register for the next semester, you must see a TSI advisor in Lobo Den. Lobo Den is located in Lawrence Hall, Room 102 and their phone number is 432-837-8982.

Sul Ross 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 day a week for your convenience.

You can reach the support desk:

By calling 888.837.6055 Via email <u>blackboardsupport@sulross.edu</u>

Lamar Math 1314

# SRSU Email:

You will want to **check your Sul Ross e-mail regularly**. It is an easy way for me to stay in contact with you and for you to stay in contact with me. I will use Hawkes to send messages to your class, collect major assignments, provide you access to class assignments, and post your major paper grades. We will use Hawkes in class. You need to be able to access both, your Hawkes, and Blackboard accounts.

# **Required Student Responsibilities Statement**

All full-time and part-time students are responsible for familiarizing themselves with the <u>Student Handbook</u> and the <u>Undergraduate & Graduate Catalog</u> and for abiding by the <u>University rules and regulations</u>. 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 Library Services:**

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 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/findand-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.

New for Fall 2023: 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.

# **SRSU 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.

# Course Supplement Syllabus Math 1314 TR 9:30am

# Hawkes Software - Objective to be covered

Introduction 1.1 Real Numbers	Week 1
1.2 The Arithmetic of Algebraic Expressions	
1.3 Properties of Exponents	Week 2
1.4 Properties of Radicals	
1.5 Polynomials	
1.6 Factoring Polynomials	Week 3
1.7 Rational Expressions	
1.8 Complex Numbers	
2.1 Linear Equations in One Variable	Week 4
2.2 Linear Inequalities in One Variable	
2.3 Quadratic Equations in One Variable	
2.4 Polynomial and Polynomial-Like Equations in One Variable	Week 5
2.5 Rational Equations in One Variable	
2.6 Radical Equations in One Variable	
Review and Exam 1	Week 6
4.1 Relations and Functions	Week 7
4.2 Linear Functions	
4.3 Quadratic Functions	
4.4 Other Common Functions	Week 8
5.1 Transformations of Functions	
5.2 Properties of Functions	
5.3 Combining Functions	Week 9
5.4 Inverse of Functions	
Review and Exam 2	Week 10

<ul><li>6.1 Polynomial Functions and Polynomial Inequalities</li><li>6.2 Polynomial Division and Polynomial Algorithm</li><li>6.3 Locating Real Zeros of Polynomial Functions</li></ul>	Week 11
<ul><li>6.4 The Fundamental Theorem of Algebra</li><li>6.5 Rational Functions and Rational Inequalities</li><li>7.1 Exponential Functions and Their Graphs</li></ul>	Week 12
7.3 Logarithmic Functions and Their Graphs 7.5 Exponential and Logarithmic Equations	Week 13
Final Review and Thanksgiving Break.	Week 14
Finals	Dec 6 and 9-11