

**Sul Ross State University**  
**Course Syllabus**  
**MATH 1314-C01: College Algebra**  
**Spring 2020**

**Instructor:** Mr. Richard Mrozinski

**Offices:** RAS 113 (MWF), ACR 109-B (TR)

**Office Telephone Number:** RAS: (432) 837-8606, ACR (no phone; e-mail only)

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**Office Hours:** MW 2-3 RAS 113; TR 10:45-11:30 ACR 109-B; F 10-12 RAS 113; or by appointment

**Class Meeting Time and Place:** TR 9:30-10:45 am in ACR 205

**Course Description:** In-depth study and applications of polynomial, rational, radical, and exponential and logarithmic functions and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

**Course Prerequisites:** Undergraduate level Math 0300 Minimum Grade of C or high enough score on one of the math placement exams.

**Mathematics Student Learning Objectives:** The graduating student should be able to

- Apply knowledge of basic mathematics principles.
- Identify and provide valid proofs or solutions for theorems or problems.
- Recognize and dispute invalid mathematical statements by using counter-examples.

**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 understand 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 Objectives:

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

## Required Textbooks and Software:

1. **REQUIRED:** *College Algebra, A Concise Approach* by P. Sisson (Math 1314 physical textbook)
2. **REQUIRED:** Hawkes Online Software Access Code (online learning system plus Sisson e-book)
3. **OPTIONAL:** *College Algebra Guided Notebook* by C. Schroeder (Accompanying help for this specific course)

## NOTES:

- All 3 items above can be purchased at the Sul Ross bookstore, and are listed under your Math 0314 section.
- You must purchase Item 2 above (a Hawkes license) by class time no later than the 2nd class day. **If you have not purchased your Hawkes access by the end of the fourth week of class, you will be dropped from this class with an “F.”** Hawkes Tech Support: M-F, 7:00 AM to 9:00 PM (Central Time), 843-571-2825, <http://support.hawkeslearning.com/supportcenter/>
- First time Math 1314/0314 Students: Items 1 and 2 above can be purchased as a bundle at the Sul Ross bookstore (ISBN 978-1-64277-289-0).
- Repeating Students: If you already have Hawkes access (remember it's for life), but no longer have your textbook, the Sul Ross bookstore has copies of the book without the access code (ISBN 978-1-935782-02-5).
- All students: The optional guided notebook is available for purchase at the Sul Ross bookstore (ISBN 978-1-941552-34-6); it is designed to help walk you through the material of the course (Items 1 and 2 above) and stay organized.

## Other Equipment Needed:

1. **REQUIRED:** Scientific calculator. A scientific calculator is one that 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 ARE NOT ALLOWED** (for example the TI-83, TI-84, TI-89 or TI-92).
2. **OPTIONAL:** Graph paper.

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

**Grading Policy:** The grade weighting will be as follows:

Homework: 20%

Exams: 80% (There will be 4 equally-weighted exams, including the final exam.)

**Homework:** Homework will be assigned each class period in Hawkes. Possible scores are 0, 25, 50, 75, and 100. A zero is given if the mastery level of 80% is not reached in Hawkes Certify mode. If the 80% mastery level is achieved, and the homework is completed on time, a score of 100 is earned. If the mastery level is achieved, but the homework is 0-1 days late, a score of 75 is earned; for 1-2 days late the score will be 50; for 2-3 days late the score will be 25; for 3 or more days late the score will be zero regardless of mastery achieved.

**Exams: No make-up exams will be given** without a valid excuse communicated to the instructor before the exam starts. Exams will be closed notes, closed book, and a NON-GRAPHING scientific calculator will be allowed. Any restroom breaks need to be taken before an exam starts. No cell phones should be on during exams.

**Participation:** I expect a high level of engagement to enhance everyone's learning. This includes interacting with the instructor and other students, asking questions during class, completing outside of class assignments and readings, and being prepared to participate in class discussions

**Attendance Policy:** Students are expected to attend EVERY MATH 1314 and MATH 0314 class. If class must be missed, the student is expected to find out what was missed.

Students are expected to arrive to class on time. If a student is perpetually late, they will be asked to not attend class unless they can arrive on time. If tardiness becomes a problem for the class as a whole, people who arrive late will not be permitted to enter the class. If this stricter policy becomes necessary, there will be an announcement made in class.

It is policy of the university to **drop a student with a grade of "F" if 9 hours or more of class are missed.** For this course that would be 8 or more class sessions missed.

**Cell Phone Policy:** Cell phones are not allowed in class. They can not be used as calculators on any assignment or exam. Any phone ringing during class will be taken up until the end of class. If a phone rings during a test or quiz, the student will forfeit their right to finish that test or quiz.

**Academic Integrity:** On all work submitted for credit by students at the university, the following pledge is implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." Unauthorized aid includes copying, sharing, or obtaining information from an unauthorized source, attempting to take credit for the intellectual work of another person, falsifying information, and giving or receiving information about a test, quiz, or assignment to other students. Any student involved in academic dishonesty will receive no credit (0) for work done and/or may be penalized in accordance with published University Rules.

**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. Please contact Ms. Rebecca Greathouse Wren, M.Ed., LPC-S, Director/Counselor, Accessibility Services Coordinator, Ferguson Hall (Suite 112) at 432.837.8203; mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students should then contact the instructor as soon as possible to initiate the recommended accommodations.

## Co-Requisite Model Information

I will introduce each College Algebra concept and work through some examples in the MATH 1314 lectures. Your MATH 0314 class is designed to provide you with support for your MATH 1314 class. Your MATH 0314 instructor will help ensure that you have the math skills needed to master each MATH 1314 concept. **You WILL ultimately need to attend both classes to be successful.**

**Drop Requests:** Any student can ask the MATH 1314 instructor to drop MATH 1314 **before** Friday April 3, 2020 (the last day for students to drop a class with a “W”). Upon request, your Math 1314 instructor will determine, in consultation with your Math 0314 instructor, if you have made a good faith effort to pass MATH 1314. If over the course of the semester you attend both classes, complete your homework assignments, quizzes, and exams for both classes, but it does not look like you will be able to pass MATH 1314, then your MATH 1314 instructor has the *option* to allow you to drop MATH 1314 with a “W.”

If your MATH 1314 instructor determines that you are eligible to drop MATH 1314 with a “W,” then your MATH 1314 instructor will give you a signed form that you will take to Lobo Den so that you can be dropped from MATH 1314. Only Lobo Den can drop you from your MATH 1314 course and only if you have the form signed by your MATH 1314 instructor.

You will then spend the rest of the semester attempting to complete MATH 0314 successfully. You will not be allowed to drop your MATH 0314 course.

**NOTE:** Before dropping any class, be sure to check the impact of a withdrawal on your full-time status, financial aid status, scholarship status, and NCAA eligibility.

### Tentative Schedule (Subject to Change)

Tuesday	Topic(s)	Thursday	Topic(s)
1/14	Course Intro	1/16	1.1
1/21	1.1, 1.2	1/23	1.2
1/28	1.2, 1.3	1/30	1.3
2/04	1.4	2/06	<b>EXAM I (1.1-1.3)</b>
2/11	1.4	2/13	1.4, 1.5
2/18	1.5	2/20	1.5, 1.6
2/25	2.1	2/27	<b>EXAM II (1.4-1.6)</b>
3/03	2.2	3/05	2.3, 2.5
3/10	SPRING BREAK	3/12	SPRING BREAK
3/17	2.5	3/19	2.5, 2.6
3/24	3.1	3/26	<b>Exam III (2.1-2.3, 2.5, 2.6)</b>
3/31	3.2, 3.3	4/02	3.3, 4.1
4/07	4.1, 4.2	4/09	4.5, 4.6
4/14	4.6, 7.1	4/16	7.1, 7.2
4/21	7.2, 7.3	4/23	7.3, 7.4
4/28	7.4, 7.5	4/30	Dead Day

**NOTE: Final Exam for Math 1314 C01 will be held on Mon May 04 from 8:00-10:00 am.**