South Plains College
Common Course Syllabus: MATH 1314
Spring 2022

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1314

Course Title: College Algebra

Available Formats: conventional, hybrid, internet, and ITV

Campuses: Levelland, Reese, Plainview, Lubbock Center, and Dual Credit

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

Prerequisite: Minimum score of 350 on the TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, a successful completion with a grade of 'C' or better in MATH 0320, or successful completion of NCBM-0114.

Credit: 3 **Lecture:** 3 **Lab:** 1

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

Core Curriculum Objectives addressed:
- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomial and rational functions.
5. Recognize, solve and apply systems of linear equations using matrices.

Student Learning Outcomes Assessment: A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

Course Evaluation: There will be departmental final exam questions given by all instructors.

Attendance/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor <u>may</u> remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student cannot receive an X, the instructor will assign an F.

Academic Integrity (Plagiarism and Cheating Policy): "Complete honesty is required of the student in the presentation of any and all phases of course work. This idea applies to quizzes of whatever length as well to final examinations, to daily reports, and to term papers." *(SPC General Catalog)*

Cheating violations include, but are not limited to, the following:
1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another's work during an examination or on a homework assignment;
8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. *(SPC General Catalog)*

Plagiarism and cheating are not tolerated in this course. Under the policies of South Plains College, punishment for cheating may include no credit (failing) on the assignment, quiz, exam, or the course.

COVID Syllabus Statement: Consistent with the latest CDC recommendations, we have revised our guidance for students, faculty, and staff who have a known exposure or have tested positive. Anyone with a known exposure should wear a mask for 10 days and should seek a COVID-19 test on day five after exposure. If you test positive or develop symptoms, you should immediately self-isolate and seek a COVID-19 test. Please immediately notify your instructor, supervisor, and DeEtte Edens, Associate Director of Health and Wellness, any time you test positive for COVID-19. Anyone who tests positive is required to self-isolate for five days. Following the five-day isolation period, if you are asymptomatic or your symptoms are resolving, you may return to work or class but should wear a mask for five additional days. If you are still symptomatic, please contact DeEtte Edens at dedens@southplainscollege.edu or 806-716-2376 prior to your return date.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning**.** Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

Diversity Statement: In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting

diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Disability Statement: Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

Nondiscrimination Policy: South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336, 806-716-2360.

Title IX Pregnancy Accommodations Statement: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email rcanon@southplainscollege.edu for assistance.

Campus Concealed Carry: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page
at: http://www.southplainscollege.edu/campuscarry.php
Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

SPC Bookstore Price Match Guarantee Policy: If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift card! If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match. The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon and Amazon's Warehouse Deals are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs. A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund. Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

Spring 2022
College Algebra

Instructor	Traci Sanders	Math 1314.209	TR 11:00 – 12:45
Email	tsanders@southplainscollege.edu	Classroom	RC 220
Phone	806-716-4616	Office	RC 223-C

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
10:45 – 1:15	8:30 – 9:00 12:45 – 2:00	10:45 – 11:45	8:30 – 9:00 12:45 – 2:00	8:30 – 9:30 (virtual)

Zoom Link for Friday Virtual Office Hour: https://southplainscollege.zoom.us/j/574536690

Communication: You may email me at tsanders@southplainscollege.edu or email me through Blackboard. When you log into the course on Blackboard, there is a link to Send Email in the main menu on the left side. I will do my best to respond to your email within 24 hours. When I post an announcement in Blackboard, the announcement will also be sent to your SPC email address. Please check your SPC email daily!

SPC Tutors: Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, and view tutoring locations.
http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

Tutor.com: You also have 180 FREE minutes of tutoring with Tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tools option from the left-hand menu bar. Click on the Tutor.com link and you will automatically be logged in for free tutoring. You may access tutor.com tutors during the following times:
Monday – Thursday: 8pm-8am
6pm Friday – 8am Monday morning

Text: No textbook is required.

Required Materials: method of scanning (can be your cell phone), notebook paper, pencils, straightedge, scientific or graphing calculator (cell phones, smart watches, TI-89, TI-92, TI-Nspire calculators, or other electronic devices will not be allowed during labs or tests)

Blackboard: https://southplainscollege.blackboard.com
Blackboard is an online course management system that will be used in this course. For technical support, call 806-716-2180 or email blackboard@southplainscollege.edu.

Attendance: Your attendance is monitored through physical attendance and completion of assignments. If you must miss, please email me to find out what you need to do to stay caught up. If you are absent for 6 classes and/or you miss 6 assignments, the instructor may withdraw you from the course with a grade of X. If you wish to drop this class, you should submit a **Student Initiated Drop Form** online. Students will not be required to obtain an instructor signature to drop, however, students should communicate with instructors or advisors prior to dropping a course when they are able.

Lesson Videos and Notes: There are videos and notes posted in Blackboard for each section. To find the videos and notes, click on the unit in the main menu and then the section. Print the notes, and bring the notes to class with you. You will fill in the notes in class as I am lecturing. If you have to miss class, you may use the videos to fill in the notes. On homework, labs, and tests, your work needs to follow the work as I have taught it. If your work comes from a math app rather than the notes I have

given, you will not receive credit. Keep your notes organized, and always bring them to class. When you work on a lab in the classroom, you may use your notes as reference.

Homework: Homework assignments for each section are posted in Blackboard. Homework is located in the same folder as the videos and notes. Homework should be completed neatly on notebook paper with work shown. The answers are given so that you can check your answers and make sure you are working the problems correctly. The homework will help you prepare for labs and tests! Homework will be turned in on test days. You may earn one bonus point per homework assignment to be added to your test grade. To get the bonus point for the assignment, it cannot be missing more than two problems, and the work must be shown as taught in class.

Labs: Approximately the last 30 minutes of class will be our lab time. The lowest three lab grades will be dropped. There are no make-up labs. Here are the two different types of labs we will have:
1. Work on homework. As long as you participate, you will receive a 100 for these labs.
2. Work a few problems to be turned in for a grade.

Tests: There will be 4 tests and a comprehensive final exam. There will be NO MAKEUP TESTS! Dates for all tests are given in the course calendar, so PLAN AHEAD! You will be allowed one 8.5" by 11" sheet of notes (front only) on the tests. You will not be allowed any electronic devices other than a calculator.

Grading Policy: Grades will be averaged according to the following percentages:

Lab Average	10%
Test Average	70%
Final Exam	20%

There will be a category in the Blackboard gradebook titled Course Average. This is the number you should look at throughout the semester to see your current average in the course. Do not use the Total category to calculate your average. Blackboard automatically creates the Total category. You do not need to pay any attention to it.

Grading Scale:
A: 90 and above, B: 80 – 89, C: 70 – 79, D: 60 – 69, F: 59 or belo

College Algebra Course Calendar
Spring 2022

This is a tentative schedule. Any changes will be announced in class and posted in Blackboard.
Assignments that will be graded are highlighted in yellow.

Grading Policy: Lab Average = 10%, Test Average = 70%, Final Exam = 20%
The lowest three lab grades will be dropped. There are no make-up labs.

	Monday	Tuesday	Wednesday	Thursday	Friday
1	Jan 17 **Martin Luther King Holiday**	Jan 18 Section 1.1	Jan 19	Jan 20 Section 1.2 Lab 1	Jan 21
2	Jan 24	Jan 25 Section 1.3 Lab 2	Jan 26	Jan 27 Factoring Review Lab 3	Jan 28
3	Jan 31	Feb 1 Section 1.4 Lab 4	Feb 2	Feb 3 Section 1.5 Lab 5	Feb 4
4	Feb 7	Feb 8 Section 1.6 Lab 6	Feb 9	Feb 10 Review & Section 2.1	Feb 11
5	Feb 14	Feb 15 Test 1	Feb 16	Feb 17 Section 2.2 Lab 7	Feb 18
6	Feb 21	Feb 22 Section 2.3 Lab 8	Feb 23	Feb 24 Sections 2.4 & 2.5 Lab 9	Feb 25
7	Feb 28	Mar 1 Section 2.6 Lab 10	Mar 2	Mar 3 Section 2.7 Lab 11	Mar 4

8	Mar 7	Mar 8 Review & Section 3.1	Mar 9	Mar 10 Test 2	Mar 11
9	Mar 14 **Spring Break**	Mar 15 **Spring Break**	Mar 16 **Spring Break**	Mar 17 **Spring Break**	Mar 18 **Spring Break**
10	Mar 21	Mar 22 Section 3.2 Lab 12	Mar 23	Mar 24 Section 3.3 Lab 13	Mar 25
11	Mar 28	Mar 29 Section 3.4 Lab 14	Mar 30	Mar 31 Section 3.5 Lab 15	Apr 1
12	Apr 4	Apr 5 Review & Section 4.1	Apr 6	Apr 7 Test 3	Apr 8 Online Registration Opens
13	Apr 11	Apr 12 Section 4.2 Lab 16	Apr 13	Apr 14 Section 4.3 Lab 17	Apr 15 **Easter Break**
14	Apr 18	Apr 19 Section 4.4 Lab 18	Apr 20	Apr 21 Review & Section 5.1 Last Day to Drop	Apr 22
15	Apr 25	Apr 26 Test 4	Apr 27	Apr 28 Sections 5.1 & 5.4 Lab 19	Apr 29

16	May 2	May 3 Section 5.3 Lab 20	May 4	May 5 Review	May 6
17	May 9	May 10 Final Exam 10:15 – 12:15 (Units 1 – 5)	May 11	May 12	

Section Titles

1.1 Linear & Absolute Value Equations
1.2 Linear Inequalities
1.3 Complex Numbers & Simplifying Radical Expressions
1.4 Quadratic Equations: Factoring & Square Root Property
1.5 Quadratic Formula: Complete the Square & Quadratic Formula
1.6 Rational Equations & Radical Equations

2.1 Distance, Midpoint, & Circles
2.2 Basics of Functions & Analyzing Graphs
2.3 Evaluating Functions & Symmetry
2.4 Increasing, Decreasing, & Piecewise Functions
2.5 Graphs & Transformations
2.6 Functions: Operations & Composition
2.7 Functions: Composition & Inverses

3.1 Linear Functions: Slope, Graph, Parallel, & Perpendicular
3.2 Graph Quadratic Functions
3.3 Synthetic Division & Polynomial Equations
3.4 Graph Polynomial Functions
3.5 Graph Rational Functions

4.1 Polynomial & Rational Inequalities
4.2 Exponential & Log Functions: Basics & Graphs
4.3 Properties of Logs
4.4 Exponential & Log Equations

5.1 Solve Systems in Two Variables & Three Variables
5.2 Nonlinear Systems
5.3 Solve Systems Using Matrices
5.4 Solve Systems Using Cramer's Rule