

South Plains College
Common Course Syllabus: MATH 1314
Fall 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 Downtown 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 may 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: If you are experiencing any of the following symptoms, please do not attend class and either seek medical attention or test for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at dedens@southplainscollege.edu or 806-716-2376. Proof of a positive test is required. A home test is sufficient but students must submit a photo of the positive result. The date of test must be written on the test result and an ID included in the photo. If tested elsewhere (clinic, pharmacy, etc.), please submit a copy of the doctor's note or email notification. Results may be emailed to DeEtte Edens, BSN, RN at dedens@southplainscollege.edu. A student is clear to return to class without further assessment from DeEtte Edens if they have completed the 5-day isolation period, symptoms have improved, and they are without fever for 24 hours without the use of fever-reducing medication. Students must communicate with DeEtte prior to their return date if still symptomatic at the end of the 5-day isolation.

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, Lubbock Centers (located at the Lubbock Downtown Center) 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 Health and Wellness Center. 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 Health and Wellness Center at 806-716-2529 or email dburleson@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. 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.

**Fall 2022
College Algebra**

Instructor	Traci Sanders	Math 1314.610	TR 9:00 – 10:45
Email	tsanders@southplainscollege.edu	Classroom	B010 Basement of Downtown Center
Phone	806-716-4616	Office	B021

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
8:30 – 10:30	12:45 – 2:45		12:45 – 2:45	8:30 – 10:30

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: binder, notebook paper, pencils (please show your work in pencil), straightedge, scientific or graphing calculator (cell phones, smart watches, TI-89, TI-92, TI-Nspire calculators, or other electronic devices will not be allowed)

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 or you miss 10 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.

Before arriving for each class meeting (except the first meeting and test days), make certain you have:

1. Printed the notes. See the course calendar for which section of notes you need for each class. (I will print Section 1.1 for you.)
2. Watched the videos and filled in the notes for that day's lesson.

Upon arriving at the class meeting (non-test days), we will:

1. Answer questions over the notes.
2. Work more examples if needed.
3. Work on the homework assignment. (I will check your notes while you are working.)
4. Answer questions over homework problems.
5. Take a quiz.

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. Keep your notes organized, and always bring them to class. I recommend keeping your notes in a binder. Each class day that we are not taking a test, you will get a grade for your notes. As long as the notes are completed correctly, you will earn a 100. If you are absent, you can scan your notes and email them to me. If absent, the notes are due by 10:00 pm on the day you miss class. Late notes will not be accepted. When you work on homework and quizzes 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 Blackboard 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 quizzes and tests! Homework will be turned in on test days. You may earn one bonus point per homework assignment to be added to your exam 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 the videos and in class.

Quizzes: A quiz will be given each class day that is not an exam day. There are no make-up quizzes. The lowest three quiz grades will be dropped. On quizzes, the work must be shown as taught in the videos and in class. You will not be allowed any electronic devices other than a calculator.

Tests: There will be 3 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:

Notes/Quiz Average	20%
Test 1 (covering Unit 1)	20%
Test 2 (covering Unit 2)	20%
Test 3 (covering Units 3 & 4)	20%
Final Exam (covering Unit 5 & major topic from previous tests)	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 below

To maximize your potential for successfully completing this course:

- login to Blackboard daily;
- attend each class and ask for help when needed;
- watch the lecture videos and take notes on them;
- thoroughly complete notes, homework, and quizzes;
- practice the problems repeatedly until you have full mastery of them.

College Algebra Course Calendar Fall 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: Notes/Quiz Avg=20%, Test 1=20%, Test 2=20%, Test 3=20%, Final Exam = 20%
The lowest three quiz grades will be dropped. There are no make-up quizzes.

	Monday	Tuesday	Wednesday	Thursday	Friday
1	Aug 29	Aug 30 Section 1.1	Aug 31	Sept 1 Section 1.2 Notes 1: 1.1,1.2 Quiz 1: 1.1,1.2	Sept 2
2	Sept 5 Labor Day Holiday	Sept 6 Section 1.3 Notes 2: 1.3 Quiz 2: 1.3	Sept 7	Sept 8 Factoring Review Notes 3: Factoring Quiz 3: Factoring	Sept 9
3	Sept 12	Sept 13 Section 1.4 Notes 4: 1.4 Quiz 4: 1.4	Sept 14	Sept 15 Section 1.5 Notes 5: 1.5 Quiz 5: 1.5	Sept 16
4	Sept 19	Sept 20 Section 1.6 Notes 6: 1.6 Quiz 6: 1.6	Sept 21	Sept 22 Test 1	Sept 23
5	Sept 26	Sept 27 Section 2.1 Notes 7: 2.1 Quiz 7: 2.1	Sept 28	Sept 29 Section 2.2 Notes 8: 2.2 Quiz 8: 2.2	Sept 30
6	Oct 3	Oct 4 Section 2.3 Notes 9: 2.3 Quiz 9: 2.3	Oct 5	Oct 6 Sections 2.4 & 2.5 Notes 10: 2.4,2.5 Quiz 10: 2.4,2.5	Oct 7

7	Oct 10	Oct 11 Section 2.6 Notes 11: 2.6 Quiz 11: 2.6	Oct 12	Oct 13 Section 2.7 Notes 12: 2.7 Quiz 12: 2.7	Oct 14 Fall Break
8	Oct 17	Oct 18 Test 2	Oct 19	Oct 20 Section 3.1 Notes 13: 3.1 Quiz 13: 3.1	Oct 21
9	Oct 24	Oct 25 Section 3.2 Notes 14: 3.2 Quiz 14: 3.2	Oct 26	Oct 27 Section 3.3 Notes 15: 3.3 Quiz 15: 3.3	Oct 28
10	Oct 31	Nov 1 Section 3.4 Notes 16: 3.4 Quiz 16: 3.4	Nov 2	Nov 3 Section 3.5 Notes 17: 3.5 Quiz 17: 3.5	Nov 4
11	Nov 7	Nov 8 Section 4.1 Notes 18: 4.1 Quiz 18: 4.1	Nov 9	Nov 10 Section 4.2 Notes 19: 4.2 Quiz 19: 4.2	Nov 11 Online Registration Opens
12	Nov 14	Nov 15 Section 4.3 Notes 20: 4.3 Quiz 20: 4.3	Nov 16	Nov 17 Section 4.4 Notes 21: 4.4 Quiz 21: 4.4	Nov 18
13	Nov 21	Nov 22 Test 3	Nov 23 Thanksgiving Break	Nov 24 Thanksgiving Break	Nov 25 Thanksgiving Break
14	Nov 28	Nov 29 Section 5.1 Notes 22: 5.1 Quiz 22: 5.1	Nov 30	Dec 1 Section 5.3 Notes 23: 5.3 Quiz 23: 5.3 Last Day to Drop	Dec 2

15	Dec 5	Dec 6 Section 5.4 Notes 24: 5.4 Quiz 24: 5.4	Dec 7	Dec 8 Review	Dec 9
16	Dec 12	Dec 13 Final Exam 8:00 – 10:00 (Units 1 – 5)	Dec 14	Dec 15	

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