

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

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, the larger world and ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but 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 SPC 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 SPC 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, Amazon's Warehouse Deals, *fulfilled by Amazon*, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, 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.

Fall 2022
Online College Algebra: Math 1314.151

Instructor	Traci Sanders	Phone	806-716-4616
E-mail	tsanders@southplainscollege.edu	Office	Downtown Center B021

Office Hours:

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

To arrange a time to meet on zoom, just send me an email.

Communication: Email is the best form of communication to reach me. You can email me at tsanders@southplainscollege.edu. You can also email me from Blackboard by clicking on Send Email in the main menu on the left. 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!

Academic coach: Jeffrey Fortner

Email: jfortner5644@southplainscollege.edu

The Academic Coach will work directly with our class to create an inviting, engaging, and collaborative learning environment by tutoring, coaching, and mentoring students. The Academic Coach functions as a tutor, providing in-time tutoring services in a small group setting or one-on-one tutoring. He may also provide students with academic tips and skills for success in the academic setting.

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: computer access, good internet connection, printer, webcam, method of scanning, 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)

Blackboard: <https://southplainscollege.blackboard.com>

Blackboard is the online course management system that we will use for this course. For technical support, call 806-716-2180 or email blackboard@southplainscollege.edu.

Scanning Assignments: Your work will have to be scanned as a pdf file to be uploaded to Blackboard. There are many free mobile apps available for scanning. Some of these are the Notes App (on iPhones), OneDrive (free to SPC students), Scannable, and CamScanner. You do not have to choose one of these, but please determine an app you want to use for scanning and then practice scanning multiple pages as one pdf file. The app will allow you to name the file and save it. When you upload to Blackboard, you will click on Browse Local Files and then find the file where you saved it.

Attendance: Your attendance is monitored through completion of assignments. If you miss 7 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 Course Content in the main menu and then the week and then the section. Print the notes. Watch the videos to fill in the notes and learn the material. The deadlines for submitting notes are given in the course calendar. Scan all pages of the notes as one pdf file and upload the notes to Blackboard by clicking on Course Content and then the correct week according to the course calendar. On homework, quizzes, and tests, your work needs to follow the work in the videos. If your work does not follow the work in the videos, you will not receive credit.

Homework: There is a homework assignment posted in Blackboard for each section. Homework is located in the same folder as the videos and notes. Homework should be completed 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. Homework is for practice only and will not count as a grade. The homework will help you prepare for quizzes and tests! Doing the homework is a key to success in this course, so make sure you are keeping up with the homework! Feel free to email me or come to office hours for help with homework problems.

Quizzes: There will be 15 quizzes. The deadlines for the quizzes are given in the course calendar. The quizzes are located in Blackboard. To find a quiz, click on Course Content and then click on the week in which you are working. You will be allowed to use notes and homework on the quizzes. Your work must follow the work taught in the videos to get credit. You will not be allowed any electronic devices other than a calculator. You will print the quiz and work the problems on the print-out. All pages of the quiz will need to be scanned as **one pdf file** and uploaded to Blackboard. Quizzes are due at 10:00 pm.

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. You have two options for test-taking. One option is to take the tests online in Blackboard and be proctored using an online proctoring program called Proctorio. The other option is to come to the Downtown Center campus and take the tests on paper in the classroom. As shown on the course calendar, all tests are due on Mondays. If you choose to take the tests in the classroom, the time will be 9:00 – 11:00 am on September 26, October 17, November 28, and December 11.

Proctorio: For students who choose to test online, Proctorio will be used to record you as you take tests. You must use Chrome to take your tests, and you will need to download the Proctorio Chrome Extension. The instructions for downloading and using Proctorio are posted in Blackboard under Course Resources.

Guidelines for using Proctorio:

- You must show your workspace. Your workspace is your desk area, not your face. You may have to slide your computer back so that the camera picks up your writing space.
- You must put your cell phone on the corner of your workspace in the camera view and you are not allowed to use it during the test. Your calculator also needs to be in camera view.
- You are not allowed to have another person in the camera view or talk to another person.
- You must show your ID right side up. It cannot be sideways or the computer will tag it.
- You must have good light so you and your workspace can be seen clearly.
- You are not allowed to move out of the camera view at any time during your test.

- Once you are finished with the test, BEFORE you hit submit, grab your cell phone and take pictures of your work using a mobile scanning app. Once you take the pictures, you are NOT allowed to write anything else on your paper.
- After you click submit, you have 15 minutes to upload your work to Blackboard.
- If any one of these guidelines are not followed, you will receive a zero on your test.

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

Quiz/Notes 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, but 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

Online College Algebra Course Calendar
Fall 2022

This calendar shows which sections need to be completed each week. The material for each week is located in Blackboard under Course Content. For each section, you should print the notes for that section, watch the videos to fill in the notes, and then do the homework on that section. Deadlines are given in the third column and are non-negotiable. **The time for all the deadlines is 10:00 pm.** I recommend working on this course a little bit each day. Do not wait until the deadline to do the work! Excellent time management is critical to successful course completion!

Dates	Sections	Deadlines
Week 1: Aug 29 – Sept 3	Factoring Review Section 1.1	Tuesday, Aug 30, 10:00 pm – Day 1 Checklist Due Wednesday, Aug 31 – Factoring Review Notes Due Friday, Sept 2, 10:00 pm – Notes 1: 1.1 Due Saturday, Sept 3, 10:00 pm – Quiz 1: Factoring, 1.1 Due
Week 2: Sept 4 – 10 <i>Sept 5 Labor Day Holiday</i>	Section 1.2 Section 1.3	Friday, Sept 9, 10:00 pm – Notes 2: 1.2, 1.3 Due Saturday, Sept 10, 10:00 pm – Quiz 2: 1.2,1.3 Due
Week 3: Sept 11 – 17	Section 1.4 Section 1.5	Monday, Sept 12, 10:00 pm – Proctorio Practice Test Due Friday, Sept 16, 10:00 pm – Notes 3: 1.4, 1.5 Due Saturday, Sept 17, 10:00 pm – Quiz 3: 1.4,1.5 Due
Week 4: Sept 18 – 24	Section 1.6 Review Unit 1	Friday, Sept 23, 10:00 pm – Notes 4: 1.6 Due Saturday, Sept 24, 10:00 pm – Quiz 4: 1.6 Due
Week 5: Sept 25 – Oct 1	Section 2.1 Section 2.2	Monday, Sept 26, 10:00 pm – Test 1 Due – Covers Unit 1 (offered in person 9:00 – 11:00, Downtown Center) Friday, Sept 30, 10:00 pm – Notes 5: 2.1,2.2 Due Saturday, Oct 1, 10:00 pm – Quiz 5: 2.1,2.2 Due
Week 6: Oct 2 – 8	Section 2.3 Section 2.4 Section 2.5	Friday, Oct 7, 10:00 pm – Notes 6: 2.3, 2.4,2.5 Due Saturday, Oct 8, 10:00 pm – Quiz 6: 2.3 2.4,2.5 Due
Week 7: Oct 9 – 15 <i>Oct 14 Fall Break</i>	Section 2.6 Section 2.7 Review Unit 2	Friday, Oct 14, 10:00 pm – Notes 7: 2.6,2.7 Due Saturday, Oct 15, 10:00 pm – Quiz 7: 2.6,2.7 Due
Week 8: Oct 16 – 22	Section 3.1 Section 3.2	Monday, Oct 17, 10:00 pm – Test 2 Due – Covers Unit 2 (offered in person 9:00 – 11:00, Downtown Center) Friday, Oct 21, 10:00 pm – Notes 8: 3.1,3.2 Due Saturday, Oct 22, 10:00 pm – Quiz 8: 3.1,3.2 Due
Week 9: Oct 23 – 29	Section 3.3 Section 3.4	Friday, Oct 28, 10:00 pm – Notes 9: 3.3,3.4 Due Saturday, Oct 29, 10:00 pm – Quiz 9: 3.3,3.4 Due
Week 10: Oct 30 – Nov 5	Section 3.5 Section 4.1	Friday, Nov 4, 10:00 pm – Notes 10: 3.5,4.1 Due Saturday, Nov 5, 10:00 pm – Quiz 10: 3.5,4.1 Due
Week 11: Nov 6 – 12 <i>Nov 11 Registration Opens</i>	Section 4.2 Section 4.3	Friday, Nov 11, 10:00 pm – Notes 11: 4.2,4.3 Due Saturday, Nov 12, 10:00 pm – Quiz 11: 4.2,4.3 Due
Week 12: Nov 13 – 19	Section 4.4	Friday, Nov 18, 10:00 pm – Notes 12: 4.4 Due Saturday, Nov 19, 10:00 pm – Quiz 12: 4.4 Due

Week 13: Nov 20 – 26 <i>Nov 23-25 Thanksgiving Holiday</i>	Review Unit 3 Review Unit 4	
Week 14: Nov 27 – Dec 3 <i>Dec 1 Last Day to Drop</i>	Section 5.1 Section 5.2	Mon, Nov 28, 10:00 pm – Test 3 Due – Covers Units 3 & 4 (offered in person 9:00 – 11:00, Downtown Center) Friday, Dec 2, 10:00 pm – Notes 14: 5.1,5.2 Due Saturday, Dec 3, 10:00 pm – Quiz 14: 5.1,5.2 Due
Week 15: Dec 4 – 10	Section 5.3 Section 5.4 Review for Final	Friday, Dec 9, 10:00 pm – Notes 15: 5.3, 5.4 Due Saturday, Dec 10, 10:00 pm – Quiz 15: 5.3,5.4 Due
Week 16: Dec 11 – 15		Monday, Dec 12, 10:00 pm – Final Exam Due (offered in person 9:00 – 11:00, Downtown Center)

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 Equations: Completing 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

Test 1 will cover the following sections: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6.

Test 2 will cover the following sections: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7.

Test 3 will cover the following sections: 3.1, 3.2, 3.3, 3.4, 3.5, 4.1, 4.2, 4.3, 4.4.

The final exam will cover major topics from the three tests as well as 5.1, 5.2, 5.3, and 5.4.