

**South Plains College**  
**Common Course Syllabus: MATH 1314**  
**Fall 2024**

**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, 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. 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*) Plagiarism violations include, but are not limited to, the following:

1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail-order term paper mill;
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

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.

**Student Code of Conduct Policy:** Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior. 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.

#### **Other Policies:**

For information regarding official South Plains College statements about intellectual exchange, disabilities, non-discrimination, Title IX Pregnancy Accommodations, CARE Team, and Campus Concealed Carry, please visit <https://www.southplainscollege.edu/syllabusstatements/>.

South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: <https://www.southplainscollege.edu/emergency/covid19-faq.php>.

**Disclaimer:** The instructor reserves the right to alter any class policies/dates as deemed necessary by the instructor. If there are any changes, they will be announced **over Blackboard and via your SPC email**.

**Fall 2024**  
**Online College Algebra: Math 1314.151**

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

**Office Hours:**

Monday	Tuesday	Wednesday	Thursday	Friday
10:45 – 11:30	10:45 – 11:00 12:45 – 2:30	10:45 – 11:30	10:45 – 11:00 12:45 – 2:30	8:30 – 11:00

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](mailto:tsanders@southplainscollege.edu). All email correspondence should come from your SPC email address. If you need help with your SPC email, you can call the Help Desk at 806-716-2600. Please give me up to 24 hours to respond via email. If you email about a specific math question, please attach a picture of the question and the work that you have tried. 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 Tutoring:** 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>

**Brainfuse Live Tutoring:** Log into the course in Blackboard. Find Books & Tools in the left menu bar. Click on view course and institution tools. In the pop-up box, scroll down until you see Brainfuse Live Tutoring. You may access Brainfuse tutors during the following times:

Monday – Thursday: 8pm-8am

6pm Friday – 8am Monday morning

**Text:** No textbook is required.

**Required Materials:** laptop or desktop computer access , good internet connection, printer, webcam, method of scanning, notebook paper, pencils, straightedge, scientific or graphing calculator

If you use a graphing calculator, it cannot be a TI-89 or TI-Nspire.

If you do not already have a calculator, I recommend the TI-30XIIS scientific calculator.

Phone / tablet / laptop / smart watch calculators will not be allowed.

I recommend keeping your notes in a binder to stay organized.

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

Blackboard Ultra 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](mailto: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.

**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 the unit under Course Content and then the folder for the section on which you are working. Print the notes. Watch the videos to fill in the notes and learn the material for each section. The deadlines for turning in 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 the unit and then the notes assignment link. **On notes, 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. If you need help with a homework problem, email me a picture of your work. Working through the homework and studying the problems will help you prepare for quizzes and tests! Doing the homework is a key to success in this course!

**Quizzes:** The deadlines for the quizzes are given in the course calendar. You may turn in quizzes early. To find quizzes, click on the unit under Course Content. Click on the quiz link to open the quiz. The quizzes will be multiple choice, and you will click on your answer choice in Blackboard. Some of the problems will require work to be shown. For those problems, you will write down your work on notebook paper. All pages of your work will need to be scanned and saved as **one pdf file** and uploaded to Blackboard by clicking on the quiz work link. Blackboard will show your unofficial quiz grade after you submit the quiz. I will grade your work. If you choose the correct answer in Blackboard, but your work is not correct, you will lose credit for that problem. The work needs to follow what I have taught in the videos. You are not allowed to use a math app to show you how to do the work! Once I have graded your work, then you will see your official quiz grade. You will be able to see which problems you missed once the deadline has passed. You are allowed to use notes and homework on the quizzes but no electronic devices other than a calculator. Quizzes are due at 11:59 pm. There will be **NO LATE QUIZZES!**

**Tests:** There will be 3 tests and a comprehensive final exam. There will be **NO LATE TESTS!** Dates for all tests are given in the course calendar, so **PLAN AHEAD!** Tests will open at 7:00 am and close at 11:59 pm. Once you begin the test, you will have two hours to complete it. 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 Honorlock. This option requires you to have a webcam. The tests will be multiple choice with some problems that require work to be shown. For those problems, you will write down your work on notebook paper. All pages of your work will need to be scanned and saved as **one pdf file** and uploaded to Blackboard by clicking on the test work link. Blackboard will show your unofficial test grade after you submit the test. I will grade your work. If you choose the correct answer in Blackboard, but your work is not correct, you will lose credit for that problem. Once I have graded your work, then you will see your official test grade. You will be able to see which problems you missed once the deadline has passed.

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 11:00 – 1:00 on Sept 23, Oct 14, Nov 18, and Dec 9. If you want to take your tests in person, and this time does not work for you, please email me and let me know.

**Showing Work:** To receive full credit on notes, quizzes, and tests, you must show all work that leads to your answers on the problems that require work to be shown. The work must be legible and easy to follow. The problems on your work must be numbered with the same numbering as the quiz or test.

**Honorlock:** Honorlock is an online proctoring service that will record you as you take your tests. You must use Google Chrome to take your tests, and you will need to download the Honorlock Chrome Extension. The instructions for downloading and using Honorlock will be posted in Blackboard. Honorlock requires a laptop or desktop computer, a webcam/microphone, your ID, and a stable internet connection.

**Guidelines for using Honorlock:**

- You must show your workspace. Your workspace is your desk area, not just your face. You may have to slide your computer back or place it to the side 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 and paper also need 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.
- 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 scan your work using a mobile scanning app. Once you scan, 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 is not followed, you will receive a zero on your test.

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

Notes Average	10%
Quiz Average	10%
Test Average	60%
Final Exam	20%

In the Blackboard gradebook, your course average will be called “Current Grade.” This is the number you should look at throughout the semester to see your current average in the course.

**Grading Scale:**

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

**Academic Dishonesty:**

Academic dishonesty will not be tolerated. Please see the list of things that constitute plagiarism and cheating in the general syllabus. If you violate anything on those lists, you will receive a zero on the assignment and could be subject to other actions outlined in the South Plains College Student Code of Conduct. Please note that these actions could include failing the course and being expelled from the college.

**To maximize your potential for successfully completing this course:**

- Get in the habit of thinking and saying positive things about math every time you work on it. Your brain will learn much easier that way.
- Do math every day, even if it’s just a little.
- Remind yourself often of the math you have learned by looking back over your notes.
- Ask for help when needed.
- Print the notes. Engage your brain and take good notes during the lecture videos.
- Thoroughly complete notes, homework, quizzes, and tests.
- Practice the problems repeatedly until you have full mastery of them.

**Online College Algebra Course Calendar**  
**Fall 2024**

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 11:59 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!

Grading Policy: Notes Average=10%, Quiz Average=10%, Test Average=60%, Final Exam=20%

<b>Dates</b>	<b>Sections</b>	<b>Deadlines</b>
<b>Week 1:</b> Aug 26 – 31	Factoring Review Section 1.1	Tues, Aug 27 – Syllabus Acceptance Email Due (See the Day One Checklist) Wed, Aug 28 – Factoring Review Notes Due (See the Day One Checklist) Thurs, Aug 29 – Notes 1: 1.1 Due Fri, Aug 30 – Finish Factoring & 1.1 Homework (Homework is for practice and does not need to be turned in.) Sat, Aug 31 – Quiz 1: Factoring, 1.1 Due
<b>Week 2:</b> Sept 1 – 7 <i>Sept 2 Labor Day Holiday</i>	Section 1.2 Section 1.3	Thurs, Sept 5 – Notes 2: 1.2, 1.3 Due Fri, Sept 6 – Finish 1.2 & 1.3 Homework Sat, Sept 7 – Quiz 2: 1.2,1.3 Due
<b>Week 3:</b> Sept 8 – 14	Section 1.4 Section 1.5.3	Mon, Sept 9 – <b>Honorlock Practice Test Due</b> Thurs, Sept 12 – Notes 3: 1.4, 1.5 Due Fri, Sept 13 – Finish 1.4 & 1.5 Homework Sat, Sept 14 – Quiz 3: 1.4,1.5 Due
<b>Week 4:</b> Sept 15 – 21	Section 1.6 Review Unit 1	Thurs, Sept 19 – Notes 4: 1.6 Due Fri, Sept 20 – Finish 1.6 Homework & Work on Review Sat, Sept 21 – Quiz 4: 1.6 Due Sun, Sept 22 – Study!
<b>Week 5:</b> Sept 22 – 28	Section 2.1 Section 2.2	Mon, Sept 23 – <b>Test 1 Due – Covers Unit 1</b> (offered in person 11:00 – 1:00, Downtown Center) Thurs, Sept 26 – Notes 5: 2.1,2.2 Due Fri, Sept 27 – Finish 2.1 & 2.2 Homework Sat, Sept 28 – Quiz 5: 2.1,2,2 Due
<b>Week 6:</b> Sept 29 – Oct 5	Section 2.3 Section 2.4 Section 2.5	Thurs, Oct 3 – Notes 6: 2.3, 2.4,2.5 Due Fri, Oct 4 – Finish 2.3, 2.4, & 2.5 Homework Sat, Oct 5 – Quiz 6: 2.3 2.4,2.5 Due
<b>Week 7:</b> Oct 6 – 12	Section 2.6 Section 2.7	Thurs, Oct 10 – Notes 7: 2.6,2.7 Due Fri, Oct 11 – Finish 2.6 & 2.7 Homework, Work on Review

	Review Unit 2	Sat, Oct 12 – Quiz 7: 2.6,2.7 Due Sun, Oct 13 – Study!
<b>Week 8:</b> Oct 13 – 19 <i>Oct 18 Fall Break</i>	Section 3.1 Section 3.2	Mon, Oct 14 – <b>Test 2 Due</b> – <b>Covers Unit 2</b> (offered in person 11:00 – 1:00, Downtown Center) Thurs, Oct 17 – Notes 8: 3.1,3.2 Due Fri, Oct 18 – Finish 3.1 & 3.2 Homework Sat, Oct 19 – Quiz 8: 3.1,3.2 Due
<b>Week 9:</b> Oct 20 – 26	Section 3.3 Section 3.4	Thurs, Oct 24 – Notes 9: 3.3,3.4 Due Fri, Oct 25 – Finish 3.3 & 3.4 Homework Sat, Oct 26 – Quiz 9: 3.3,3.4 Due
<b>Week 10:</b> Oct 27 – Nov 2	Section 3.5 Section 4.1	Thurs, Oct 31 – Notes 10: 3.5,4.1 Due Fri, Nov 1 – Finish 3.5 & 4.1 Homework Sat, Nov 2 – Quiz 10: 3.5,4.1 Due
<b>Week 11:</b> Nov 3 – 9 <i>Nov 8 Registration Opens</i>	Section 4.2 Section 4.3	Thurs, Nov 7 – Notes 11: 4.2,4.3 Due Fri, Nov 8 – Finish 4.2 & 4.3 Homework Sat, Nov 9 – Quiz 11: 4.2,4.3 Due
<b>Week 12:</b> Nov 10 – 16	Section 4.4 Review Unit 3 Review Unit 4	Thurs, Nov 14 – Notes 12: 4.4 Due Fri, Nov 15 – Finish 4.4 Homework & Work on Reviews Sat, Nov 16 – Quiz 12: 4.4 Due Sun, Nov 17 – Study!
<b>Week 13:</b> Nov 17 – 23	Section 5.1	Mon, Nov 18 – <b>Test 3 Due</b> – <b>Covers Units 3 &amp; 4</b> (offered in person 11:00 – 1:00, Downtown Center) Thurs, Nov 21 – Notes 13: 5.1 Due Fri, Nov 22 – Finish 5.1 Homework Sat, Nov 23 – Quiz 13: 5.1 Due
<b>Week 14:</b> Nov 24 – 30 <i>Nov 27-30 Thanksgiving Holiday</i>	Section 5.2	Mon, Nov 25 – Notes 14: 5.2 Due Tues, Nov 26 – Finish 5.2 Homework
<b>Week 15:</b> Dec 1 – 7 <i>Dec 4 Last Day to Drop</i>	Section 5.3 Section 5.4 Review for Final	Wed, Dec 4 – Notes 15: 5.3, 5.4 Due Thurs, Dec 5 – Finish 5.3 & 5.4 Homework, Work on Review Fri, Dec 6 – Quiz 14: 5.2,5.3,5.4 Due Sat and Sun – Study!
<b>Week 16:</b> Dec 8 – 12		Mon, Dec 9 – <b>Final Exam Due</b> (offered in person 11:00 – 1:00, Downtown Center)

## Section Titles

### **Unit 1: Solving Equations & Inequalities**

- 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

### **Unit 2: Circles & Functions**

- 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

### **Unit 3: Graphing Functions; Solving Polynomial Equations**

- 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

### **Unit 4: Inequalities; Exponential & Log Functions**

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

### **Unit 5: Systems of 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.