



College Algebra Syllabus: MATH 1314-C002 and 0314-C002

South Plains College

Term: Fall 2026

Location: Levelland Campus, Ag 105

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1314-C002 and MATH 0314-C002

Course Title: College Algebra

Meeting Times: MW 9:00 am – 10:45 am

Format: Hybrid

Instructor: Elizabeth Payton

Email: epayton@southplainscollege.edu

Office Hours: As scheduled or by appointment. Office: Levelland Math 106 , Lubbock Downtown B001

Levelland: MW 11-12, TH 9:30-10:50, F 9-10; Lubbock Downtown: MW 4-5:10

Email Correspondence: All email correspondence should come from your SPC email address. Please give me up to 1 business day 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!

All correspondence should be done through email. I do not use Blackboard messages!

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.

0314 Course Description: Background topics which are necessary for a student to successfully complete MATH-1314 will be covered, with an emphasis on fractions, factoring polynomials, functions, exponents, and operating with radical and rational expressions. A grade of P is required for satisfactory course completion.

1314 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.

0314 Prerequisite: TSIA2 diagnostic score of 4 or 5 or 'C' or better in MATH-0305.

1314 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 with a grade of 'P' in MATH-0314.

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

Optional Textbook: *College Algebra with Corequisite Support*, Abramson and North, 2nd Edition, OpenStax

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: 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 a departmental final exam 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 keep the student from harming their GPA. If the student cannot receive an X, the instructor may assign an F.

Course Supplies:

- Required: Notebook paper and writing utensils with which to complete your assignments. Electronic devices are permitted for use in writing notes and homework problems.
- Required: Printed or Downloaded Notes. A blank copy of the notes will be posted on Blackboard. You should print them off and fill them out as we go through the notes in class. Please note that the SPC campus computer labs are available if you want to print your notes off there. You can also print them off at most public libraries, but please note that it usually requires you to pay a small fee per page. I recommend keeping all of your notes in a notebook so they are easily accessible.
- Required: Large 3-ring binder with dividers to organize all notes and homework.
- Required: Any scientific calculator or simple graphing calculator. Calculator must be able to do 'e', 'ln', 'log', 'sin', 'cos', and 'tan' (along with their inverse) operations. Graphing calculators of higher ability than the TI-84 (e.g.: TI-89, TI-92, Ti-nSpire) are not allowed.
- Required: Internet access and a device for use in watching online lecture videos.

Tutoring: Tutoring is free for all current SPC students both on campus and online. The tutoring schedule can be found on <https://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php>. Free online tutoring is also available through Brainfuse outside of SPC's normal tutoring hours. You can access Brainfuse through your Blackboard page.

Assignments:

- Syllabus Quiz (10 points): This is a bonus assignment in Blackboard to start the semester off strong. It may be repeated as many times as needed for full credit to show understanding of the syllabus.
- Weekly Homework (10 points each): There is an assignment for each set of notes covered per class day generally due one week after being assigned. Please keep up with the course calendar to avoid missing an assignment. Assignments will be graded based on completion and correctness. There are 44 assignments throughout the semester with 40 required for your grade and 4 being built in extra credit.
- Binder (10 points each): Your binder will be collected on exam days to be graded. The lecture notes and homework problems will be kept in a binder to serve as a portfolio. This portfolio will serve as a textbook and study guide, so keeping it organized and up to date is important. There will be four (4) binder checks over the semester.
- Learning Reflections (10 points each): These are free-response surveys to reflect, review mistakes, and learn from them. There will be three (3) surveys over the semester to be completed on Blackboard, each one due the Friday after unit exams 1-3.

Exams:

- Unit Exams (100 points each): 4 unit exams will be given throughout the semester. They will be completed without notes or previous assignments.
- Final Exam (200 points): The final exam will be completed without notes or previous assignments. The Final Exam is comprehensive and held during finals week.
- Exam Corrections: Exam Corrections may be offered for up to 10% back on Unit Exams. Incorrect problems must be corrected and mistakes made during the exam explained to demonstrate understanding of the problem missed.

Showing Work:

To receive full credit on practice problems and exams, you must show all work that leads to your answers. The work must be legible, make sense, and be easy to follow. All work and answers should be handwritten.

Blackboard:

We will use Blackboard this term, which is our Learning Management System (LMS). It will house all of the course materials, resources, and grades. The gradebook will automatically give a zero for any assignment not graded by the due date. Do not worry! If you submitted your assignment on time, I will update the grade once I have graded the assignment.

Grading Formula:

Completing all submissions on time and having a strong work ethic are important but do not guarantee a passing grade. However, these two things do increase the likelihood of passing. The final responsibility for learning lies with the student.

The final letter grade for this course will be based on a points system:

Weekly Homework	44 @ 10 points each = 440 points
Unit Exams	4 @ 100 points each = 400 points
Final Exam	200 points
Organization (LR, Binders)	7 @ 10 points each = 70 points
Syllabus Quiz	10 points
Total Possible Points	(Grade Calculated out of 1070) 1120

Final Grade Determination:

A 957.6-1120 B 850.6-957.5 C 743.6-850.5 D 636.6-743.5 F 636.5 or below

Normal rounding rules are incorporated.

Missed Assignments and Exam:

- Work will generally not be accepted late for any reason other than a documented and verified extended problem with the Blackboard server. In rare cases, primarily associated with events like lengthy medical events such as hospitalization, an exception may be granted. This would be a rare exception and determined on a case-by-case basis by the instructor.
- Make-up tests may be given at the discretion of the instructor in extreme cases such as hospitalization if sufficient paperwork is provided to show cause for an unavoidable absence. The instructor must be contacted within a reasonable timeframe of the absence to request a make-up.
- If the Final Exam is not attempted, a grade of F will be reported for the student's grade regardless of the grade before the Final Exam was administered.
- Extra credit is built in through the extra homework and the syllabus quiz. Additional extra credit will not be provided.

Plagiarism: Plagiarism is not acceptable and 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: Cheating is not acceptable and 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.
10. Use of AI for the completion of assigned problems is considered cheating.

Resources:

- Blackboard! The course syllabus, calendar, gradebook, notes handouts, and assignments will be available on Blackboard.
- I am available to help you! Feel free to email me at epayton@southplainscollege.edu. When you email me, please give me up to 1 business day to respond. If you email about a specific math question, please attach a picture of the question and the work that you have tried, so that I may best address your question.
- Peer tutoring is available via SPC and is required for this course. Visit the link below to learn more about SPC tutoring:
<http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php>
- Free tutorial videos are available at the following sites: <https://www.mathtv.com/> and <https://www.khanacademy.org/>.

Withdrawal Policy:

As required by Texas Education Code Section 51.907, all new students who enroll in a Texas public institution of higher education for the first time beginning with the 2007 fall semester and thereafter, are limited to six course drops throughout their entire undergraduate career. All course drops, including those initiated by students or faculty and any course a transfer student has dropped at another institution, automatically count toward the limit. After six grades of W are received, students must receive grades of A, B, C, D, or F in all courses. There are other exemptions from the six-drop limit and students should consult with a Counselor/Educational Planner before they drop courses to determine these exemptions. Students receiving financial aid must get in touch with the Financial Aid Office before withdrawing from a course. It is the student's responsibility to drop. Excessive absences may result in an administrative withdrawal with a Grade of X or F. If you plan to withdraw, please consult with the instructor immediately.

Note: The last day to drop or be dropped with a grade of W is Thursday, December 3, 2026.

Keys to Succeeding in a Math Class:

- Be mentally present! Pay attention and ask questions in class.
- Plan ahead. Do notes and practice problems early enough before the due date that you will have time to ask questions or seek help if you need it.
- Get help as soon as you feel yourself falling behind! Don't wait!
- All notes printouts and practice problems for the course are posted on Blackboard. If you want to get ahead, that is encouraged. Time management is crucial.
- I have found that the best way for a student to study for a math exam is to practice problems over and over.

Everyone learns and studies differently. I encourage you to seek out and find what works best for you.

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.

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>.

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 certificate! The gift certificate can be spent on anything in the store.

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, 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, 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.

MATH 1314 Tentative Course Calendar

Note: There are assignments for each set of notes, and they are generally due one week **after** they are covered in class.

Bolded topics are online class days.

Week Dates	Topics	Assignments Due
1 Aug 24-28	• Introduction	○ Intro Quiz (In Class)
	• Integer Operations	
	• Fractions Operations	
	• Order of Operations	
2 Aug 31-Sept 4	• Laws of Exponents	○ Assignment 1 ○ Assignment 2 ○ Assignment 3 ○ Assignment 4
	• Polynomial Operations	
	• Factoring Review	
	• Interval Notation	
	• Average Rate of Change	
3 Sept 7-11	• Complex Numbers	○ Assignment 5 ○ Assignment 6 ○ Assignment 7 ○ Assignment 8
	• Radicals and Rational Exponents Review	
	• <u>Labor Day: No Classes</u>	
	• Binomial Theorem	
4 Sept 14-18	• Linear Equations	○ Assignment 9 ○ Assignment 10 ○ Assignment 11 ○ Optional: Exam 1 Review ○ Exam 1: 9/16/26 (In Class) ○ Binder 1: 9/16/26 (In Class) ○ Learning Reflection 1: 9/18/26
	• Linear Inequalities in One and Two Variables	
	• Absolute Value Equations	
	• Absolute Value Inequalities	
5 Sept 21-25	• Exam 1 Review	○ Assignment 12 ○ Exam 1 Corrections ○ Assignment 13
	• <u>Exam 1</u>	
	• Functions	
	• Library of Functions	
6 Sept 28-Oct 2	• Evaluating Functions	○ Assignment 14 ○ Assignment 15 ○ Assignment 16 ○ Assignment 17
	• Operations with Functions	
	• Inverse Functions	
	• Linear Functions	
7 Oct 5-9	• Modeling with Linear Equations	○ Assignment 18 ○ Assignment 19 ○ Assignment 20
	• Quadratic Equations	
	• Quadratic Equations	
	• Quadratic Functions	
	• Circles	
	• Distance Formula	
	• Simplifying, Multiplying, Dividing Rational Expressions	
	• Adding and Subtracting Rational Expressions	
	• Rational Equations	
	• Partial Fraction Decomposition	

Week Dates	Topics	Assignments Due
8 Oct 12-16	• Rational Functions	○ Assignment 21 ○ Assignment 22 ○ Optional: Exam 2 Review ○ Exam 2: 10/14/26 (In Class) ○ Binder 2: 10/14/26 (In Class) ○ Learning Reflection 2: 10/15/26 ○ Assignment 23 ○ Assignment 24
	• Exam 2 Review	
	• <u>Exam 2</u>	
	• Polynomial and Rational Inequalities	
9 Oct 19-23	• Dividing Polynomials	○ Assignment 25 ○ Exam 2 Corrections ○ Assignment 26
	• Solving Polynomials by Factoring	
	• Zeros of Polynomials	
	• Polynomial Functions	
10 Oct 26-30	• Radical Equations	○ Assignment 27 ○ Assignment 28 ○ Assignment 29 ○ Assignment 30
	• Piecewise Functions	
	• Exponential and Log Equations	
	• Exponential and Log Equations	
11 Nov 2-6	• Exponential Functions	○ Assignment 31 ○ Assignment 32 ○ Assignment 33
	• Properties of Log Functions	
	• Log Functions	
	• Compound Interest	
12 Nov 9-13	• Transformations	○ Assignment 34 ○ Assignment 35 ○ Optional: Exam 3 Review ○ Exam 3: 11/11/26 (In Class) ○ Binder 3: 11/11/26 (In Class) ○ Learning Reflection: 11/13/26 ○ Assignment 36 ○ Assignment 37
	• Exam 3 Review	
	• <u>Exam 3</u>	
	• Systems of Linear Equations	
13 Nov 16-20	• Systems of Linear Equations	○ Assignment 38 ○ Exam 3 Corrections
	• Systems of Nonlinear Equations	
	• Systems of Linear and Nonlinear Inequalities	
	• Introductions to Matrices and Basic Operations	
14 Nov 23-27	• Basic Operations	○ Assignment 39 ○ Assignment 40
	• Gauss-Jordan Eliminations	
	• Determinants	
	• Cramer's Rule	
	• <u>Thanksgiving Break: No Classes</u>	
	• <u>Thanksgiving Break: No Classes</u>	

Week Dates	Topics	Assignments Due
15 Nov 30-Dec 4	• Cramer's Rule • Exam 4 Review	○ Assignment 41 ○ Assignment 42 ○ Assignment 43 ○ Assignment 44 ○ Optional: Exam 4 Review ○ Exam 4: 12/2/26 (In Class) ○ Binder 3: 12/2/26 (In Class) ○ Optional: Final Review ○ Exam 4 Corrections
	• Exam 4 Review • Final Review	
	• <u>Exam 4</u>	
	• Final Review	
16 Dec 7-10	• <u>Final Exam: Wednesday, December 9th: 8:00 – 10:00 am</u>	○ Final Exam