South Plains College

Mathematics, Engineering, & Computer Science Department

College Algebra w/ Corequisite Support – MATH 0314/1314.C002

Monday, Tuesday, Wednesday, & Thursday: 1:00pm – 2:45pm Course Syllabus - Fall 2025

Instructor: Jake Wyatt

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Office Hours: M & R: 3-4:30, F: 9-12, and by appointment.

Course Description: MATH 0314/1314 is the study and mathematical application of functions and their graphs. Corequisite material is provided during the first five weeks of the course.

Credit: 6 Semester Credit Hours

Prerequisites: TSI eligible.

Textbooks: Elementary & Intermediate Algebra 4th ed. by Sullivan, Struve, & Mazzarella (Optional)

College Algebra 5th ed. by Robert Blitzer (Provided)

Attendance: Attendance and effort are both important for success in this course. Class attendance may be taken at any time during the class period, so please do not arrive late or leave early.

Class Format: 1:00 – 1:30pm Questions from Students

1:30 – 2:15pm Lecture 2:15 – 2:20pm Break

2:20 – 2:45pm Lab Assignment

Lab Assignments: Lab assignments (labs) are short worksheets to be completed in class. The lab consists of problems related to the lecture. If the lab cannot be completed by 2:45, then an extension without penalty will be granted. However, if a student leaves early before completing the lab, no extension will be granted and he or she must turn in the incomplete lab before leaving. Make-up labs are only permitted in the case of an excused absence. Groupwork is encouraged during labs.

Homework: Homework will be assigned at each class meeting but will not be graded until exam day.

Format for all homework assignments:

- 1. Copy the given problem on your own paper.
- 2. Solve, showing all the necessary work. Use graph paper when graphing.
- 3. Clearly mark your answer.
- 4. Check your answer with the answer key to make certain you are practicing correctly.

Notebook: You are required to maintain a 3-ring binder with four dividers, labeled: Notes, Homework, Lab Assignments, & Exams. Your notebook will be collected on exam days and will be graded for completeness and neatness.

Supplementary Information & Tutoring: The course syllabus, schedule, and grades can be accessed through Blackboard, the online course management system for this course. Please email questions regarding Blackboard support to blackboard@southplainscollege.edu. Free math tutoring is available both in person and online throughout the semester. Please contact Dalila Gonzales: (806)716-2241 or dgonzales@southplainscollege.edu for more information.

Grading: Notebook: 10%

Lab Assignments: 10% 4 Exams: 15% each Final Exam: 20%

Note: Your lowest exam score will be replaced with your final exam score, provided the latter is higher.

Your final average in the course will determine the letter grade posted on your transcript. This grade is determined by the following scale. A(90-100%), B(80-89%), C(70-79%), D(60-69%), F(0-59%).

Calculators: A non-graphing calculator may be used if needed. The TI-30XIIS is a good option. Cell phones are prohibited.

College Algebra w/ Corequisite Support, Course Schedule – Fall 2025 MATH 0314/1314.C002 (MTWR 1:00pm-2:45pm)

Topics & Assignments from: Elementary & Intermediate Algebra (4th ed.) by Sullivan, Struve, & Mazzarella & College Algebra (5th ed.) by Robert Blitzer

Week	Date	Торіс	Homework Assignment #
1	Aug 25 – M	2.1 (EIA) – Linear Equations Part 1	Assignment 1
		2.2 (EIA) – Linear Equations Part 2	
	Aug 26 – T	2.3 (EIA) – Solving Linear Equations w/ Fractions & Decimals	Assignment 2
		2.4 (EIA) – Evaluating Formulas & Solving for a Variable	
	Aug 27 – W	2.8 (EIA) – Solving Linear Inequalities in One Variable	Assignment 3
	Aug 28 – R	3.4 (EIA) – Slope-Intercept Form of a Line	Assignment 4
		3.5 (EIA) – Point-Slope Form of a Line	
		3.6 (EIA) – Parallel & Perpendicular Lines	
2	Sep 1 – M	Labor Day Holiday – no class	
	Sep 2 – T	6.1 (EIA) – Greatest Common Factor & Factoring by Grouping	Assignment 5
		6.2 (EIA) – Factoring Trinomials Part 1	
	Sep 3 – W	6.3 (EIA) – Factoring Trinomials Part 2	Assignment 6
		6.4 (EIA) – Factoring Special Products	
	Sep 4 – R	6.5 (EIA) – Summary of Factoring Techniques	Assignment 7
		6.6 (EIA) – Solving Polynomial Equations by Factoring	
3	Sep 8 – M	7.1 (EIA) – Simplifying Rational Expressions	Assignment 8
		7.2 (EIA) – Multiplying & Dividing Rational Expressions	
	Sep 9 – T	7.3 (EIA) – Adding & Subtracting Rational Expressions Part 1	Assignment 9
		7.4 (EIA) – Finding the LCD & Equivalent Rational Expressions	
	~ 10 ***	7.5 (EIA) – Adding & Subtracting Rational Expressions Part 2	
	Sep 10 – W	7.7 (EIA) – Rational Equations	Assignment 10
	Sep 11 – R	Review for Exam 1	
4	Sep 15 – M	Exam 1 (15%)	
	Sep 16 – T	8.3 (EIA) – An Introduction to Functions	Assignment 11
		8.4 (EIA) – Functions & Their Graphs	
	Sep 17 – W	8.7 (EIA) – Absolute Value Equations & Inequalities	Assignment 12
	Sep 18 – R	9.1 (EIA) – Square Roots	Assignment 13
5	Sep 22 – M	9.2 (EIA) – nth Roots & Rational Roots	Assignment 14
		9.3 (EIA) – Simplifying Expressions Using the Laws of Exponents	
	Sep 23 – T	9.4 (EIA) – Simplifying Radical Expressions	Assignment 15
		9.5 (EIA) – Adding, Subtracting, & Multiplying Radical Expressions	
	Sep 24 – W	9.6 (EIA) – Rationalizing Radical Expressions	Assignment 16
	~ ^ ~	9.7 (EIA) – Functions Involving Radicals	
_	Sep 25 – R	9.9 (EIA) – The Complex Number System	Assignment 17
6	Sep 29 – M	2.1 (CA) – Basic Functions & Their Graphs	1-37 odd, 55-91 odd
	Sep 30 – T	2.2 (CA) – More on Functions & Their Graphs	1-13 odd, 17-41 odd, 55, 59, 61
	Oct 1 – W	2.3 (CA) – Linear Functions & Slope	1-71 odd
	Oct 2 – R	Review for Exam 2	
7	Oct 6 – M	Exam 2 (15%)	
	Oct 7 – T	2.4 (CA) – More on Slope	1-23 odd
	Oct 8– W	2.8 (CA) – Distance and Midpoint Formulas	1-29 odd
	Oct 9 – R	2.8 (CA) – Circles	31-49 odd, 53-63 odd

8	Oct 13 – M	3.1 (CA) – Quadratic Functions	1-8 all, 9-43 odd
	Oct 14 – T	3.2 (CA) – Polynomial Functions & Their Graphs	1-63 odd
	Oct 15 – W	3.3 (CA) – Dividing Polynomials; Remainer & Factor Theorems	17-45 odd
	Oct 16 – R	3.4 (CA) – Zeros of Polynomial Functions	39-51 odd
	Oct 17 - F	SPC Fall Break – no office hours	
9	Oct 20 - M	3.5 (CA) – Rational Functions & Their Graphs	1-69 odd
	Oct 21 – T	3.6 (CA) – Polynomial & Rational Inequalities	1-25 odd, 43-59 odd
	Oct 22 – W	4.1 (CA) – Exponential Functions	1-17 odd, 19-24 all, 25-55 odd
	Oct 23 – R	4.2 (CA) – Logarithmic Functions	1-41 odd, 81-99 odd
10	Oct 27 – M	4.3 (CA) – Properties of Logarithms	1-77 odd
	Oct 28 – T	4.4 (CA) – Exponential & Logarithmic Equations	1-89 odd
	Oct 29 – W	4.5 (CA) – Exponential Growth and Decay; Modeling Data	1-6 all, 9-16 all, 27
	Oct 30 – R	Review for Exam 3	
11	Nov 3 – M	Exam 3 (15%)	
	Nov 4 – T	5.1 (CA) – Systems of Linear Equations in Two Variables	5-41 odd
	Nov 5 – W	5.2 (CA) – Systems of Linear Equations in Three Variables	5-15 odd
	Nov 6 – R	5.3 (CA) – Partial Fractions	1-41 odd
	Nov 7 - F	Registration Opens for Spring	
12	Nov 10 – M	5.4 (CA) – Systems of Nonlinear Equations in Two Variables	1, 5, 7, 9, 17, 19, 23, 25, 31, 35
	Nov 11 – T	5.5 (CA) – Systems of Inequalities	1-59 odd
	Nov 12 – W	6.1 (CA) – Matrix Solutions to Linear Systems	1-11 odd, 21-33 odd
	Nov 13 – R	6.2 (CA) – Inconsistent & Dependent Systems & Applications	1-23 odd
13	Nov 17 – M	6.3 (CA) – Matrix Operations & Applications	1-13 odd, 17-23 odd, 27-31 odd
	Nov 18 – T	6.4 (CA) – Multiplicative Inverse of Matrices & Matrix Equations	1-11 odd, 37-41 odd
	Nov 19 – W	6.5 (CA) – Determinants and Cramer's Rule	1-39 odd
	Nov 20 – R	Review for Exam 4	
14	Nov 24 – M	Exam 4 (15%)	
	Nov 25 – T	7.1 (CA) – The Ellipse	1-31 odd
	Nov 26 – W	Thanksgiving Holiday – No Class	
	Nov 27 – R	Thanksgiving Holiday – No Class	
	Nov 28 - F	Thanksgiving Holiday – No Office Hours	
15	Dec 1 – M	7.2 (CA) – The Hyperbola	1-31 odd
	Dec 2– T	7.3 (CA) – The Parabola	1-33 odd
	Dec 3 – W	Review for Final Exam	
	Dec 4 – R	Review for Final Exam	
16	Dec 8 – M	Final Exam (20%)	
	1:00 - 3:00pm		

Legend: EIA = Elementary & Intermediate Algebra Textbook

CA = College Algebra Textbook

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