South Plains College Mathematics, Engineering, & Computer Science Department College Algebra w/ Corequisite Support – MATH 0314/1314.C606 Monday & Wednesday: 5:20pm – 6:55pm Course Syllabus - Spring 2025

Instructor: Jake Wyatt Office: M110 (mathematics building) Telephone: (806) 716-2543 Email: jwyatt@southplainscollege.edu Office Hours: M-R: 10:30-12, F: 10-12, and by appointment.

Course Description: MATH 0314/1314 is the study and mathematical application of equations and functions. Corequisite material is provided throughout the course of study.

Credit:	6 Semester Credit Hours
Prerequisites:	TSI eligible.
Textbook:	College Algebra w/ Corequisite Support 2e, by Jay Abramson and Sharon North Free Access: https://openstax.org/details/books/college-algebra-corequisite-support-2e

Attendance: Attendance and effort are the most important activities 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:	5:20 – 5:45pm	Questions from Students
	5:45 – 6:30pm	Lecture
	6:30 – 6:35pm	Break
	6:35 – 6:55pm	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 6:55pm, 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. Group work 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 corequisite video lectures can be accessed through Blackboard, the online course management system for this course. Please email questions regarding Blackboard support to <u>blackboard@southplainscollege.edu</u>. 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%
	3 Exams:	20% 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 on lab assignments and tests. The TI-30XIIS is a good option. Cell phone calculators are prohibited.

College Algebra w/ Corequisite Support, Tentative Course Schedule – Spring 2025 MATH 0314/1314.C606 (MW 5:20 – 6:55pm)

Topics & Assignments from OpenStax: College Algebra w/ Corequisite Support 2e By Jay Abramson and Sharon North

Week	Date	Торіс	Assignment
1	Jan 13 – M	1.1 Real Numbers: Algebra Essentials	SE: 1-51 odd
	Jan 14 – T	1.2 Exponents & Scientific Notation	SE: 1, 5-19 odd, 25-35 odd
	Jan 15 – W	1.3 Radicals & Rational Exponents	SE: 1-21 odd, 35-45 odd
	Jan 16 – R	1.4 Polynomials	SE: 5-45 odd
2	Jan 20 – M	No Class – MLK Jr. Holiday	
	Jan 21 – T	1.5 Factoring Polynomials	SE: 5-25 odd, 37-43 odd
	Jan 22 – W	1.6 Rational Expressions	SE: 5, 7, 9, 15, 25, 35, 37, 43, 45
	Jan 23 – R	IA 1.4.7 (pg. 100)	PMP: 1-3
		IA 3.1.1 (pg. 100)	PMP: 4-7
3	Jan 27 – M	2.1 The Rectangular Coordinate Systems & Graphs	SE: 1-41 odd
	Jan 28 – T	IA 1.1.3 (pg. 117)	PMP: 1-9
	X A A XX	IA 2.1.1 (pg. 118)	PMP: 10-17
	Jan 29 – W	2.2 Linear Equations in One Variable	SE: 4-21
	Jan 30 – R	IA 2.3.1 (pg. 136)	PMP: 1-10
4	Ech 2 M	IA 2.2.1 (pg. 137)	PMP: 11-10
4	Feb $3 - M$	2.5 Wodels and Applications	DMD: 1.8
	1004-1	IA 8.2.1 (pg. 149) IA 8.8.1 (ng. 150)	PMP 9-19
	Feb 5 – W	2.4 Complex Numbers	SE: 4-41
	Feb 6 – R	No Online Lecture	
	Feb 7 - F	Instructor Out of Town - No Office Hours	
5	Feb 10 – M	Exam 1 (20%)	
	Feb 11 – T	IA 6.4.1 (pg. 161)	PMP: 1-12
	Feb 12 – W	2.5 Quadratic Equations	SE: 1-43
	Feb 13 – R	No Online Lecture	
6	Feb 17 – M	2.6 Other Types of Equations	SE: 1-2, 6-38
	Feb 18 – T	No Online Lecture	
	Feb 19 – W	2.7 Linear & Absolute Value Inequalities	SE: 1-4, 7-31, 43-53
	Feb 20 – R	IA 3.5.3 (pg. 210)	PMP: 1-8
7	Feb 24 – M	3.1 Functions and Function Notation	SE: 1-75 odd, 91
	Feb 25 – T	IA 3.5.1 (pg. 237)	PMP: 1-8
	Feb 26– W	3.2 Domain and Range	SE: 6-25, 27-53 odd
	Feb 27 – R	IA 3.2.1 (pg. 258)	PMP: 1-4
8	Mar 3 – M	3.3 Rates of Change and Behavior of Graphs	SE: 1-33 odd, 45
	Mar $4 - T$	IA 3.3.3 (pg. 377)	PMP: 8-12
	Mar 5 – W	4.1 Linear Functions	SE: 1-13 odd, 37-51 odd, 76-84 all, 119
	Mar 6 – R	No Online Lecture	
9	Mar 10 – M	Exam 2 (20%)	
	Mar 11 – T	IA 9.6.4 (pg. 460)	PMP: 1-5
	Mar 12 – W	5.1 Quadratic Functions	SE: 1-4, 7-49 odd, 67
	Mar 13 – R	IA 5.2.1 (pg. 483)	PMP: 1
		IA 5.1.1 (pg. 484)	PMP: 2-7
SB	Mar 17-21	Spring Break – no classes this week	

10	Mar 24 – M	5.2 Power Functions & Polynomial Functions	SE: 6-45
	Mar 25 – T	IA 5.4.3 (pg. 531)	PMP: 1-4
		IA 5.4.4 (pg. 533)	PMP: 5-6
	Mar 26 – W	5.4 Dividing Polynomials	SE: 1-53 odd
	Mar 27 – R	IA 6.5.2 (pg. 544)	PMP: 1-5
11	Mar 31 – M	5.5 Zeros of Polynomial Functions	SE: 7-59 odd
	Apr 1 – T	IA 7.1.1 (pg. 560)	PMP: 1-10
		IA 3.1.4 (pg. 561)	PMP: 11-13
	Apr 2 – W	5.6 Rational Functions	SE: 7-49 odd
	Apr 3 – R	No Online Lecture	
12	Apr 7 – M	Exam 3 (20%)	
	Apr 8 – T	IA 10.2.1 (pg. 627)	PMP: 4-9
	Apr 9 – W	6.1 Exponential Functions	SE: 15-25 odd, 45, 47
	_	6.2 Graphs of Exponential Functions	SE: 9, 11, 13-22, 43
	Apr 10 – R	IA 10.3.1 (pg. 665)	PMP: 1-3
		IA 10.3.2 (pg. 667)	PMP: 4-5
		IA 10.4.1 (pg. 706)	PMP: 8-11
	Apr 11 – F	Registration Opens for Summer & Fall	
13	Apr 14 – M	6.3 Logarithmic Functions	SE: 7-53 odd
		6.5 Properties of Logarithms	SE: 3-25 odd
	Apr 15 – T	IA 10.2.2 (pg. 720)	PMP: 1-2
		IA 10.3.4 (pg. 722)	PMP: 3-5
	Apr 16 – W	6.6 Exponential & Logarithmic Equations	SE: 5-49 odd
	Apr 17 – R	IA 4.1.1 (pg. 796)	PMP: 1-2
		IA 4.1.2 (pg. 798)	PMP: 3-4
		IA 4.4.1 (pg. 819)	PMP: 1-2
		IA 4.4.2 (pg. 821)	PMP: 3
	Apr 18 – F	Easter Break – no office hours	
14	Apr 21 – M	7.1 Systems of Linear Equations: Two Variables	SE: 1-29 odd, 41, 43, 59
		7.2 Systems of Linear Equations: Three Variables	SE: 1, 7-27 odd, 55
	Apr 22 – T	IA 11.2.1 (pg. 836)	PMP: 1
		IA 11.1.4 (pg. 839)	PMP: 2-3
	Apr 23 – W	7.3 Systems of Nonlinear Equations & Inequalities	SE: 7-23 odd, 39-43 odd
	Apr 24 – R	IA 4.5.1 (pg. 868)	PMP: 1-6
		IA 4.6.3 (pg. 870)	PMP: 1-2
1.5		Last Day to Drop a Course	
15	Apr 28 – M	7.5 Matrices & Matrix Operations	SE: 7-23 odd
	A	7.8 Solving Systems with Cramer's Rule	SE: 25-39 6dd
	Apr 29– 1	No Online Lecture	
	Apr 30 – W	Review for Final Exam	
	May 1 – R	No Online Lecture	
16	May $5 - M$	Final Exam (20%)	
	5:00-7:00 pm		

Legend: SE = Section Exercises PMP = Practice Makes Perfect

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.