College Algebra - Fall 2024 Math 1314 – 609

Instructor Information: Jacqueline Fowler B022 (LBK Downtown Center – Basement)

806-716-4640 <u>jfowler@southplainscollege.edu</u>

Office Hours: Mon/Wed: 8:00 – 9:30, 10:45 – 11:00, 12:45 – 1:00, 2:45 – 4:00 Fri: 8:00 – 9:30

Required Materials: pencils, erasers, printed notes from Blackboard. You may use a scientific calculator, but graphing calculators and cell phones are not allowed at any time.

Blackboard: Blackboard is an online course management system that SPC uses for course information. All course materials can be accessed through Blackboard. For questions regarding Blackboard support call 806-716-2180 or email blackboard@southplainscollege.edu.

Communication: All emails need to be sent through your SPC email account to my SPC email account. Do **not** use your personal email. I will try to respond to all emails within 24 hours, but sometimes it may take longer. You **must** include your name and class on every email. Be professional in your messages. Do **not** use all caps or text language.

Dropping the class: You may submit a drop form online (<u>online drop form</u>) or visit the Student Services Office. **If someone other than you logs into your Blackboard account, you <u>WILL</u> be dropped from this class immediately and receive an X.**

Grading Policy: Final Grade Determination:

Labs/Quizzes	20%	A: 90 –	100
Participation	20%	B: 80 –	89
Exam 1	20%	C: 70 –	79
Exam 2	20%	D: 60 –	- 69
Exam 3	20%	F: 0 – 5	9

Tutoring: You have access to free tutoring through SPC. Click on the tutoring link in Blackboard for more information. If you visit with a tutor, please share with them the work in your notes, so they can help you with the correct steps.

Quizzes/Labs: There will be several quizzes and labs randomly given during class throughout the semester. For quizzes, you will not be allowed to use anything other than a calculator. For labs, you are allowed to use your notes, homework, and a calculator. If you are absent on a day that a quiz or lab is given, you will not be allowed to take it at a later time, and you will receive a zero.

Participation: Participation will include completed homework and Math Skills Assignments. Homework will be checked weekly during class. If you are absent on a day that homework is checked, you will not be allowed to turn it in at a later time, and you will receive a zero. Math Skills Assignments will be completed in Blackboard. If you do not complete the assignment before the deadline, you will not be allowed to take it at a later time, and you will receive a zero.

Exams: There will be three exams given this semester.

- You may use a calculator and a notecard (size will be different on every exam see Blackboard for information), but notes, homework, graphing calculator, and cell phones are prohibited.
- These exams will be timed and must be completed during class time. When time expires, all questions not completed will be counted wrong, and you will not be allowed to finish the exam. If you are absent on the day an exam is given, you will receive a zero for the exam and you will not be allowed to take the exam at a later time. There are no make-up exams.

Common Course Syllabus – Math Department Policies

Department: Mathematics, Engineering, and Computer Science **Course Number:** Math 1314 **Discipline:** Mathematics **Course Title:** College Algebra

Available Formats: conventional, hybrid, internet, and ITV.

Campuses: Levelland, Plainview Center, 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 a successful completion of NCBM-0114.

Credit: 3 Lecture: 3 Lab: 1

This course partially satisfies a Core Curriculum Requirement: 1314 - 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.

South Plains College Policies

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.

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.

South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: 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.

***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 – FALL 2024 Tentative Course Calendar

Any changes will be announced in class and posted in Blackboard.

144.	Any changes will be announced in class and posted in Blackboard.		
Week	Date	Topics	
1 Aug 26	Introduction, Tips for success in math courses		
		Polynomials and Combining Functions	
Aug 28		Linear Equations without Fractions	
2 Sep 2	Sep 2	Labor Day Holiday	
	Sep 4	Time Management	
	оср .	Linear Equations with Fractions	
3 Sep 9	Sep 9	Overcoming Math Anxiety	
		Factoring	
	Sep 11	Summary of Factoring and Solving Equations by Factoring	
Sep 16	Preparing for a Math Test and Test-Taking Strategies		
	3cp 10	Rational Expressions	
	Sep 18	Sep 18 Rational Equations	
5	Sep 23	Exam 1	
	Sep 25	Roots and Complex Numbers and Simplifying Radical Expressions	
Son 20	Sep 30	Using Available Resources	
6	3cp 30	Radical Equations	
	Oct 2	Quadratic Equations	
	Oct 7	After Math Test Behavior	
7	000	Polynomial Equations	
	Oct 9	Systems of Equations – 2 variables	
8 Oct 14	Oct 1/	How to Read and Use Class Materials	
	000 14	Systems of Equations – Cramer's Rule	
	Oct 16	Systems of Equations - Matrices	
	Oct 21	Note-taking for Math	
9	OCI 21	Exponential Equations	
	Oct 23	Properties of Logs	
10	Oct 28	Log Equations	
10	Oct 30	Exam 2	
11	Nov 4	Compositions of Functions	
11	Nov 6	Evaluating Exponential Functions	
	Nov 11	Piecewise Functions, Inverse Functions	
12 Nov 13	Nov 12	Inequalities – Linear, Polynomial, and Rational	
	NOV 13	Graphing Linear Equations	
13 Nov 18	Preparing for a Math Final Exam		
	NOV 18	Graphing Quadratic Functions	
Nov 20		Graphing Polynomial Functions	
14 ⊢	Nov 25	Graphing Rational Functions	
	Nov 27	Thanksgiving Holiday	
15	Dec 2	Graphing Exponential and Log Functions	
		Symmetry, Increasing, Decreasing, Constant, and Transformations	
	Dec 4	Exam 3	
16	Dec 9	Final Exam	