Math 0305 – Foundations of Algebra – Spring 2024

Revised July 2023

Department: Mathematics, Engineering, and Computer Science
Discipline: Mathematics
Course Number: MATH 0305
Course Title: Foundations of Algebra

Available Formats: conventional and internet

Campuses: Levelland, Plainview Center, Lubbock Downtown Center

Course Description: This course is a study of fundamental mathematics principles and concepts to help prepare students for math corequisites. Topics include performing basic arithmetic operations on integers, fractions, and decimals; performing calculations involving exponents and order of operations; solving application problems involving proportions, percent, and fractions; simplifying algebraic expressions and solving linear equations; application problems involving linear models; graphs of linear equations in two variables; applying rules of exponents; and operations on polynomials. The course includes a non-course competency-based lab option that will require students to work with academic coaches, peer tutors, or online supplemental tools outside of the prescribed class meeting time to help develop skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. This course will not satisfy graduation requirements.

Prerequisite: This course is designed for students who test between 910-949 with a diagnostic level of 1-3 or TSIA: ABE Math Level 3-4.

Credit: 3 **Lecture:** 2 **Lab:** 2

Textbook: No textbook required, course materials will be provided on Blackboard

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: No

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

1. Add, subtract, multiply and divide real numbers.
2. Use the order of operations to simplify an expression.
3. Simplify algebraic expressions.
4. Solve linear equations.
5. Translate and solve word problems.
6. Solve linear inequalities.
7. Graph equations in two variables by the intercept method and the slope intercept method.
8. Evaluate expressions using exponent rules.
9. Add, subtract, multiply and divide polynomials.

Student Learning Outcomes Assessment: Comprehensive Final Exam

Course Evaluation: There will be a comprehensive departmental final exam given by all instructors.

Attendance/Student Engagement Policy: Attendance and effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed to miss twenty percent (20%) of class assignments for the semester, ***for any reason***. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion.

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.

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.

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.

Section 603

Instructor Information: Jacqueline Fowler
806-716-4640
B022 (LBK Downtown Center - Basement)
jfowler@southplainscollege.edu

Office Hours: M/W: 12:30 – 1:00 pm, 2:45 – 5:30 pm F: 8:00 – 9:30 am

Required Materials:

- Notebook paper, pencils, erasers
- Printed Notes. A blank copy of the notes will be posted on Blackboard.

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 respond to all emails within 36 hours except on weekends. Emails sent to me after 10:00 am on Friday may not receive a response until Monday morning. Be professional in your messages. Do **not** use all caps or text language. **Include your name and class on every email.**

Attendance: Course attendance will be taken. Per South Plains College math department policy, you will be administratively dropped from the course if your number of missed submissions goes over 20% of all submissions.

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 will 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 with a grade of W is Thursday, 25 April 2024.**

Grading Formula: Completing all submissions 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 the following:

- Required Tutor Lab Attendance……15%
- Weekly Quizzes……15%
- Comprehensive Final Exam……70%

Final Grade Determination: A: 90 – 100 B: 80 – 89 C: 70 – 79 D: 60 – 69 F: 59 or below

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.

Required Tutoring Lab Attendance:

- You must attend the tutoring lab provided by South Plains College to get assistance and practice for 60 minutes (1 hour) weekly.
- When you arrive at the Tutoring Lab, check in on the Penji app to get credit for your attendance.
- A week is from Monday through Friday.
- Your grade will be computed by finding the ratio of the minutes you attended the tutoring lab over the required 60 minutes ($\frac{attended\ minutes}{60} \cdot 100$).

Weekly Quizzes:

- There will be a weekly quiz most weeks. Please see the class calendar to determine the weeks there will not be a quiz.
- Weekly quizzes will be given and taken in class.
- You should do all of your work for the weekly quiz on the weekly quiz.
- You must show all work to receive credit for each individual problem.

Reviewing Grades on Blackboard: After I grade your assignments, you should be able to log into Blackboard to see your grade.

Academic Dishonesty: Academic dishonesty will not be tolerated. Please see the list of things that constitute plagiarism and cheating in the general Math 0305 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.

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 jfowler@southplainscollege.edu. When you email me, please give me up to 24 hours to respond. If you email about a specific math question, please attach a picture of the question and the work that you have tried.
- 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/.

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

Week	Date	Topics	Assignments	Assessment
1	Jan 17	Introduction		
		Tips for success in math courses		
		Notes 1: Adding & Subtracting Whole Numbers (including basic facts)	Assignment 1	
2	Jan 22	Time Management		Syllabus and Tips Quiz (1)
	Jan 24	Notes 2: Multiplying & Dividing Whole Numbers (including basic facts)	Assignment 2	
3	Jan 29	Overcoming Anxiety		Notes 1 & 2 Quiz (2)
		Notes 3: Introduction to Integers, Absolute Value, Additive Inverses, Adding & Subtracting Integers	Assignment 3	
	Jan 31	Notes 4: Multiplying & Dividing Integers	Assignment 4	
4	Feb 5	How to Read & Use Class Material		Notes 3 & 4 Quiz (3)
		Notes 5: Evaluating Exponents, Prime Factoring & Square Roots	Assignment 5	
	Feb 7	Notes 6: Finding Greatest Common Factor (GCF) & Least Common Multiple (LCM)	Assignment 6	
5	Feb 12	Note Taking for Math		Notes 5 & 6 Quiz (4)
		Notes 7: Simplifying Fractions, Finding Reciprocals, Multiplying & Dividing Fractions	Assignment 7	
	Feb 14	Notes 8: Adding & Subtracting Fractions; Mixed Numbers	Assignment 8	
6	Feb 19	Using Available Resources		Notes 7 & 8 Quiz (5)
		Notes 9: Decimal Places, Adding & Subtracting Decimals	Assignment 9	
	Feb 21	Notes 10: Multiplying & Dividing Decimals	Assignment 10	
7	Feb 26	Improving Memory		Notes 9 & 10 Quiz (6)
		Notes 11: Percents, Converting Between Fractions, Decimals & Percents	Assignment 11	
	Feb 28	Notes 12: Order of Operations	Assignment 12	
8	Mar 4	Preparing for a Math Test		Notes 11 & 12 Quiz (7)
		Notes 13: Evaluating Algebraic Expressions	Assignment 13	
	Mar 6	Notes 14: Solving One-Step and Two-Step Equations (include single fraction)	Assignment 14	

9	Mar 18	Math Test-Taking Strategies		Notes 13 & 14 Quiz (8)
		Notes 15: Solving Multi-Step Equations	Assignment 15	
	Mar 20	Notes 16: Percent Equations, Applications of Linear Equations	Assignment 16	
10	Mar 25	After Math Test Behavior		Notes 15 & 16 Quiz (9)
		Notes 17: Solving Linear Inequalities	Assignment 17	
	Mar 27	Notes 18: Solving Compound Inequalities	Assignment 18	
11	Apr 1	Notes 19: Rules of Exponents Part 1	Assignment 19	Notes 17 & 18 Quiz (10)
	Apr 3	Notes 20: Rules of Exponents Part 2	Assignment 20	
12	Apr 8	Preparing for a Math Final Exam		Notes 19 & 20 Quiz (11)
		Notes 21: More with Rules of Exponents	Assignment 21	
	Apr 10	Notes 22: Intro to Polynomials; Add, Subtract, Multiply Polynomials (including 2 variables), Divide by a Monomial	Assignment 22	
13	Apr 15	Notes 23: Coordinate Plane Basics	Assignment 23	
14	Apr 22	Notes 24: Intro to Lines & Slope	Assignment 24	Notes 22 & 23 Quiz (12)
	Apr 24	Notes 25: Graphing Linear Equations	Assignment 25	
15	Apr 29 May 1	Review for Comprehensive Final	Final Review	Notes 24 & 25 Quiz (13)
	May 6	**Final Exam Week**		