South Plains College Common Course Syllabus: MATH 0305 Fall 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, Downtown Center, Plainview 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.

Other Policies:

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: <u>https://www.southplainscollege.edu/emergency/covid19-</u> 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.

Foundations of Algebra Syllabus Math 0305.605 Fall 2023

| Classroom | ssroom B011 | | T/Th 1:00 – 2:15 |
|------------|---------------------------------|--------|------------------|
| | (Basement of Downtown Center) | | |
| Instructor | Traci Sanders | Phone | 806-716-4616 |
| E-mail | tsanders@southplainscollege.edu | Office | B021 |

Office Hours:

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------|-------------|-----------|-------------|--------------|
| 7:45 – 10:15 | 8:00 - 9:00 | | 8:00 - 9:00 | 7:45 – 11:15 |

Email Correspondence: All email correspondence should come from your SPC email address. If you need help with your SPC email, you can call the Help Desk at 806-716-2600. Please give me up to 24 hours 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.

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.

Showing Work: To receive full credit on quizzes and exams, you must show all work that leads to your answers. The work must be legible, make sense and be easy to follow.

Course Supplies:

- <u>Required:</u> Notebook paper on which to complete your assignments
- <u>Required:</u> Printed 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 could 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 order in a binder so they are easily accessible.
- <u>Recommended:</u> Large 3-ring binder with dividers to organize all notes and homework.

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

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 (attended minutes / 60 * 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 completed in class.
- You should do all of your work for the weekly quiz on the quiz.
- You must show all work to receive credit for each individual problem.

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. <u>The final</u> <u>responsibility for learning lies with the student</u>. The final letter grade for this course will be based on the following:

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

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 tsanders@southplainscollege.edu. 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: <u>https://www.mathtv.com/</u> and <u>https://www.khanacademy.org/</u>.

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 with a grade of W is November 30, 2023.**

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 | Topics | Assignments | Assessment | |
|------|--|--------------|--|--|
| 1 | Introduction | | Syllabus and Tips Quiz (1) | |
| | Tips for success in math courses | | 7 | |
| | Notes 1: Adding & Subtracting Whole Numbers | Assignment 1 | | |
| | (including basic facts) | | | |
| 2 | Time Management | | | |
| | Labor Day: Those who have 2 classes this week can | | 7 | |
| | work more on multiplication facts. | | | |
| | Notes 2: Multiplying & Dividing Whole Numbers | Assignment 2 | | |
| | (including basic facts) | | | |
| 3 | Overcoming Anxiety | | Adding, Subtracting | |
| | Notes 3: Introduction to Integers, Absolute Value, | Assignment 3 | Multiplying & Dividing | |
| | Additive Inverses, Adding & Subtracting Integers | | Whole Numbers Quiz (2) | |
| | Notes 4: Multiplying & Dividing Integers | Assignment 4 | | |
| 4 | How to Read & Use Class Material | | Absolute Value, Additive | |
| | Notes 5: Evaluating Exponents, Prime Factoring & | Assignment 5 | Inverses, Adding, | |
| | Square Roots | | Subtracting, Multiplying & | |
| | | | Dividing Integers Quiz (3) | |
| | Notes 6: Finding Greatest Common Factor (GCF) & | Assignment 6 | | |
| 5 | Least Common Multiple (LCM) | | | |
| 5 | Note Taking for Math | | Evaluating Exponents, Prime | |
| | Notes 7: Simplifying Fractions, Finding Reciprocals, | Assignment 7 | Factoring & Square Roots, Finding the GCF & LCM | |
| | Multiplying & Dividing Fractions | | Quiz (4) | |
| | Notes 8: Adding & Subtracting Fractions; Mixed | Assignment 8 | Quiz (4) | |
| | Numbers | | | |
| 6 | Using Available Resources | | Simplifying Fractions, | |
| | Notes 9: Decimal Places, Adding & Subtracting | Assignment 9 | Finding Reciprocals, | |
| | Decimals | | Multiplying, Dividing, | |

MATH 0305 Course Calendar

| | Notes 10: Multiplying & Dividing Decimals | Assignment 10 | Adding & Subtracting Fractions, Mixed Numbers Quiz (5) |
|----|---|--------------------------------------|---|
| 7 | Improving Memory | | Decimal Places, Adding, |
| | Notes 11: Percents, Converting Between Fractions, Decimals & Percents | Assignment 11 | Subtracting, Multiplying & Dividing Decimals Quiz (6) |
| | Notes 12: Order of Operations | Assignment 12 | |
| 8 | Preparing for a Math Test | | Percents, Converting |
| | Notes 13: Evaluating Algebraic Expressions | Assignment 13 | Between Fractions, Decimals & Percents, Order of |
| | Notes 14: Solving One-Step and Two-Step Equations (include single fraction) | Assignment 14 | Operations Quiz (7) |
| 9 | Math Test-Taking Strategies | | Evaluating Algebraic |
| | Notes 15: Solving Multi-Step Equations | Assignment 15 | Expressions, Solving One- |
| | Notes 16: Percent Equations, Applications of Linear Equations | Assignment 16 | Step and Two-Step Equations (include single fraction) Quiz (8) |
| 10 | After Math Test Behavior | | Solving Multi-Step |
| | Notes 17: Solving Linear Inequalities | Assignment 17 | Equations, Percent |
| | Notes 18: Solving Compound Inequalities | Assignment 18 | Equations, Applications of Linear Equations Quiz (9) |
| 11 | Notes 19: Rules of Exponents Part 1 | Assignment 19 | Solving Linear & Compound |
| | Notes 20: Rules of Exponents Part 2 | Assignment 20 | Inequalities Quiz (10) |
| 12 | Preparing for a Math Final Exam | | Rules of Exponents Quiz |
| | Notes 21: More with Rules of Exponents | Assignment 21 | (11) |
| | Notes 22: Intro to Polynomials; Add, Subtract, Multiply Polynomials (including 2 variables), Divide by a Monomial | Assignment 22 | |
| 13 | Notes 23: Coordinate Plane Basics | Assignment 23 | |
| | Thanksgiving Break (Wednesday - Friday) | | |
| 14 | Notes 24: Intro to Lines & Slope | Assignment 24 | Intro to Polynomials; Add, |
| | Notes 25: Graphing Linear Equations | Assignment 25 | Subtract, Multiply Polynomials (including 2 variables), Divide by a Monomial, Coordinate Plane Basics Quiz (12) |
| 15 | Review for Comprehensive Final | Review for | Intro to Lines & Slope, |
| | | Comprehensive Final | Graphing Linear Functions Quiz (13) |
| | Review for Comprehensive Final | Review for Comprehensive Final | |
| 16 | No Class on Tuesday | | |
| 1 | Final Exam: Thursday, Dec 14, 10:15 – 12:15 | 1 | |