



Math 1314 – College Algebra – FALL 2019

Instructor Information: Jacqueline Fowler
806-716-4640

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Office Hours:

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--|------------------------------|------------------------------|------------------------------|--------------|
| 8:00 – 8:30 10:15 – 11:00 5:00 – 6:00 pm (virtual) | 8:00 – 8:30 10:15 – 11:00 | 8:00 – 8:30 10:15 – 11:00 | 8:00 – 8:30 10:15 – 11:00 | 8:00 – 10:00 |

Course Objectives: Upon successful completion of this course, students will:

- Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
- Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
- Apply graphing techniques.
- Evaluate all roots of higher degree polynomial and rational functions.
- Recognize, solve and apply systems of linear equations using matrices.

Core Objectives:

Communication Skills:

- Develop, interpret, and express ideas through written, oral, and visual communication

Critical Thinking:

- Generate and communicate ideas by combining, changing, and reapplying existing information
- Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information

Empirical and Quantitative Competency Skills:

- Manipulate and analyze numerical data and observable facts, and arrive at an informed conclusion

Text: No textbook is required.

Required Supplies

- Pencils, erasers, 3-ring binder, notebook paper (to be turned in WITHOUT spiral edges)
- Scientific or Graphing calculator (TI 83-Plus or TI 84-Plus) --- TI-89, TI-92, and TI-Nspire calculators along with cell phones, smart watches, and other electronic devices will not be allowed during testing

Blackboard: Blackboard is an online course management system that SPC uses for course information. In Blackboard, you will find all course information. For technical support, call 806-716-2180 or email blackboard@southplainscollege.edu.

Attendance: Attendance and effort are the most important activities for success in this course. If you are absent, it is your responsibility to see a classmate to get the assignment and notes. **If you have 4 consecutive or 6 cumulative absences, you may be dropped from this class and receive an X or F.** I do not distinguish between excused and unexcused absences. If you stop attending class, you should go through the procedure for dropping a course to obtain a grade of W. Perfect attendance will result in 4 points added to your final grade. Having only one absence will result in 2 points added to your final grade.

Communication: I will respond to all emails within 24 hours. After 10 AM on Friday, the response time could be longer over the weekend. Sign your name to the bottom of EVERY email, do not use text language in your emails, and do not use ALL CAPS.

Homework: Homework will be assigned for all of the sections covered in the course. For most weeks, the homework will be due on Mondays. Any change to the Monday deadlines will be announced in class. For each completed homework assignment, one point will be added to that test grade. Homework will not be accepted late.

Lab Assignments: Excluding test days, approximately the last 30 minutes of class will be our lab time. The lowest three lab grades will be dropped. **There are no make-up labs!** Here are the two different types of labs we will have:

1. Work on homework. As long as you participate, you will receive a 100 for these labs. If you are absent, you will receive a zero.
2. Work a few problems to be turned in for a grade. If you are absent, you will receive a zero.

Exams: Dates for exams are located in the outline. **There are no make-up exams!** On exam days, students will be required to leave backpacks, cell phones, smart watches, etc. at the front of the room. If you are absent on the day an exam is given, you will receive a zero for the exam. There will be a comprehensive final exam at the end of the semester. There are no exemptions for the final exam. The final exam will be used to replace the lowest test only if the Final Exam is higher.

Grading Scale and Policy:

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|-----------------|-----|----|----------|
| Lab Assignments | 20% | A: | 90 – 100 |
| Test 1 | 15% | B: | 80 – 89 |
| Test 2 | 15% | C: | 70 – 79 |
| Test 3 | 15% | D: | 60 – 69 |
| Test 4 | 15% | F: | 0 – 59 |
| Final Exam | 20% | | |

Academic Integrity: The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a serious offense and

renders the offender liable to serious consequences, possibly suspension. For more detail, see p. 22 of the South Plains College General Catalog.

Diversity Statement: In this class, the teachers will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Non-Discrimination Statement: South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

Disability Statement: Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability. For more information, call or visit the Disability Services Office at, Reese Center Building 8, 806-716-4675.

Title IX Pregnancy Accommodations Statement: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact Crystal Gilster, Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

Campus Concealed Carry Statement: South Plains College permits the lawful carry of concealed handguns in accordance with Texas state law, and Texas Senate Bill 11. Individuals possessing a valid License to Carry permit, or the formerly issued Concealed Handgun License, may carry a concealed handgun at all campus locations except for the following: natatorium. For a complete list of campus carry exclusions zones by event, please visit <http://www.southplainscollege.edu/campuscarry.php>

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

| Week | Dates | Day | Topic | Assignment |
|------|--------|------|---|------------|
| 1 | Aug 26 | Mon | Solve Linear and Absolute Value Equations Solve Linear Inequalities | 1.1 |
| | Aug 28 | Wed | Summary of Factoring / Solve Quadratics by Factoring | 1.2 |
| 2 | Sep 2 | Mon | Find LCD and Solve Rational Equations | 1.3 |
| | Sep 4 | Wed | Properties of Roots and Complex Numbers Simplifying and Rationalizing Radical Expressions | 1.4 |
| 3 | Sep 9 | Mon | Rational Exponents and Solving Radical Equations | 1.5 |
| | Sep 11 | Wed | Solve Quadratics by Factoring and the Square Root Prop Solve Quadratics by Comp the Square and Quad Form | 1.6 |
| 4 | Sep 16 | Mon | Distance, Midpoint, Circles | 1.7 |
| | Sep 18 | Tues | EXAM 1 | |
| 5 | Sep 23 | Mon | Basics of Functions, Analyzing Graphs Evaluating Functions, Symmetry | 2.1 |
| | Sep 25 | Wed | Increasing, Decreasing, Piecewise Functions | 2.2 |
| 6 | Sep 30 | Mon | Graphs and Transformations Functions: Operations and Composition | 2.3 |
| | Oct 2 | Wed | Funtions: Compositions and Inverses | 2.4 |
| 7 | Oct 7 | Mon | Functions: Slope and Graphing Functions: Equations, Parallel and Perpendicular Lines | 2.5 |
| | Oct 9 | Wed | EXAM 2 | |
| 8 | Oct 14 | Mon | Graph Quadratics | 3.1 |
| | Oct 16 | Wed | Synthetic Division, Solve Polynomial Equations | 3.2 |
| 9 | Oct 21 | Mon | Graph Polynomial Functions | 3.3 |
| | Oct 23 | Wed | Graph rational functions | 3.4 |
| 10 | Oct 28 | Mon | Solve Polynomial and Rational Inequalities | 3.5 |
| | Oct 30 | Wed | EXAM 3 | |
| 11 | Nov 4 | Mon | Exponential and Log Functions: Basics and Evaluating | 4.1 |
| | Nov 6 | Wed | Properties of Logs | 4.2 |
| 12 | Nov 11 | Mon | Solve Exponential and Log Equations | 4.3 |
| | Nov 13 | Wed | Solve Systems of Equations in 2 variables | 4.4 |
| 13 | Nov 18 | Mon | EXAM 4 | |
| | Nov 20 | Wed | Holiday | |
| 14 | Nov 25 | Mon | Solve Systems of Equations in 3 variables | 5.1 |

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| | Nov 27 | Wed | Matrices | 5.2 |
| 15 | Dec 2 | Thurs | Cramer's Rule | 5.3 |
| | Dec 4 | Tues | Review for Final Exam | |
| 16 | <i>Final Exam: Monday, Dec 9, 10:15 - 12:15</i> | | | |