

South Plains College
Math 1314 – College Algebra (3:3:1)
Course Syllabus
Spring 2018

Instructor: Diane Eagle
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Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
3:45 – 4:45	1:00 to 2:30	3:45 – 4:45	1:00 to 2:30	9:00 – 12:00

Prerequisites: 2 years of high school algebra, successful completion of MATH 0320 (a C or higher) or TSI compliance.

Textbook: College Algebra, 7th edition, Blitzer, Pearson-Prentice Hall, 2018. This textbook is available on reserve in the library.

Supplies: Pencils, paper, straightedge, and graph paper. **Only a basic non-graphing calculator (such as a TI-30) will be allowed in class.** Calculators on cell phones, graphing calculators, and other electronic devices will **NOT** be allowed during tests or in-class assignments.

Course Description: A standard course in college algebra. Quadratic equations; ratio and proportion; variation; binomial theorem; progressions; inequalities; complex numbers; theory of equations; determinants and matrices; linear programming; mathematical induction; permutations and combinations.

Course Purpose/Rational/Goal: The purpose of the course is to provide a fundamental background in algebra to meet the mathematics requirement for the core curriculum and to provide a basis for further study in mathematics.

Student Learning Outcomes/Competencies:

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

1. Solve and graph problems involving linear (1.2, 1.3, 2.1, 2.2, 2.3, 2.4) quadratic (1.5, 1.6, 3.1) exponential (4.1, 4.4) and logarithmic (4.2, 4.3, 4.4) functions
2. Solve and graph linear, quadratic, and rational inequalities (1.7, 3.6, 5.5)
3. Identify and simplify complex numbers (1.4)
4. Apply midpoint, distance, and circle formulas (2.8)
5. Analyze and graph polynomial functions (3.2, 3.3, 3.4)
6. Analyze and graph rational functions (3.5)
7. Create and solve systems of equations with algebraic techniques (5.1, 5.2, 5.4) with matrix techniques (6.1) and with determinants (6.5)
8. Apply the Binomial Theorem to expand binomials of higher degree (8.5)

Core Objectives:

Communication Skills:

- Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through oral communication
- Develop, interpret, and express ideas through 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 arrive at an informed conclusion
- Manipulate and analyze observable facts and arrive at an informed conclusion

Course Evaluation: Your final grade will be determined by the average of four tests (400 points) the comprehensive final exam (100 points) and daily quiz and homework grades (100 points.) The lowest grade of the four tests will be dropped, provided the student completed the course and took the final exam. The final exam is NOT eligible to be dropped. There are 500 points possible. The number of points earned will follow the grading scale below:

Grading Scale:	A	90 to 100	448 to 500 points
	B	80 to 89	398 to 447 points
	C	70 to 79	348 to 397 points
	D	60 to 69	298 to 347 points
	F	Below 60	0 to 297 points

Exams: Dates for the 4 major tests and comprehensive final exam are listed on the calendar. **There are NO makeup tests!** If you miss one of the 4 major tests, you may qualify to have that missing grade dropped at the end of the semester (see requirements above.)

Daily Grades: Homework is assigned from each section covered and will be checked during class. Consistently working problems reinforces the skills and concepts presented, and is essential for success in this course. All steps/work must be neatly shown and the answer clearly indicated. Do not submit “answer sheets.” Completed homework earns 1 point; no homework earns –1 point. Weekly 10-point quizzes will be given during lab time. To do well on the quizzes, you will need to complete the homework. Focus your effort on being able to complete the problems on a quiz/exam without any outside resources. **There is NO makeup for quizzes and a grade of zero will be assigned.** Daily grades comprise 20% of your overall average.

Bonus Points: Occasionally, tests will include a bonus problem, or a bonus problem may be assigned to complete outside of class. Opportunities for extra points are sometimes posted on Blackboard as well. Students will have the opportunity to make corrections on **one** test (final exam not included) of their choosing, for up to 50% of the points missed. Corrections are due the class period after the test is handed back and must be turned in on a separate sheet of paper with the exam.

Tutoring: Students can obtain free tutoring in room M116 in the math building on the South Plains Campus in Levelland or in Building 2 at the Reese Center. Tutoring schedules will be posted on campus. Please remember to sign in when you seek the help of a tutor in each of these places.

Additional Resources: Materials accompanying the textbook include PowerPoint slides and videos containing worked-out solutions to chapter test questions. Links to these items are posted on Blackboard. SPC produced videos of many topics are also available and a link is provided on Blackboard for online viewing. Additional free tutorial videos are available at the following sites: <http://patrickjmt.com/>, <http://www.mathtv.com/>, and <http://www.khanacademy.org/> and others.

Attendance Policy: Attendance will be taken every class period. Students who arrive late, leave early, sleep during class, or fail to sign the attendance sheet may be counted absent. Whenever absences become excessive and, in the instructor's opinion, minimum course objectives cannot be met due to absences, the student will be withdrawn from the course. **Any student who misses 3 consecutive classes or exceeds 5 absences throughout the semester will be administratively dropped and receive a grade of X or F.** Students wishing to drop this class must see the registrar by Thursday, April 26, 2018 to officially withdraw and receive a grade of W.

Classroom Civility: Students are expected to be respectful of their fellow classmates and maintain a classroom environment that is conducive to learning. Turn off all cell phones and other electronic devices **before** entering the classroom. The instructor reserves the right to ask a student to leave if his/her cell phone is left on and disrupts the class. Refrain from using offensive language, talking loudly or off-topic, working on outside assignments, chewing tobacco products, or otherwise being disruptive in class. Food and/or drinks are NOT allowed in the classroom.

Academic Honesty: Students are expected to uphold the ideas of academic honesty. Academic dishonesty includes, but is not limited to, cheating on tests, collaborating with another student during a test, copying another student's work, using materials not authorized, and plagiarism. **Use of a graphing calculator, cell phone, or other electronic devices during any in-class assignment or exam will result in a grade of zero.** Leaving the classroom during an exam will not be permitted. Students who do not follow the academic honesty policy will receive a grade of zero for the assignment, and may be dropped from the course with an F, or face possible suspension.

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 to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) and Lubbock Center 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

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, 806-894-9611.

Campus Concealed Carry: 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 exclusion zones by event, please visit <http://www.southplainscollege.edu/campuscarry.php>.