

South Plains College
 Department of Mathematics & Engineering
 Math1314 – College Algebra (Duel Credit)
 Course Syllabus – Fall 2018

Instructor: Jerod Clopton
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Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
1:30 to 2:30	9:00 to 11:00	1:30 to 2:30	9:00 to 11:00	10:00 to 12:00

Course Description: MATH 1314. COLLEGE ALGEBRA. (3:3:1) 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. Pre-requisite: Two units of high school algebra or MATH 0320. (SPC Course Catalogue)

Student Learning Outcomes:

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.

General Education Core Objectives:

1. **Critical Thinking:** Students will develop habits of mind, allowing them to appreciate the processes by which scholars in various disciplines organize and evaluate data and use the methodologies of each discipline to understand the human experience.
2. **Communication Skills:** Students will communicate ideas, express feelings and support conclusions effectively in written, oral and visual formats.
3. **Empirical and quantitative Skill:** Students will develop quantitative and empirical skills to understand, analyze and explain natural, physical and social realms.

Textbook: College Algebra with Intermediate Algebra, A Blended Course by Beecher / Penna / Johnson / Bittinger, Pearson Education, 2017. ISBN 9780134556505.

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

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, November 15, 2018 to officially withdraw and receive a grade of W.

Course Evaluation: Your final grade will be determined by the average of the four tests (60%), the comprehensive final exam (20%), and the average of the homework and quiz grades (20%).

Grading Scale: A: 90-100 B: 80-89 C: 70-79 D: 60-69 F: 59 or below

Exams: There will be four exams and one comprehensive final exam for this class. The dates for exams are given in the course calendar. **There will be no make-up exams.** The grade from your final exam grade will replace your lowest exam grade, so long as the final exam grade is greater than your lowest exam grade.

Homework / Quizzes: Homework will be assigned for each section of material covered. 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". Expect to spend *at least* two hours outside of class for each hour you spend in class working on math. Homework is due on the assigned due date. **Absolutely NO late homework assignments will be accepted.** Completed homework earns 5 points; no homework earns -5 points. The points from homework will be applied to quiz grades. Weekly quizzes will be given, (possible exceptions for weeks with an exam). To do well on the quizzes, you 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 zeros will be assigned.**

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 and on Blackboard.

Blackboard is the online course management system that will be utilized for this course. The course syllabus, supplemental online resources, as well as any class handouts can be accessed through Blackboard. Login at <http://southplainscollege.blackboard.com>. The user name and password should be the same as the MySPC and SPC email.

User name: first initial, last name, and last 4 digits of the Student ID

Password: Original Campus Connect Pin No. (found on SPC acceptance letter)

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 room. 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, reading newspapers, 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 calculator, cell phone, or other electronic device during any in-class assignment or exam will result in a grade of zero. 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 from the college.

Equal Opportunity: South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability or age.

Diversity Statement: In this class, the teacher 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.

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) & Lubbock Center 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so.

Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at: (http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php)

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

College Algebra Course Schedule for Fall 2018*

Week	Day	Topic	Assignment
1	Mon, Aug 27	Introduction	
	Wed, Aug 29	1.1 - Solving Equations	
	Fri, Aug 31	1.2 - Formulas and Applications	
		1.3 - Applications and Problem Solving	
2	Mon, Sep 3	Labor Day	
	Wed, Sep 5	1.6 - Absolute-Value Equations and Inequalities	
	Fri, Sep 7	2.1 - Graphs of Equations	
		2.2 - Functions and graphs	
3	Mon, Sep 10	2.3 - Finding Domain and Range	
		2.4 - The Algebra of Functions	
	Wed, Sep 12	Review	
	Fri, Sep 14	Exam 1	
4	Mon, Sep 17	2.5 - Linear functions	
	Wed, Sep 19	2.6 - More on Linear Functions	
	Fri, Sep 21	4.8 - Applications of Polynomial Equations and Functions	
5	Mon, Sep 24	5.5 - Solving Rational Equations	
	Wed, Sep 26	6.6 - Solving Radical Equations	
	Fri, Sep 28	7.3 - The Complex Numbers	
6	Mon, Oct 1	7.4 - Quadratic Equations	
	Wed, Oct 3	Review	
	Fri, Oct 5	Exam 2	
7	Mon, Oct 8	8.1 - Polynomial Functions	
	Wed, Oct 10	8.2 - Graphing Polynomial Functions	
	Fri, Oct 12	Fall Break	
8	Mon, Oct 15	8.3 - Polynomial Division	
	Wed, Oct 17	8.5 - Rational Functions	
	Fri, Oct 19	8.6 - Polynomial Inequalities	
9	Mon, Oct 22	9.1 - The Composition of Functions	
	Wed, Oct 24	9.2 - Inverse Functions	
	Fri, Oct 26	Exam 3	
10	Mon, Oct 29	9.3 - Exponential Functions and Graphs	
	Wed, Oct 31	9.4 - Logarithmic Functions and Graphs	
	Fri, Nov 2	9.5 - Properties of Logarithmic Functions	
11	Mon, Nov 5	9.6 - Solving Exponential and Logarithmic Equations	
	Wed, Nov 7	9.6 - Solving Exponential and Logarithmic Equations	
	Fri, Nov 9	3.1 - Systems of Equations in Two Variables	

12	Mon, Nov 12	3.2 - Solving by Substitution	
	Wed, Nov 14	3.3 - Solving by Elimination	
	Fri, Nov 16	3.4 - Solving Applied Problems	
13	Mon, Nov 19	Exam 4	
	Wed, Nov 21	Thanksgiving	
	Fri, Nov 23	Thanksgiving	
14	Mon, Nov 26	3.5 - Systems of Equations in Three Variables	
	Wed, Nov 28	10.1 - Maticies	
	Fri, Nov 30	10.4 - Determinants and Cramer's Rule	
15	Mon, Dec 3	3.7 - Systems of Inequalities	
		11.4 - Nonlinear Systems of Equations and Inequalities	
	Wed, Dec 5	Review for Final	
	Fri, Dec 7	Review for Final	
16	Mon, Dec 10	Finals Week	

* This is a tentative calendar is subject to change. Any changes to the tentative calendar will be announced in class.