

South Plains College
Department of Mathematics & Engineering
Math1314 – College Algebra
Course Syllabus – Fall 2017

Math1314.004.171S

Scheduled Class Time: MW – 11:00am-12:45pm, Math Building, AG105

Instructor: Jerod Clopton

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Phone: 806-716-2738

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
4:00 – 5:00	10:00 – 12:00	4:00 – 5:00	10:00 – 12:00	10:15 – 12:15
Or by appointment				

Course Description: MATH 1314. COLLEGE ALGEBRA. (3:3:1) Prerequisite: Two units of high school algebra or MATH 0320. 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. (copied from the current SPC catalog)

Course Objectives: Successful completion of this course should reflect mastery of the following objectives. Chapter and section numbers are indicated in parentheses.

1. Solve and graph problems involving linear, quadratic, exponential, and logarithmic functions; (1.2, 1.3, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1, 4.2, 4.3, 4.4)
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, with matrix techniques, and with determinants; (5.1, 5.2, 5.4, 6.1, 6.5)
8. Apply the Binomial Theorem to expand binomials of higher degree. (8.5)

Textbook: Blitzer, Robert. *College Algebra*, 7th Edition. ISBN-13: 9780134469300. (The purchase or use of a textbook is not required for this class. You may check out a copy of the textbook from the library to use as a reference if you desire.)

Course Requirements: To maximize the potential to complete this course, a student should attend all class meetings, bring all required supplies to class meetings, take notes and participate in class, complete all homework assignments and examinations, including the final examination.

Supplies: Notebook, lined loose-leaf paper, 3-ring binder, pencils, ruler, graph paper. Calculators will only be allowed after the first exam. 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.

Attendance: Your attendance and active participation is vital to your success in this class. Attendance will be taken at the beginning of each class meeting. Failure to be in attendance will result in you being marked as absent for that class meeting. Should you arrive after attendance has been taken or leave class early, you will be marked as being tardy for that class meeting. For every 2 accounts that you are marked as being tardy, you will receive 1 mark of being absent; i.e. 2 tardies = 1 absent. If you exceed 5 absences during the course of the semester you will be dropped from this course with a grade of X or F.

Be on time for class and turn off any cell phones or other electronic devices before class starts. Note: unless allowed under special circumstances, no laptops or tablets are shall be used during class.

Homework and Quizzes: Homework will be assigned for each section of material covered and will be collected on the due date at the end of class. Homework is assigned to reinforce the learning and mastery of concepts taught in class. **Late homework will not be accepted and a grade of zero will be assigned. There will be no makeups for missed quizzes.**

Exams: There will be four unit exams and one comprehensive final exam for this class. The dates for exams are given in the course colander. **There will be no make up exams.** There is an opportunity to replace your lowest exam grade. If your final exam grade is greater than your lowest exam grade, then that lowest exam grade will be replaced by the grade from your final exam.

Grading Policy:

	Percentage	
Homework and Quiz Average	20%	
Exams (4 @ 15% each)	60%	
Final Exam	20%	

Your final average will determine your letter grade for this class; determined by the following scale: A(90-100%), B(80-89%), C(70-79%), D(60-69%), F(0-59%)

Supplementary Course Information & Tutoring:

Blackboard is the online course management system that will be utilized for this course. This course syllabus, homework assignments, 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)

Check Blackboard often for the latest tutoring schedule and course supplements (handouts, online practice quizzes, additional notes, sample problems for practice, etc.).

Free Math Videos: Visit SPC's website, www.southplainscollege.edu. At the top right of the home page, click on Blackboard. Blackboard will ask for a user name and password. Use the following for both: mvideos. What will you find here? You will find videos (ordered by topic) from SPC professors and handouts (PDF) that accompany most videos. This is a great resource to use if you missed class, did not fully understand the lesson, or just simply forgot the lesson.

Tutoring: Students can obtain free tutoring in room M116 in the math building at the South Plains College campus in Levelland, and in rooms 206 and 208 in Building 2 at the Reese Campus.

The Internet: The topics, along with the examples and solutions of problems that are covered in this class are freely available to you through the Internet. There are numerous webpages, PDFs, and videos that will relate to every thing that is covered in this class. Various web links will be posted in Blackboard throughout the semester for you to reference. I encourage that you search for other references and utilize these to gain a more solid understanding of the martial.

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 2017*

Week	Day	Topic	Assignment
1	Mon, Aug 28	Syllabus; Assessment	
	Wed, Aug 30	[1.2] Linear & Rational Equations	Assignment 1
2	Mon, Sep 4	Labor Day Holiday	
	Wed, Sep 6	[1.3] Linear Applications	Assignment 2
3	Mon, Sep 11	[1.4] Complex Numbers; [1.5] Quadratic Equations Part 1 of 2	Assignment 3
	Wed, Sep 13	[1.5] Quadratic Equations Part 2 of 2	Assignment 4
4	Mon, Sep 18	[1.6] Other Types of Equations	Assignment 5
	Wed, Sep 20	[1.7] Linear & Absolute Value Inequalities	Assignment 6
5	Mon, Sep 25	Exam 1 (Through 1.7)	
	Wed, Sep 27	[2.1 & 2.2] Functions and Their Graphs	Assignment 7
6	Mon, Oct 2	[2.3 & 2.4] Linear Functions and Slope	Assignment 8
	Wed, Oct 4	[2.8] Distance, Midpoint, & Circles; [2.6] Combinations of Functions	Assignment 9
7	Mon, Oct 9	[2.6] Composite Functions, [2.7] Inverse Functions	Assignment 10
	Wed, Oct 11	[3.1] Quadratic Functions, [3.3] Synthetic Division	Assignment 11
8	Mon, Oct 16	Exam 2 (Through 3.3)	
	Wed, Oct 18	[3.2] Polynomial Functions & Their Graphs; [3.4] Roots of Polynomials	Assignment 12
9	Mon, Oct 23	[3.5] Rational Functions & Their Graphs	Assignment 13
	Wed, Oct 25	[3.6] Polynomial & Rational Inequalities	Assignment 14
10	Mon, Oct 30	[4.1] Exponential Functions, [4.2] Logarithmic Functions	Assignment 15
	Wed, Nov 1	[4.3] Properties of Logarithms	Assignment 16
11	Mon, Nov 6	[4.4] Exponential & Logarithmic Equations	Assignment 17
	Wed, Nov 8	[5.1] 2x2 Systems; [5.2] 3x3 Systems	Assignment 19
12	Mon, Nov 13	Exam 3 (Through 4.4)	
	Wed, Nov 15	[5.4] Nonlinear Systems; [5.5] Systems of Inequalities	Assignment 20
13	Mon, Nov 20	[6.1] Matrix Solutions to Systems	Assignment 21
	Wed, Nov 22	Thanksgiving Break	
14	Mon, Nov 27	[6.5] Determinants & Cramer's Rule	Assignment 22
	Wed, Nov 29	Exam 4 (Through 6.5)	
15	Mon, Dec 4	[8.5] The Binomial Theorem	Assignment 23
	Wed, Dec 6	Review for Final Exam	Assignment 24
16	Mon, Dec 11	Final Exam: 10:15-12:15	

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