South Plains College MATH 1314 - COLLEGE ALGEBRA Fall 2017 Course Syllabus

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Class alerts by text:

Text: @d42fk to 81010

Mymathlab: www.coursecompass.com CourselD: 1314.002 - Sanchez74085

Textbook: Blitzer, R. (2010). College Algebra, 6th ed. New Jersey: Pearson Prentice

Hall

About the course: This course is intended to provide students with the skills necessary to use tools from algebra to solve problems in a variety of contexts.

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

Learning 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)

*Tentative Course Outline

We will be covering chapters 1-8. We will cover only a limited selection out of chapters 6 through 8.

Methods of assessment: The expected learning outcomes for the class will be assessed through exams, in-class activities, homework, class discussions, and/or active learning activities. Group work outside of class is encouraged.

Comprehensive Final Exam

Attendance: Record of your attendance will be maintained throughout the semester. You may be dropped from this course with a grade of X or F if you exceed three absences throughout the semester. **Absences are not classified as 'excused' or 'unexcused'**. If you are absent for any reason, you are responsible for any notes, and being prepared to take a quiz or test the next time you come to class. It is a good idea to have a network of friends that can take notes for you and other things you might have missed while you were gone.

TSI: The Texas Success Initiative (TSI) is a state program designed to ensure that all Texas institutions provide placement testing, personal advisement and appropriate instruction to students to enhance their opportunities for success in their college studies. All new students entering Texas colleges and universities are required to take a placement test prior to enrolling in college-level courses, unless exempt from testing under specified state standards (i.e., scores on ACT, SAT or TAKS). Testing will indicate whether a student possesses adequate basic college level skills in reading, writing and mathematics necessary to begin an undergraduate program of study. (copied from the current SPC catalog)

Homework: Homework will be assigned and taken up on the next class day. The homework will be the basis of discussion during class. NO LATE HOMEWORK WILL BE ACCEPTED!

Grading: Scale:

Homework: 25% 90 – 100% A
Tests: 50% 80 – 89% B
Lab: 10% 70 – 79% C
Final: 15% Below 70% F

Make-up: Absolutely no make-up tests will be given. This is why it is so important to attend class. If you miss, it is your responsibility to turn in homework prior to class. **No late homework** will be accepted.

Civility in the classroom: Students are expected to assist in maintaining a classroom environment which is conducive to learning. In order to assure all students have an opportunity to gain from time spent in class, troublesome behavior will not be tolerated. This includes the use of cellular phones, making offensive remarks, reading newspapers, sleeping, bad attitudes, or engaging in any other form of distraction. The instructor is authorized to take such steps as are necessary when the behavior of a student disrupts the normal classroom procedure.

Calculators: A graphing calculator is required. You will need a calculator that can do matrix manipulations such as row reductions and that can graph most functions. I would recommend a TI 83 or 84. Do not get a TI 86, TI 92, or any other that can do the factoring for you. Cell phones and similar devices may NOT be used as calculators. The instructor reserves the right to not allow any particular calculator. Check with the instructor immediately to make sure yours is allowable.

Tutorials: Free tutoring and video tapes are available in Room 116 of the Math Building. Digital versions of these tutorial videos can be viewed on your personal computer. There is a link for these videos on blackboard http://spc.blackboard.com

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.

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 Special 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 Special Services Coordinator. For more information, call or visit the Special Services
Office in the Student Services Building, 894-9611 ext. 2529.

Diversity: 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.

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.

"Insanity is doing the same thing, over and over again, but expecting different results."

~Albert Einstein