South Plains College
Department of Mathematics and Engineering
College Algebra with Support – MATH 0314.C01, MATH 1314.C01
Spring 2019 Course Syllabus

Instructors:
Karol Albus
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Office Hours: As listed or by appointment.

Monday	Tuesday	Wednesday	Thursday	Friday
9:30-10:00	1:00-4:00	9:30-10:00	12:30-1:30	9:00-12:00

Kaylan K Thompson
Office: M111, Telephone: (806) 716-4886, Email: kthompson@southplainscollege.edu
Office Hours: As listed or by appointment.

Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:00	1:00-2:30	9:00-10:00	1:00-2:30	10:00-1:00

Textbook: (Optional) Blitzer. College Algebra, 7th ed. Pearson. ISBN 10:0-13-446916-X. Older versions of the textbook are acceptable. Your homework will be in handout form, but additional problems, as well as additional explanations, will be in the book.

Course Descriptions:
MATH 0314 College Algebra Support Course (3:3:1) Background topics which are necessary for a student to successfully complete Math 1314 will be covered, with an emphasis on fractions, factoring polynomials, functions, exponents, and operating with radical and rational expressions.

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.

Supplies: You will need a large 3-ring binder, dividers, notebook paper, graph paper, a 3-hole punch, and pencils with an eraser. You will be allowed to use a scientific calculator most of the time. Phone/tablet and graphing calculators will not be allowed. Do not expect instructors to loan you supplies.

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

Attendance Policy: Attendance and effort are crucial for success in this course. Record of your attendance will be maintained throughout the semester. Leaving class early and being tardy will be recorded as ½ of an absence. Sleeping in class will also be recorded as an absence. You may be dropped from this course with a grade of X or F if you are absent four consecutive days or if you accrue seven absences for any reason throughout the semester. Absences are not classified as 'excused' or 'unexcused'.

Grading Policy:
      Homework/Quizzes/Lab Assignments/Binder Checks 10%
      8 Unit Exams 72%
      Final Exam 18%

Homework/Quizzes/Lab Assignments/Binder Checks:
- Homework assignments will be assigned during each class session and may be collected the following class period. Work the problems early enough to seek help if needed. You should expect to spend as much time outside of class as you do in class practicing homework problems and studying. Absolutely no late homework assignments will be accepted. If you are absent, you must email your assignment to me before or on the day of class to earn credit for the assignment. Otherwise, a zero will be given.
- Quizzes will be given during almost all class periods to demonstrate that you have practiced the skills from the previous class/classes. Make-up quizzes will not be given and a zero will be given.
- Periodically, lab assignments will be given, completed, and turned in during a class period. If absent, a zero will be given.
- All students will keep a binder which will be used as a reference and study guide. Your binder should be brought to class every day! The binder will be checked twice randomly by the instructor during the semester. Neatness and organization of a 3-ring binder are important.

Exams: There will be 8 unit exams given and a comprehensive final. Dates for the exams are on the course calendar. If for any reason you are going to miss an exam, you must contact us PRIOR to class time. Make-up exams will be given at the discretion of the instructor. Once you begin an exam, you will not be able to leave the classroom until the exam is submitted for grading.

Grading Scale: A 90-100   B 80-89   C 70-79   D 60-69   F 59 or below
If you make a grade of A, B, or C then that is the grade you will be awarded for both halves of the course. However, if you COMPLETE THE COURSE and make a grade of D or F, then your grade for the 0314 course will be assessed at your instructor's discretion. If you pass MATH 0314 but not the MATH 1314 portion of the course, you will be able to register for MATH 1314 in future semesters.

Student Learning Outcomes for MATH 0314
Upon successful completion of this course, the student will be able to:
1. Perform order of operations of real numbers.
2. Perform operations using integer and rational exponents.
3. Factor and perform operations with polynomials.
4. Simplify and perform operations with rational expressions.
5. Simplify and perform operations with radical expressions.
6. Solve linear equations and equalities of a single variable.
7. Solve quadratic equations by factoring and quadratic formula.
8. Solve systems of two linear equations in two variables.
9. Graph linear and quadratic functions.

Student Learning Outcomes for College Algebra (MATH 1314):
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.

Student Responsibilities and Expectations:
1. Come to class on time and prepared to learn. (Pencils, homework, notebook, calculator)
2. Read the syllabus.
3. Take notes, participate in class, and complete course assignments early enough to seek help if needed.
4. Food and drink are not allowed in class, with the exception of bottled water.
5. Cell phones and any other electronic devices must be silenced and put away before entering the classroom. Use of these devices during class will result in a zero for that day's quiz, homework, or exam.

Resources:
- Blackboard is the online course management system that will be used for this course. The course syllabus, handouts for notes, reviews, as well as any other class handouts can be accessed through Blackboard. Your grades will also be posted there. You will want to check Blackboard regularly.
- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted by the door of M116 and I will also post them on Blackboard.
- We are available to help you! Feel free to come by during our office hours or email us at kalbus@southplainscollege.edu or kthompson@southplainscollege.edu .

Use of Student Email: The College provides a free, official, email account to all students to ensure efficient and secure communications between you and the College. Students will be required to use their college-issued email address to communicate with their instructor and all other college personnel, so it is easy to distinguish a student's email form spam. The College expects that students will utilize their college email addresses to send and receive communications with college personnel and will read email on a frequent and consistent basis.

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.

Core Objectives:
Communication Skills:
effective development, interpretation, and expression of ideas through written, oral, and visual communication.
- 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:
creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information.
- 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:
the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
- Manipulate and analyze numerical data and arrive at an informed conclusion
- Manipulate and analyze observable facts and arrive at an informed conclusion

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 Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

Sexual Harassment: Sexual harassment includes unwelcome sexual advances or visual, verbal or physical conduct of a sexual nature. This definition encompasses many forms of offensive behavior, including gender-based harassment of a person of the same gender as the harasser, conduct of a sexual nature that creates an offensive, intimidating or hostile work environment; and coerced sexual conduct by a person in a position of authority in the workplace. Examples of prohibited sexual harassment include:

a. unwelcome sexual flirtation or advances,
b. offering employment, promotions or other benefits in exchange for sexual favors,
c. making or threatening reprisals for refusing sexual advances,
d. visual conduct such as leering; making sexual gestures; displaying sexually suggestive objects or pictures; cartoons or posters; suggestive or obscene letters, notes or invitations.
e. verbal conduct such as derogatory comments; epithets; slurs; sexual innuendo; sexual jokes; graphic verbal commentaries about an individual's body; sexually degrading words used to describe an individual, and
f. physical conduct such as unwanted, suggestive or offensive touching; assault; impeding or blocking movement.

Sexual or other forms of harassment of an employee or student by any College employee, regardless of position, will not be tolerated. Sexual harassment by a non-employee, for example, a customer, vendor or supplier, is also prohibited.
Employee: Any employee of the College.
Student: An individual enrolled in any credit or non-credit course at South Plains College.

Campus Concealed Carry syllabus statement: 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.

Tentative Course Schedule

Date	Topic	Notes, Assignment
Jan 14	Course Introduction/ Integers, Fraction Multiplication & Division	Notes P1, Assignment P1
Jan 15	Fraction Addition & Subtraction, Order of Operations	Notes P2, Assignment P2
Jan 16	Solving Linear and Absolute Value Equations	Notes 1, Assignment 1
Jan 17	Solving Linear and Absolute Value Equations	Notes 2, Assignment 2
Jan 21	*Martin Luther King Holiday – no class*	
Jan 22	Polynomials: Exponent Rules	Notes 3, Assignment 3
Jan 23	Polynomials: Add, Subtract & Multiply Factoring: GCF, Trinomials with a Coefficient of 1	Notes 4, Assignment 4
Jan 24	Factoring: Trinomials, Grouping & Special Products	Notes 5, Assignment 5
Jan 28	Summary of Factoring/ Solving by Factoring	Notes 6, Assignment 6
Jan 29	Review 1	Review 1
Jan 30	**Exam 1**	
Jan 31	Multiply and Divide Rational Expressions	Notes 7, Assignment 7
Feb 4	Add and Subtract Rational Expressions	Notes 8, Assignment 8
Feb 5	Add and Subtract Rational Expressions	Assignment 8B
Feb 6	Multiply, Divide, Add & Subtract Rational Expressions	Notes 9, Assignment 9
Feb 7	Solving Rational Equations	Notes 10, Assignment 10
Feb 11	Review 2	Review 2
Feb 12	**Exam 2**	
Feb 13	Simplifying Radicals/Rational Exponents	Notes 11, Assignment 11
Feb 14	Add, Subtract & Multiply Radicals	Notes 12, Assignment 12
Feb 18	Rationalizing Radical Expressions & The Complex Number System Part 1	Notes 13, Assignment 13
Feb 19	The Complex Number System Part 2 & Solving Radical Equations Part 1	Notes 14, Assignment 14
Feb 20	Solving Radical Equations Part 2	Notes 15, Assignment 15
Feb 21	Review 3	Review 3
Feb 25	**Exam 3**	
Feb 26	Functions Day 1	Notes 16, Assignment 16
Feb 27	Functions Day 2	Notes 17, Assignment 17
Feb 28	Function Operations, Compositions & Inverses	Notes 18, Assignment 18
Mar 4	Linear Functions: Slope & Graphing	Notes 19, Assignment 19
Mar 5	Linear Functions: Equations, Parallel & Perpendicular Lines	Notes 20, Assignment 20
Mar 6	Review 4	Review 4
Mar 7	**Exam 4**	
Mar 11-15	*Spring Break – no class*	
Mar 18	Solving Quadratics by Factoring and the Square Root Property	Notes 21, Assignment 21

Mar 19	Solving Quadratics by Completing the Square and the Quadratic Formula	Notes 22, Assignment 22
Mar 20	Graphing Quadratics	Notes 23, Assignment 23
Mar 21	Distance, Midpoint & Circles	Notes 24, Assignment 24
Mar 25	Review 5	Review 5
Mar 26	**Exam 5**	
Mar 27	Long Division & Synthetic Division	Notes 25, Assignment 25
Mar 28	Roots of Polynomials	Notes 26, Assignment 26
Apr 1	Graphing Polynomials	Notes 27, Assignment 27
Apr 2	Rational Functions	Notes 28, Assignment 28
Apr 3	Polynomial and Rational Inequalities	Notes 29, Assignment 29
Apr 4	Review 6	Review 6
Apr 8	**Exam 6**	
Apr 9	Exponential & Logarithmic Functions (no calculator)	Notes 30, Assignment 30
Apr 10	Properties of Logarithms & Compound Interest	Notes 31, Assignment 31
Apr 11	Solving Exponential Equations	Notes 32, Assignment 32
Apr 15	Solving Logarithmic Equations	Notes 33, Assignment 33
Apr 16	Review 7	Review 7
Apr 17	**Exam 7**	
Apr 18	2x2 Systems, 3x3 Systems	Notes 34, Assignment 34
Apr 22	*Easter Break Holiday – no class*	
Apr 23	Non-Linear Systems	Notes 35, Assignment 35
Apr 24	Systems of Inequalities	Notes 36, Assignment 36
Apr 25	Matrix Methods *Last Day to Drop Spring Semester Courses*	Notes 37, Assignment 37
Apr 29	Review 8	Review 8
Apr 30	**Exam 8**	
May 1	Applications	Notes 38, Assignment 38
May 2	Review for Comprehensive Final	Review for Comprehensive Final
May 6	**Final Exam**	10:15-12:15