

South Plains College  
Department of Mathematics and Engineering  
College Algebra with Support (1314S) – MATH 0320.002, MATH 1314.002  
Spring 2018 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	12:00-1:00	9:00-12:00

Kaylan K Thompson

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**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	9:00-12:00

**Textbook: (Optional)** Blitzer. College Algebra, 7th ed. Pearson. ISBN 10:0-13-446916-X. Older versions of the textbook are acceptable. Please do not try to use an electronic device for a book. If you purchase a loose leaf book, you should secure a binder for the book. Your homework will be in handout form, but additional problems, as well as additional explanations, will be in the book.

**Course Descriptions:**

**MATH 0320 Intermediate Algebra (3:3:1)** Prerequisite: MATH 0315 or one year of high school algebra. This course is designed for the student who needs MATH 1314 or 1324. It includes factoring, fractions, linear equations in one unknown, graphs, systems of linear equations, exponents, radicals, and quadratic equations. Time in a math lab is required. This course will not satisfy graduation requirements.

**MATH 1314 College Algebra (3:3:1)** Prerequisite: MATH 0320 or two years of high school algebra. A standard course in college algebra. Quadratic equations; ratio and proportion; variation; binomial theorem; inequalities; complex numbers; theory of equations; determinants and matrices. Time in a math lab is required.

**Supplies:** You will need a 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 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 five 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. The binder should be arranged in the following manner:
  - Section 1: Syllabus
  - Section 2: Notes for each section covered—Handouts to use to take notes are posted on Blackboard. It is your responsibility to print the handouts. If you are absent, it is your responsibility to get the notes from a classmate.
  - Section 3: Homework
  - Section 4: Quizzes/Lab Assignments
  - Section 5: Reviews/Unit Exams

These pages will be kept in chronological order.

**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 0320 course will be assessed at your instructor's discretion. If you pass MATH 0320 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 Intermediate Algebra (MATH 0320)**

1. Define, represent, and perform operations on real and complex numbers.
2. Recognize, understand, and analyze features of a linear equation and a function.
3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, rational, and radical expressions.
4. Identify and solve absolute value, polynomial, rational, and radical equations.
5. Identify and solve absolute value and linear inequalities.
6. Model, interpret, justify mathematical ideas and concepts using multiple representations.
7. Connect and use multiple strands of mathematical situations and problems, as well as in the study of other disciplines.

**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.
- I am available to help you! Feel free to come by during my office hours or email us at [kalbus@southplainscollege.edu](mailto:kalbus@southplainscollege.edu) or [kthompson@southplainscollege.edu](mailto: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 from 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 Misconduct Statement:** As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help.

It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Dr. Lynne Cleavinger, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Dr. Cleavinger at 716-2563 or [lclevinger@southplainscollege.edu](mailto:lclevinger@southplainscollege.edu) or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

**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](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.

<b>Date</b>	<b>Topic</b>	<b>Notes, Assignment</b>
Jan 16	Course Introduction/Solving Linear and Absolute Value Equations	Notes 1, Assignment 1
Jan 17	Solving Linear and Absolute Value Equations	Notes 2, Assignment 2
Jan 18	Polynomials: Exponent Rules	Notes 3, Assignment 3
Jan 22	Polynomials: Add, Subtract & Multiply Factoring: GCF, Trinomials with a Coefficient of 1	Notes 4, Assignment 4
Jan 23	Factoring: Trinomials, Grouping & Special Products	Notes 5, Assignment 5
Jan 24	Summary of Factoring/ Solving by Factoring	Notes 6, Assignment 6
Jan 25	Review 1	Review 1
<b>Jan 29</b>	<b>Exam 1</b>	
Jan 30	Multiply and Divide Rational Expressions	Notes 7, Assignment 7
Jan 31	Add and Subtract Rational Expressions	Notes 8, Assignment 8
Feb 1	Multiply, Divide, Add & Subtract Rational Expressions	Notes 9, Assignment 9
Feb 5	Solving Rational Equations	Notes 10, Assignment 10
Feb 6	Review 2	Review 2
<b>Feb 7</b>	<b>Exam 2</b>	
Feb 8	Simplifying Radicals/Rational Exponents	Notes 11, Assignment 11
Feb 12	Add, Subtract & Multiply Radicals	Notes 12, Assignment 12
Feb 13	Rationalizing Radical Expressions & The Complex Number System Part 1	Notes 13, Assignment 13
Feb 14	The Complex Number System Part 2 & Solving Radical Equations Part 1	Notes 14, Assignment 14
Feb 15	Solving Radical Equations Part 2	Notes 15, Assignment 15
Feb 19	Review 3	Review 3
<b>Feb 20</b>	<b>Exam 3</b>	
Feb 21	Solving Quadratics by Factoring and the Square Root Property	Notes 16, Assignment 16
Feb 22	Solving Quadratics by Completing the Square and the Quadratic Formula	Notes 17, Assignment 17
Feb 26	Graphing Quadratics	Notes 18, Assignment 18
Feb 27	Distance, Midpoint & Circles	Notes 19, Assignment 19
Feb 28	Review 4	Review 4
<b>Mar 1</b>	<b>Exam 4</b>	
Mar 5	Functions Day 1	Notes 20, Assignment 20
Mar 6	Functions Day 2	Notes 21, Assignment 21
Mar 7	Function Operations, Compositions & Inverses	Notes 22, Assignment 22
Mar 8	Linear Functions: Slope & Graphing	Notes 23, Assignment 23
<i>Mar 12-16</i>	<i>Spring Break</i>	
Mar 19	Linear Functions: Equations, Parallel & Perpendicular Lines	Notes 24, Assignment 24
Mar 20	Review 5	Review 5
<b>Mar 21</b>	<b>Exam 5</b>	
Mar 22	Long Division & Synthetic Division	Notes 25, Assignment 25
Mar 26	Roots of Polynomials	Notes 26, Assignment 26
Mar 27	Graphing Polynomials	Notes 27, Assignment 27

Mar 28	Rational Functions	Notes 28, Assignment 28
Mar 29	Polynomial and Rational Inequalities	Notes 29, Assignment 29
<i>Apr 2</i>	<i>Easter Holiday</i>	
Apr 3	Review 6	Review 6
<b>Apr 4</b>	<b>Exam 6</b>	
Apr 5	Exponential & Logarithmic Functions (no calculator)	Notes 30, Assignment 30
Apr 9	Properties of Logarithms & Compound Interest	Notes 31, Assignment 31
Apr 10	Solving Exponential Equations	Notes 32, Assignment 32
Apr 11	Solving Logarithmic Equations	Notes 33, Assignment 33
Apr 12	Review 7	Test 7
<b>Apr 16</b>	<b>Exam 7</b>	
Apr 17	2x2 Systems, 3x3 Systems	Notes 34, Assignment 34
Apr 18	Non-Linear Systems	Notes 35, Assignment 35
Apr 19	Systems of Inequalities	Notes 36, Assignment 36
Apr 23	Gaussian Elimination	Notes 37, Assignment 37
Apr 24	Cramer's Rule	Notes 38, Assignment 38
Apr 25	Review 8	Review 8
<b>Apr 26</b>	<b>Exam 8</b> <i>Last Day to Drop</i>	
Apr 30	Selected Topics TBA	
May 1	Selected Topics TBA	
May 2	Review for Comprehensive Final	Review for Comprehensive Final
May 3	Review for Comprehensive Final	Review for Comprehensive Final
<b>May 7-10</b>	<b>Final Exam</b>	