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Office Hours: By Appointment – MTWRF 8:30-12:00pm, 1-2:30pm

### **MATH 0314/1314** College Algebra Support Course/College Algebra

**COURSE DESCRIPTION:** The College Algebra Support Course (MATH 0314) is the study of the basic algebraic concepts necessary for success in MATH 1314, to include order of operations, graphing, polynomials, factoring, exponent rules, radical and rational expressions, and the solution of equations and inequalities. This course is not applicable toward any degree. Prerequisites: Math level 6, Reading level 7. Co-requisite: MATH 1314 (3:3:1)

In College Algebra (MATH 1314), the study and application of common algebraic functions, including polynomial, exponential, logarithmic, and rational problems are addressed. Matrices and systems of equations & inequalities are also addressed.

#### **COURSE MATERIALS:**

- **TEXTBOOK:** College Algebra 2e with Corequisite Support via OpenStax (FREE!) [College Algebra 2e with Corequisite Support - OpenStax](#)
- **REQUIRED:** Scientific Calculator, TI-30IIS is a solid, cheap calculator
- **REQUIRED:** Large 3-ring binder, notebook paper, graph paper, pencils, and erasers.
- **SUGGESTED SUPPLIES:** Colored pencils or highlighters and a ruler

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#### **STUDENT LEARNING OUTCOMES:**

##### **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.

##### **MATH 1314**

Upon completion of this course and receiving a passing grade, the student will be able to:

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 OUTCOMES:**

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 & QUANTITATIVE SKILLS** – Students will develop quantitative and empirical skills to understand, analyze and explain natural, physical and social realms.

**GRADE RANGE:**

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
Below 60	F

**GRADING FORMULA:**

Enrollment in this course does not guarantee advancement to the next course level. The final responsibility for learning lies with the student.

The final letter grade for this course will be based on the following:

8 Tests .....	60%
Homework .....	10%
Class Assignments.....	10%
<u>Final Exam.....</u>	<u>20%</u>

If you make a grade of A, B, C or D, then that is the grade you will be awarded for both halves of the course. However, if you COMPLETE THE COURSE and earn an F, then your grade for the Math 0314 course will be assessed at your professor’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.

**HOMEWORK/TEST MAKE-UP POLICY:**

**Homework and other assessments are mandatory.** Knowledge of material will be assessed through graded assessments. Homework will be assigned on a weekly basis. If a class is missed, it is the student’s responsibility to obtain a copy of the notes, to pick up any worksheets or handouts, and to do the assigned homework. (Absence is not an excuse for failure to do homework.) Homework done after the due date will be accepted, but at a significant penalty. Completing all assignments is understood and expected, not optional.

You will have an assignment due each day and will be completed in class. Make-up work will not be allowed for a missed class assignment.

There are **no retakes** on tests or the final exam. Exactly one test grade may be replaced with a higher final exam grade.

NOTE: Since homework is a part of your grade, you should be prepared to spend *at least* two hours outside of class for each hour you spend in class working on math. Doing homework at the tutoring center or with a group of peers is encouraged. Simply copying answers is still cheating, though, so be prepared to justify each answer.

**CLASSROOM ETIQUETTE:** Class attendance is expected, not optional. Preparation for class (including homework) is to be completed before – not during – the lecture. Chronic tardiness (entrance after lecture has begun) will be handled on an individual basis at the instructor’s discretion but can include notation as absent and/or exclusion from admittance to class.

Class is over when the students have been dismissed by the instructor. Preparation to leave class should be done after, not during, the lecture.

NO tobacco use of any form is allowed in the classroom.

Discussion of course material among students is encouraged during class, but habitually disruptive students will be asked to leave.

**STUDENT SUPPORT:** South Plains College provides free tutoring on a variety of subjects. Tutoring is FREE and is here to benefit you. There is a Student Tutoring Center on each campus.

**WITHDRAWAL POLICY:** The last day to withdraw/drop with a grade of “W” is **April 27<sup>th</sup>**. It is the student’s responsibility to withdraw from this course. Otherwise, students will be assigned their earned letter grade at the end of the course. Course averages will be updated twice each week, and guidance will be provided throughout the term to help students decide whether they need to drop the class or not. For more information regarding drops/withdrawals, please visit <https://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php>.

**COVID-19:** For information and resources about COVID-19, please visit <https://www.southplainscollege.edu/emergency/covid19-faq.php>.

For information regarding official South Plains College statements about diversity, disabilities, non-discrimination, Title V Pregnancy Accommodations, and Campus Concealed Carry, please visit: <https://www.southplainscollege.edu/syllabusstatements/>.