

**South Plains College**  
**Common Course Syllabus: MATH0314/MATH1314 corequisite**  
**Revised July 2023**

**Department:** Mathematics, Engineering, and Computer Science

**Discipline:** Mathematics

**Course Number:** MATH 0314 and MATH 1314

**Course Title:** College Algebra and Support Course

**Available Formats:** conventional, hybrid, and internet

**Campuses:** Levelland, Downtown Center, and Plainview Center

**Course Description for Math 0314:** Math 0314 is to be taken concurrently with MATH 1314. 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.

**Course Description for Math 1314:** In-depth study and applications of polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

**Prerequisite:** Minimum score of 340 on the TSIA1, minimum diagnostic score of 3 on the TSIA2, a successful completion with a grade of 'C' or better in MATH 0315, or a successful completion of NCBM-0105.

**Credit:** 3 **Lecture:** 3 **Lab:** 1

**Textbook (optional):** *College Algebra with Intermediate Algebra: A Blended Course*, Beecher, Penna, Johnson, and Bittinger, 2018, 1<sup>st</sup> Edition, Prentice Hall/Pearson Education

**Supplies:** Please see the instructor's course information sheet for specific supplies.

**This course partially satisfies a Core Curriculum Requirement:** Mathematics Foundational Component Area (020)

**Core Curriculum Objectives addressed:**

- **Communications skills**—to include effective written, oral, and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation, and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

**Student Learning Outcomes:** 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.

**Student Learning Outcomes Assessment:** A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

**Course Evaluation:** There will be departmental final exam questions given by all instructors.

**Attendance/Student Engagement Policy:** Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor may remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student cannot receive an X, the instructor will assign an F.

**Academic Integrity (Plagiarism and Cheating Policy):** "Complete honesty is required of the student in the presentation of any and all phases of course work. This idea applies to quizzes of whatever length as well to final examinations, to daily reports, and to term papers" (*SPC General Catalog*).

**Plagiarism violations include**, but are not limited to, the following:

1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

**Cheating violations include**, but are not limited to, the following:

1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another's work during an examination or on a homework assignment;

8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

**Student Code of Conduct Policy:** Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

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

South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: <https://www.southplainscollege.edu/emergency/covid19-faq.php>.

**SPC Bookstore Price Match Guarantee Policy:** If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by Amazon*, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

*Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.*

South Plains College  
Math 0314 and Math 1314  
College Algebra with Support Corequisite  
Course Syllabus  
Spring 2025

**Instructor:** Diane Eagle  
**Office:** B015, Lubbock Downtown Center (basement)  
**Phone:** 806-716-2736  
**E-mail:** [deagle@southplainscollege.edu](mailto:deagle@southplainscollege.edu)

**Office Hours:**

Monday	Tuesday	Wednesday	Thursday	Friday
2:30 – 3:30	1:00 – 3:00	2:30 – 3:30	1:00 – 3:00	10:00 – 12:00

**Course format:** This is a fully face-to-face course. Students will attend 4 class meetings per week, Monday through Thursday. Arrive on time and come prepared to take notes every day. Lectures will be conducted face-to-face, with time available during class to work problems and ask questions. All exams will be taken in the classroom.

**Optional textbook:** *College Algebra with Intermediate Algebra: A Blended Course*, Beecher, Penna, Johnson, and Bittinger, 2018, 1<sup>st</sup> Edition, Prentice Hall/Pearson Education. The textbook is also available on reserve via SPC library services, located on the first floor.

**Supplies:** Pencils, paper, straightedge, graph paper, and a large 3-ring binder. **Only a basic non-graphing calculator (such as a TI-30) will be allowed in class.** Graphing calculators and calculators on cell phones or other electronic devices or apps will **NOT** be allowed during tests or in-class assignments. Calculators may not be allowed on certain assignments and/or portions of exams. Suitable face coverings are optional, but not required. (Refer to the link posted above regarding SPC's COVID-19 protocols.)

**Technology requirements:** Students need to have reliable access to the Internet and email. Ability to view lecture videos and open and/or print documents is required.

**Email:** Your SPC email account will be used for all correspondence and notifications. When emailing me, be sure to include your name, class, and section number. Do NOT use the “course messages” option in Blackboard as I rarely check it. Provide problem/page numbers or a screenshot if applicable.

**Course Evaluation:** Your final grade for Math 1314 will be determined by the average of six tests (600 points or 80%) and the comprehensive final exam (150 points or 20%). A total of 750 points is possible. The support course, Math 0314, is graded on a pass/fail basis (P or F) at the instructor's discretion, whereas a traditional letter grade (A, B, C, D, or F) will be issued for Math1314. A grade of D or F in Math 1314 automatically earns a grade of F in the support course, Math 0314. The number of points earned will follow the grading scale below:

<b>Grading Scale:</b>	A	90 to 100	672 to 750 points
	B	80 to 89	597 to 671 points
	C	70 to 79	522 to 596 points
	D	60 to 69	447 to 521 points
	F	Below 60	0 to 446 points

**Exams:** Dates for the 6 major tests and comprehensive final exam are listed on the calendar. Exams will be conducted face-to-face, provided this course does not move fully online. **Make up exams are NOT an option.** If you miss one of the 6 major tests, your score on the final exam will replace the missing grade. A second missed test will be averaged as a zero. If no tests were missed, the final exam grade (if higher) will replace the lowest major exam grade; however, if the final exam is lower than any of the 6 major exam grades, then it will only count once in the course average.

**Homework:** Problems are assigned from each section covered, and time will be available during class to ask questions. Consistently working problems reinforces the skills and concepts presented and is essential for success in this course. Demonstrate relevant steps and complete work for each problem; do not submit "answer sheets" or solutions copied from apps. Completed homework assignments will be self-assessed by the student during class. All class notes, homework assignments, and exams are to be organized in the student's 3-ring binder. This binder will be evaluated at the end of the semester for extra credit.

**Bonus Points:** Students will have the opportunity to make corrections on **two** tests (final exam not included) of their choosing, to recoup up to 50% of the points missed. Corrections are due the following class period after the test is graded. Test corrections must have complete and correct solutions and be turned in on a separate sheet of paper with the exam.

**Additional Resources:** Blackboard is the online management system used for this course. In addition to the grade book, all course materials, including the syllabus, calendar, videos, handouts, test reviews, and additional resources can be accessed through Blackboard. Handouts accompanying the class lectures will be provided on Blackboard. These may be printed and used to facilitate easier and more complete note taking during class. **Be sure to check Blackboard and your SPC email account regularly for class announcements and updates.**

**Tutoring:** Tutoring services are available to students at no charge. Links to access online tutoring and instructions for booking face-to-face appointments with SPC tutors will be posted on Blackboard.

**Attendance Policy:** Refer to page 2 above. Students who arrive to class late, leave early, sleep during class, or habitually access their cell phones during class, may be counted absent. Whenever absences become excessive and, in the instructor's opinion, minimum course objectives cannot be met due to absences, the student may be withdrawn from the course. Students wishing to drop this class must see the registrar by Thursday, April 24, 2025, to officially withdraw and receive a grade of W.

**Classroom Civility:** Students are expected to be respectful of their fellow classmates and maintain a classroom environment that is conducive to learning. Please model safe behaviors to protect the health of yourself and others. Silence cell phones and other electronic devices **before** entering the classroom. While usage of cell phones for class-related activities, such as viewing lessons or scanning and uploading completed assignments IS permissible, **usage unrelated to class will NOT be tolerated.** You will receive ONE verbal warning, after which you will be asked to leave and receive a zero for that day's assignment. Refrain from using offensive language, talking loudly or off-topic, working on outside assignments, 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. Refer to pages 2 and 3 for explanations of what constitutes academic dishonesty and plagiarism. **Use of a graphing calculator, cell phone, or other electronic devices or apps during an in-class assignment or exam will result in a grade of zero.** Leaving the classroom during an exam **will not** be permitted. Students who do not follow the academic honesty policy will receive a grade of zero for the assignment or exam and may be dropped from the course with an F, or face possible suspension from the college.

**Calendar:** The following schedule outlines each week's topics and test dates. Course materials and assignments will be posted online for each week's lessons. This schedule is tentative and subject to revision. Any changes will be announced in class as well as updated via Blackboard.

**Math 0314 and Math 1314 -- College Algebra Corequisite Course**  
**Spring 2025 (tentative schedule)**

Week	Date	Topic	Section(s)	Assignment
1	Jan. 13	Syllabus; Intro to Fractions, Decimals, Percents	PPT	Supplemental handout
	Jan. 14	Operations with Rational Numbers	PPT	Supplemental handout
	Jan. 15	Operations with Real Numbers	R2	p. R-17 3–129
	Jan. 16	Exponential Notation and Order of Operations	R3	p. R-24 3–108
2	Jan. 20	<b>Martin Luther King Day -- No school</b>		
	Jan. 21	Working with Algebraic Expressions	R4, R5, R6	p. R-30 3–39, p. R-38 30–63, p. R-43 3–66
	Jan. 22	Properties of Exponents and Scientific Notation	R7	p. R-53 3–78
	Jan. 23	Solving Linear Equations	1.1	p. 12 3–84
3	Jan. 27	Formulas and Applications	1.2, 1.3	p. 18 3–30, p. 28 3–30
	Jan. 28	Inequalities and Compound Inequalities	1.4, 1.5.	p. 44 3–84, p. 55 3–66
	Jan. 29	Absolute Value Equations and Inequalities	1.6	p. 64 3–105
	Jan. 30	Adding, Subtracting, and Evaluating Polynomials	4.1	p. 226 36–78
4	Feb. 3	<b>Exam 1 -- chapters R, 1 (no calculator)</b>		
	Feb. 4	Multiplication of Polynomials	4.2	p. 235 3–84
	Feb. 5	Binomial Theorem	12.7	p. 820 1–12 all
	Feb. 6	GCF Factoring and Factoring by Grouping	4.3	p. 240 3–54
5	Feb. 10	Factoring Trinomials	4.4, 4.5	p. 245 3–42, p. 253 3–51
	Feb. 11	Factoring Special Forms; Summary	4.6, 4.7	p. 262 3–102, p. 267 3–54
	Feb. 12	Solving Polynomial Equations and Applications	4.8	p. 276 3–42, 63–78
	Feb. 13	Solving Rational Equations	5.5	p. 331 3–39
6	Feb. 17	<b>Exam 2 -- chapter 4, 12.7</b>		
	Feb. 18	Work, Motion, and Proportion Problems	5.6	p. 342 3–33
	Feb. 19	Graphs of Equations	2.1	p. 82 3–51
	Feb. 20	Function Notation; Domain and Range	2.2, 2.3	p. 92 3–60, p. 99 3–33
7	Feb. 24	Combinations of Functions; Difference Quotient	2.4, 5.4	p. 104 3–60, p. 323 33–51
	Feb. 25	Graphing Linear Functions; Slope	2.5, 2.6	p. 117 3–36, p. 127 3–54
	Feb. 26	Writing Equations of Lines	2.7	p. 135 3–54
	Feb. 27	Increasing, Decreasing, Piecewise Functions	6.8	p. 423 3-15, 29-32 all, 33–39
8	Mar. 3	<b>Exam 3 -- chapters 2, 5</b>		
	Mar. 4	Symmetry and Transformations of Functions	7.1, 7.2	p. 443 3–48, p. 455 3–66
	Mar. 5	Radical Expressions and Rational Exponents	6.1, 6.2	p. 374 3–78, p. 381 3–72
	Mar. 6	Simplifying Radical Expressions	6.3	p. 388 3–96
9	Mar. 10	Operations with Radical Expressions	6.4, 6.5	TBA
	Mar. 11	Solving Radical Equations	6.6	p. 406 3–57
	Mar. 12	Applications	6.7	p. 412 3–30
	Mar. 13	Complex Numbers	7.3	p. 462 3–78
		<b>March 17 to March 21 -- Spring Break</b>		
10	Mar. 24	<b>Exam 4 -- chapter 6, 7.1, 7.2</b>		
	Mar. 25	Solving Quadratic Equations (all methods)	7.4	p. 477 3–108
	Mar. 26	Graphing Quadratic Equations	7.5	p. 490 3–48
	Mar. 27	Graphing Polynomial Functions	8.1, 8.2	p. 515 3–54, p. 527 3–45

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<b>11</b>	Mar. 31	Graphing Quadratic Functions	7.5	p. 490 3–48
	Apr. 1	Polynomial Functions and Graphs	8.1, 8.2	p. 515 3–54, p. 527 3–45
	Apr. 2	Polynomial Division and Zeros of Polynomials	8.3, 8.4	p. 534 3–45, p. 545 51–69
	Apr. 3	Rational Functions	8.5	p. 561 3–78
<b>12</b>	Apr. 7	Composite and Inverse Functions	9.1, 9.2	p. 597 3–48, p. 607 3–60
	Apr. 8	<b>Exam 5 -- 7.3, 7.4, 7.5, chapter 8</b>		
	Apr. 9	Exponential Functions and Graphs	9.3	p. 618 3–24, 51–75
	Apr. 10	Logarithmic Functions and Graphs	9.4	p. 633 3–78
<b>13</b>	Apr. 14	Properties of Logarithms	9.5	p. 643 3–75
	Apr. 15	Solving Exponential and Logarithmic Equations	9.6	p. 653 3–60
	Apr. 16	Solving Systems of Equations in 2 Variables (all methods)	3.1, 3.2, 3.3	p. 158 3–18, p. 163 3–24, p. 171 3–36
	Apr. 17	Solving Applied Problems	3.4	p. 181 3–30
<b>14</b>	Apr. 21	Systems of Linear Equations in 3 Variables	3.5	p. 189 3–27
	Apr. 22	<b>Exam 6 -- chapter 9, 3.1, 3.2, 3.3, 3.4</b>		
	Apr. 23	Systems of Linear Inequalities	3.7	p. 204 3–30, 45–60
	Apr. 24	Non-linear Systems of Equations and Inequalities	11.4	p. 758 3–45, omit #21, 69–84
<b>15</b>	Apr. 28	Matrices and GJE	10.1	p. 688 3–42
	Apr. 29	Matrix Operations	10.2	p. 696 3–30
	Apr. 30	Determinants and Cramer's Rule	10.4	p. 713 3–42
	May 1	<b>Review for Final Exam</b>		
<b>16</b>	May 5			
	May 6			
	May 7	<b>Final Exam -- 8:00 am to 10:00 am</b>		
	May 8			

**All assignments are every third problem (ex. 3, 6, 9, 12, ...) unless otherwise noted.**