

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, 1st 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, Campus Concealed Carry, and Artificial Intelligence, 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>.

Student Identification Verification Pictures: In order to comply with institutional identity-verification procedures, students enrolled in courses at South Plains College must have a current photo available in the College's student information system. Approved photos are used solely for instructional, advising, and security purposes and are protected under applicable privacy laws. Students without a photo on file must update their record during the first week of class.

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 2026

Instructor: Diane Eagle

Office: B015, Lubbock Downtown Center (basement)

Phone: 806-716-2736

E-mail: deagle@southplainscollege.edu

Office Hours:

| Monday | Tuesday | Wednesday | Thursday | Friday |
|------------------------------|-------------|------------------------------|-------------|---------------|
| 11:00 – 12:30 2:45 – 3:15 | 2:45 – 3:45 | 11:00 – 12:30 2:45 – 3:15 | 2:45 – 3:45 | 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, 1st 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 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" link in Blackboard as I rarely check it. Provide problem/page numbers or a screen shot if applicable.

Course Evaluation: Your final grade for Math 1314 will be determined by the average of six tests (75%) and the comprehensive final exam (25%). 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. Note: A grade of D or F in Math 1314 automatically earns a grade of F in the support course, Math 0314.

Grading Scale: The number of points earned will follow the grading scale below:

| | |
|---|-------------|
| A | 90% to 100% |
| B | 80% to 89% |
| C | 70% to 79% |
| D | 60% to 69% |
| F | Below 60% |

Exams: Dates for the 6 major tests and comprehensive final exam are listed on the calendar. Exams will be conducted face-to-face in class. 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 Assignments: 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 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 and handed back. Test corrections must have complete and correct solutions and/or explanations 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, assignments, handouts, test reviews, and additional resources can be accessed through Blackboard. Blank handouts accompanying each lecture are available to download and complete during class. **Be sure to check Blackboard and your SPC email account regularly for class announcements and updates.**

SPC Tutors: Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn how to book an appointment, view the tutoring schedule, and view tutoring locations.

<http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php>

Brainfuse: Students also have 180 minutes of free online tutoring with Brainfuse each week. Hours reset every Monday morning. Sign into Blackboard and then click the Brainfuse link to be automatically logged in for free tutoring. You may access Brainfuse tutors during the following times: Monday – Thursday: 8 pm – 8 am and weekends from 6pm Friday – 8am Monday morning. For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-2241.

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 30, 2026, 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. In the case of exams or submitted assignments, the instructor reserves the right to ask a student to explain and/or demonstrate their work in person. **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. This schedule is tentative and subject to revision. Any changes will be announced in class as well as updated via Blackboard announcements.

Math 0314 and Math 1314 -- College Algebra Corequisite Course
Spring 2026 (tentative schedule)

| Week | Date | Topic | Section(s) |
|------|---------|--|------------|
| 1 | Jan. 12 | Syllabus; Intro to Fractions, Decimals, Percents | PPT |
| | Jan. 13 | Operations with Rational Numbers | PPT |
| | Jan. 14 | Operations with Real Numbers | R2 |
| | Jan. 15 | Exponential Notation and Order of Operations | R3 |
| 2 | Jan. 19 | Martin Luther King Day -- No school | |
| | Jan. 20 | Working with Algebraic Expressions | R4, R5, R6 |
| | Jan. 21 | Properties of Exponents and Scientific Notation | R7 |
| | Jan. 22 | Solving Linear Equations | 1.1 |
| 3 | Jan. 26 | Formulas and Applications | 1.2, 1.3 |
| | Jan. 27 | Inequalities and Compound Inequalities | 1.4, 1.5. |
| | Jan. 28 | Absolute Value Equations and Inequalities | 1.6 |
| | Jan. 29 | Adding, Subtracting, and Evaluating Polynomials | 4.1 |
| 4 | Feb. 2 | Exam 1 -- chapters R, 1 (no calculator) | |
| | Feb. 3 | Multiplication of Polynomials | 4.2 |
| | Feb. 4 | Binomial Theorem | 12.7 |
| | Feb. 5 | GCF Factoring and Factoring by Grouping | 4.3 |
| 5 | Feb. 9 | Factoring Trinomials | 4.4, 4.5 |
| | Feb. 10 | Factoring Special Forms; Summary | 4.6, 4.7 |
| | Feb. 11 | Solving Polynomial Equations and Applications | 4.8 |
| | Feb. 12 | Solving Rational Equations | 5.5 |
| 6 | Feb. 16 | Exam 2 -- chapter 4, 12.7 | |
| | Feb. 17 | Work, Motion, and Proportion Problems | 5.6 |
| | Feb. 18 | Graphs of Equations | 2.1 |
| | Feb. 19 | Function Notation; Domain and Range | 2.2, 2.3 |
| 7 | Feb. 23 | Combinations of Functions; Difference Quotient | 2.4, 5.4 |
| | Feb. 24 | Graphing Linear Functions; Slope | 2.5, 2.6 |
| | Feb. 25 | Writing Equations of Lines | 2.7 |
| | Feb. 26 | Increasing, Decreasing, Piecewise Functions | 6.8 |

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| 8 | Mar. 2 | Exam 3 -- chapters 2, 5 | |
| | Mar. 3 | Symmetry and Transformations of Functions | 7.1, 7.2 |
| | Mar. 4 | Radical Expressions and Rational Exponents | 6.1, 6.2 |
| | Mar. 5 | Simplifying Radical Expressions | 6.3 |
| 9 | Mar. 9 | Operations with Radical Expressions | 6.4, 6.5 |
| | Mar. 10 | Solving Radical Equations | 6.6 |
| | Mar. 11 | Applications | 6.7 |
| | Mar. 12 | Complex Numbers | 7.3 |
| | | March 16 to March 20 -- Spring Break | |
| 10 | Mar. 23 | Exam 4 -- chapter 6, 7.1, 7.2 | |
| | Mar. 24 | Solving Quadratic Equations (all methods) | 7.4 |
| | Mar. 25 | Graphing Quadratic Equations | 7.5 |
| | Mar. 26 | Graphing Polynomial Functions | 8.1 |
| 11 | Mar. 30 | Polynomial Functions and Graphs | 8.2 |
| | Mar. 31 | Polynomial Division | 8.3 |
| | Apr. 1 | Zeros of Polynomials | 8.4 |
| | Apr. 2 | Rational Functions | 8.5 |
| 12 | Apr. 6 | Composite and Inverse Functions | 9.1, 9.2 |
| | Apr. 7 | Exam 5 -- 7.3, 7.4, 7.5, chapter 8 | |
| | Apr. 8 | Exponential Functions and Graphs | 9.3 |
| | Apr. 9 | Logarithmic Functions and Graphs | 9.4 |
| 13 | Apr. 13 | Properties of Logarithms | 9.5 |
| | Apr. 14 | Solving Exponential and Logarithmic Equations | 9.6 |
| | Apr. 15 | Solving Systems of Equations in 2 Variables (all methods) | 3.1, 3.2, 3.3 |
| | Apr. 16 | Solving Applied Problems | 3.4 |
| 14 | Apr. 20 | Systems of Linear Equations in 3 Variables | 3.5 |
| | Apr. 21 | Exam 6 -- chapter 9, 3.1, 3.2, 3.3, 3.4 | |
| | Apr. 22 | Systems of Linear Inequalities | 3.7 |
| | Apr. 23 | Non-linear Systems of Equations and Inequalities | 11.4 |

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|-----------|---------|--|------|
| 15 | Apr. 27 | Matrices and GJE | 10.1 |
| | Apr. 28 | Matrix Operations | 10.2 |
| | Apr. 29 | Determinants and Cramer's Rule | 10.4 |
| | Apr. 30 | Review for Final Exam | |
| 16 | May 4 | | |
| | May 5 | | |
| | May 6 | Final Exam -- 8:00 am to 10:00 am | |
| | May 7 | | |