

South Plains College
Common Course Syllabus: MATH 0314 & 1314
Revised July 2023

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0314 & 1314

Course Title: College Algebra Support Course

Available Formats: conventional, hybrid, and internet

Campuses: Levelland, Downtown Center, and Plainview Center

Course Description: 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: 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: *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 can not receive an X, the instructor will assign an F.

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.

COURSE SPECIFIC INFORMATION FOR MATH 0314_1314_C601

Class meeting time: 9:00 AM – 10:45 AM Monday – Thursday **Place:** Room B030

Instructor: Phyllis Cormier **Email:** pcormier@southplainscollege.edu

Office: Lubbock Downtown Center Rm B016 **Phone:** (806)716-2797

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
10:50 AM – 12:00 PM		10:50 AM – 12:00 PM		9:20 – 11:00 AM
	12:45 – 1:45 PM		12:45 – 1:45 PM	
4:00 – 5:30 PM		5:00 – 5:30 PM		

Office hours are times I have set aside to work with students on any questions they have about the class. Please use this time to improve your understanding of the material. Appointments may also be made to meet face-to-face or virtually. You may make an appointment through email, in person, or by calling. I will respond to emails within 24 hours. If I am in my office, feel free to stop by without an appointment.

Email: All students at South Plains College are assigned an SPC email account. Although personal email addresses will continue to be collected, the assigned SPC email account will be used as the official channel of communication for South Plains College. To access the SPC student email account,

- Navigate to <https://office.com> and select **Sign In**
- Username: MySPCusername@southplainscollege.edu
- Password: **Your MySPC/Blackboard password**
- Select **Outlook** to check your new SPC email.

Students should make it a habit to check their student email account frequently. (Copied from SPC Student Guide.)

Class Structure: This is a conventional course. The class will meet in person four days a week. If you must miss class for any reason, the notes and videos are provided for you on Blackboard.

Class Attendance: Attendance and effort are the keys to success in this class. 12 absences are allowed for the semester. If you exceed this number, you may be dropped from the course.

Assignments & Grading:

Notes: Class notes will be provided on Blackboard. It is recommended that you print out the notes and fill them in during class. If you miss class for any reason or need to review a section, videos are provided on Blackboard to help you.

Homework: Assignments are made 4 days a week. Practice problems are on Blackboard and will be due at 10:00 PM on the day following the day the topic is discussed in class. **Work must be shown to receive credit.** The answers are provided so your job is to show that you understand why that is the answer. Practice problems will count 10% of your grade. I will grade practice problems 70% for completion and 30% for correct work. I will grade 3 – 7 problems from each lesson to assess your understanding. Late work will be accepted for a reduced score.

Submitting work: You will need the Gradescope app on your phone or tablet to make a single pdf of your work to submit on Gradescope.

Quizzes: Short in class quizzes will be given often. These will closely resemble the assigned practice problems. Answers are not provided for the quizzes. Questions may be asked about the practice problems before the quiz is distributed, but the quizzes are to be completed without assistance. Quizzes will be completed in class without apps or websites, but scientific calculators, practice problems, and notes may be used. Notes and practice problems on electronic devices may not be accessed during quizzes. **Quizzes cannot be made up. Work must be shown to receive credit.**

Exams: There will be 6 exams and a comprehensive final exam. You may use a scientific or simple graphing calculator on the exams but calculators on cell phones or other electronic devices will not be permitted. Cell phones should be out of sight and not touched during exams. The use of any websites or apps during exams is considered cheating. You may not leave the room during an exam. You may bring one sheet of notebook paper with formulas and/or examples written on one side only to use during the exam.

Make-up exams will be available only on rare and well-documented occasions. If you miss an exam for any reason, the final exam will take the place of the missed exam. If you miss two exams, you may be dropped from the course. If you know you will need to miss an exam, let me know before the exam so an alternate testing time can be arranged **before** the exam is taken in class. Comprehensive final exams are required. Students who do not take the final exam will receive a zero for the final exam grade.

You are responsible for completing homework and exams on time. Print out the course calendar and keep it with your other course material to help you keep up with deadlines.

Course Evaluation:

Practice Problems	10%
Quizzes	10%
Exam 1	10%
Exam 2	10%
Exam 3	10%
Exam 4	10%
Exam 5	10%
Exam 6	10%
Final Exam	20%
Total	100%

<u>Grade Average</u>	<u>Final Grade</u>
89.5 and above	A
79.5 – 89.4	B
69.5 – 79.4	C
59.5 – 69.4	D
59.4 and below	F

To maximize potential for successful completion of this course:

- Attend class prepared to work.
- Print notes provided on Blackboard and fill in examples during class.
- Complete all practice problems to the best of your ability.
- Ask questions on any problems that you had difficulties with.
- Rework the practice problems until you have mastered them.
- Organize all class material in a 3-ring binder.

Supplies:

- The textbook is optional. Practice problems and notes will be provided on Blackboard.
- scientific calculator or simple graphing calculator (TI-89, TI-Nspire, and calculators on cell phones are not allowed)
- pencils, notebook paper, 3-ring binder
- Computer or cell phone that you can use to check Blackboard and emails.
- Scanning app used to make pdfs of your work to submit on Gradescope. I recommend the Gradescope app.

Check Blackboard and your SPC email often for any updates. Additional study aids may also be added.

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 more about how to book an appointment, view the tutoring schedule, get to know the tutors, and view tutoring locations.

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

Tutor.com

You also have 180 FREE minutes of tutoring with Tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tools option from the left-hand menu bar. Click on the Tutor.com link and you will automatically be logged in for free tutoring. You may access tutor.com tutors during the following times

Monday – Thursday: 8pm-8am

6pm Friday – 8am Monday morning

For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-2538.

Supplementary Course Information & Tutoring: Blackboard is the online course management system that will be utilized for this course. This course syllabus, as well as any class handouts and assignments can be accessed through Blackboard. Login at <http://southplainscollege.blackboard.com>. The username and password should be the same as the Texan Connect and SPC email. Check Blackboard and your SPC email often for any updates in assignments or exams. Additional study aids may also be added.

College Algebra Corequisite Tentative Course Outline

MATH 0314/1314

Fall 2023

Week	Date	Lesson / Tentative Assignment
1	Aug 28 th	1.1 Operations with Signed Numbers and Exponents
	Aug 29 th	1.2 Operations with fractions
	Aug 30 th	1.3 Order of operations
	Aug 31 st	1.4 Exponent Rules & Polynomials
2	Sept 4 th	<i>Labor Day Holiday</i>
	Sept 5 th	1.5 Solving Linear and Absolute Value Equations
	Sept 6 th	1.6 Solving Linear and Absolute Value Inequalities
	Sept 7 th	1.7 Application of Linear Equations
3	Sept 11 th	Review Exam 1
	Sept 12 th	Review Exam 1
	Sept 13 th	<i>Exam 1</i>
	Sept 14 th	2. 1 Factor: GCF, Grouping and Trinomials with a = 1
4	Sept 18 th	2.2 Factor: Trinomials with a not 1 and Special products
	Sept 19 th	2.3 Operations with Fractions and Rational Expressions
	Sept 20 th	2.4 Finding the LCD and Solving Rational Equations
	Sept 21 st	2.5 Solve Quadratic Equations by Factoring
5	Sept 25 th	Review Exam 2
	Sept 26 th	<i>Exam 2</i>
	Sept 27 th	3.1 Properties of Roots and Complex Numbers
	Sept 28 th	3.2 Radical Expressions: Simplification and Rationalization
6	Oct 2 nd	3.3 Rational Exponents and Solving Radical Equations (Part of Assignment 4)
	Oct 3 rd	3.4 Solve Quadratic equations by the square root property and completing the square
	Oct 4 th	3.5 Solve Quadratic equations by the Quadratic formula and Quadratic type equations
	Oct 5 th	Review Exam 3
7	Oct 9 th	<i>Exam 3</i>
	Oct 10 th	4.1 Functions and Their Graphs
	Oct 11 th	4.2 Increasing & Decreasing, Maxima & Minima, & Symmetry
	Oct 12 th	4.3 Linear Functions - Slopes & Graphs
8	Oct 16 th	4.4 Linear Functions - Equations
	Oct 17 th	4.5 Distance, Midpoint, & Circles;
	Oct 18 th	4.6 Composite Functions & Inverse Functions
	Oct 19 th	4.7 Quadratic Functions
Friday	Oct 20 th	<i>Fall Break</i>
9	Oct 23 rd	Review Exam 4
	Oct 24 th	<i>Exam 4</i>
	Oct 25 th	5.1 Synthetic Division and Roots of Polynomials
	Oct 26 th	5.2 Polynomial Functions & Their Graphs
10	Oct 30 th	5.3 Rational Functions & Their Graphs
	Oct 31 st	5.3 Continued

	Nov 1 st	5.4 Transformations of Functions & Intro to Polynomial & Rational Inequalities
	Nov 2 nd	5.5 Polynomial & Rational Inequalities
11	Nov 6 th	6.1 Exponential and Logarithmic Functions
	Nov 7 th	6.2 Properties of logs
	Nov 8 th	6.3 Solving Exponential Equations
	Nov 9 th	6.4 Solving Logarithmic Equations
Friday	Nov 10 th	<i>Online registration for Winter Interim 2023 and Spring 2024 opens at 8:00 AM</i>
12	Nov 13 th	6.5 Review of Unit 5 and 6
	Nov 14 th	Review for Exam 5 (Units 5 & 6)
	Nov 15 th	<i>Exam 5 (Unit 5 & 6)</i>
	Nov 16 th	7.1 2 x 2 systems
13	Nov 20 th	7.2 3 x 3 systems
	Nov 21 st	7.3 Elementary Row operations and Augmented matrices
	Nov 22 nd – 24 th	<i>Thanksgiving break</i>
14	Nov 27 th	7.4 Matrix Solutions to Systems
	Nov 28 th	7.5 Cramer's Rule
	Nov 29 th	7.6 Nonlinear Systems and Systems of Inequalities
	Nov 30 th	Review for Exam 6 <i>Last day to drop Fall Semester Courses</i>
15	Dec 4 th	<i>Exam 6 (Unit 7)</i>
	Dec 5 th	Review for Final
	Dec 6 th	Review for Final
	Dec 7 th	Review for Final
16	Dec 13 th	<i>Final Exam 8:00 AM – 10:00 AM</i>