South Plains College
Common Course Syllabus: MATH 0314 / Math 1314
Spring 2021

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0314
Course Title: College Algebra Support Course

Course Number: MATH 1314
Course Title: College Algebra

Available Formats: conventional/flex and internet

Campuses: Levelland, Reese, Plainview, Lubbock Center

0314 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.
1314 Course Description: 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 TSIA, or a successful completion with a grade of 'C' or better in MATH 0315.

0314 Credit: 3 **Lecture:** 3 **Lab:** 1
1314 Credit: 3 **Lecture:** 3 **Lab:** 1

This course partially satisfies a Core Curriculum Requirement: 0314 - None
1314 - 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

0314 Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

1. Define, represent, and perform operations on real numbers.
2. Use order of operations and exponent rules to simplify an expression.
3. Add, subtract, multiply, and divide polynomials.
4. Recognize, understand, and analyze features of a linear equation and a function.
5. Recognize and use algebraic properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, rational, and radical expressions.
6. Identify and solve linear and absolute value equations.
7. Identify and solve linear inequalities.

1314 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 effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed to miss twenty percent (20%) of class assignments for the semester, *for any reason*. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion.

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.

COVID Statement: It is the policy of South Plains College for the Spring 2021 semester that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the SPC community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings while in SPC buildings including in classrooms, labs, hallways, and restrooms. Failure to comply with this policy may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Dean of Students on the Levelland campus or the Dean/Director of external centers for Student Code of Conduct Violation. Students who believe they have been exposed or may be COVID-19 positive, must contact Health Services, DeEtte Edens, BSN, RN at (806) 716-2376 or dedens@southplainscollege.edu.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning**.** 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.

Diversity Statement: In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

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 Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

Nondiscrimination Policy: SPC does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

Title IX Pregnancy Accommodations Statement: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

Campus Concealed Carry: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in SPC 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 SPC policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at: http://www.southplainscollege.edu/campuscarry.php
Pursuant to PC 46.035, the open carrying of handguns is prohibited on all SPC campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

SPC Bookstore Price Match Guarantee Policy: If you find a lower price on a textbook, the SPC 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 SPC 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 SPC 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.

Spring 2021
Corequisite College Algebra: Math 0314.C201 & Math 1314.C201

Classroom	RC 220	**Time**	MW 9:00 – 10:45
Instructor	Traci Sanders	**Phone**	716-4616
E-mail	tsanders@southplainscollege.edu	**Office**	RC 223-C

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
12:45 – 2:00	9:00 – 11:15	12:45 – 2:00	9:00 – 11:15	8:30 – 9:30 (Virtual)

I will have virtual office hours using zoom on Fridays from 8:30 – 9:30 am. Here is the link to join me: https://southplainscollege.zoom.us/j/98520051275.

If you would like to schedule a zoom meeting for a different time, just send me an email.

Communication: You may email me at tsanders@southplainscollege.edu or email me through Blackboard. When you log into the course on Blackboard, there is a link to Blackboard email in the main menu on the left side. I will do my best to respond to your email within 24 hours. When I post an announcement in Blackboard, the announcement will also be sent to your SPC email address. Please check your SPC email and your Blackboard email daily!

Tutoring: Free tutoring will be available. The links to SPC Tutoring and Tutor.com are located in the main menu when you log into this course on Blackboard.

Class Time: We will meet in RC 220 (upstairs in Building 2) on Mondays and Wednesdays. Since we are only allowed 50% capacity in the classroom this semester, half of the students in the class will come on Mondays, and the other half will come on Wednesdays.

Mondays – Last Names Beginning with A through M
Wednesdays – Last Names Beginning with N through Z

If the class size goes below 17, then all the students in the class can come on both Mondays and Wednesdays.

Text: No textbook is required.

Required Materials: computer access, printer, method of scanning – can be your cell phone, notebook paper, pencils, straightedge, scientific or graphing calculator (cell phones, smart watches, TI-89, TI-92, TI-Nspire calculators, or other electronic devices will not be allowed during labs or tests)

Blackboard: https://southplainscollege.blackboard.com
Blackboard is an online course management system. For technical support, call 806-716-2180 or email blackboard@southplainscollege.edu.

Scanning Assignments: Some of your work will have to be scanned as a pdf file to be uploaded to Blackboard. There are many free mobile apps available for scanning. Some of these are the Notes App (on iPhones), OneDrive (free to SPC students), Scannable, and CamScanner. You do not have to use one of these, but please determine which app you want to use for scanning and then practice scanning multiple pages as one pdf file. The app will allow you to name the file and save it. When you upload to Blackboard, you will click on Browse Local Files and then find the file where you saved it.

Attendance: Your attendance is monitored through completion of assignments. If you miss 7 assignments, the instructor may withdraw you from the course with a grade of X. If you wish to drop this class, you should submit a **Student Initiated Drop Form** online**.** Students will not be required to obtain an instructor signature to drop, however, students should communicate with instructors or advisors prior to dropping a course when they are able. There will be no charge for drops this semester.

Lesson Videos and Notes: There are videos and notes posted in Blackboard for each section. To find the videos and notes, click on the unit in the main menu and then the section. Print the notes. Watch the videos to fill in the notes and learn the material. On homework, labs, and tests, your work needs to follow the work in the videos. If your work does not follow the work in the videos, you will not receive credit. Keep your notes organized, and bring them to class with you. When you work on a lab in the classroom, if you have the completed notes for that section, you will get two bonus points on that lab grade.

Homework: Homework assignments for each section are posted in Blackboard. Homework is located in the same folder as the videos and notes. Homework should be completed on notebook paper with work shown. The answers are given so that you can check your answers and make sure you are working the problems correctly. The homework will help you prepare for labs and tests! Homework will be turned in on test days. You may earn one bonus point per homework assignment to be added to your test grade. To get the bonus point for the assignment, it cannot be missing more than two problems, and the work must be shown as taught in the videos.

Labs: There will be 22 labs. The deadlines for the labs are given in the course calendar. The lowest 2 lab grades will be dropped. The labs are located in Blackboard under each Unit. You will be allowed to use notes and homework on the labs. You will not be allowed any electronic devices other than a calculator. Calculators are not allowed for Unit 1 but may be used for the other units. On days that you are not in the classroom for the lab, you will print the lab and work the problems on the print-out. All pages of the lab will need to be scanned as **one pdf file** and uploaded to Blackboard. Labs are due at 10:45 am.

Tests: There will be 6 tests and a final exam. Test 3 and the final will be comprehensive. There will be **NO MAKEUP TESTS!** Dates for all tests are given in the course calendar, so **PLAN AHEAD!** All the students in the class will come to campus on test days. We will split into two rooms so that everyone can test at the same time and still maintain social distancing. You will be allowed one 8.5" by 11" sheet of notes (front only) on the tests. Calculators are not allowed for Test 1 but may be used on the other tests.

Grading Policy: Grades will be averaged according to the following percentages:

Lab Average	10%
Test Average	70%
Final Exam	20%

There will be a category in the Blackboard gradebook titled Course Average. This is the number you should look at throughout the semester to see your current average in the course. Do not use the Total category to calculate your average. Blackboard automatically creates the Total category, and I cannot delete it. You do not need to pay any attention to it.

Grading Scale:
A: 90 and above, B: 80 – 89, C: 70 – 79, D: 60 – 69, F: 59 or below

Course Topics

1.1 Integers, Exponents, and Order of Operations
1.2 Fractions and Order of Operations
1.3 Polynomials: Exponent Rules
1.4 Polynomials: Add, Subtract, Multiply, and Divide
1.5 Solve Linear and Absolute Value Equations
1.6 Solve Linear Inequalities

2.1 Factoring: GCF, Grouping, and Trinomials with $a = 1$
2.2 Factoring: Trinomials with $a \neq 1$ and Special Products
2.3 Summary of Factoring and Solve Quadratic Equations by Factoring
2.4 Simplify, Multiply, and Divide Rational Expressions
2.5 Find LCD and Solve Rational Equations
2.6 Add and Subtract Rational Expressions

3.1 Properties of Roots and Complex Numbers
3.2 Simplify and Rationalize Radical Expressions
3.3 Rational Exponents and Solve Radical Equations
3.4 Solve Quadratic Equations by Factoring and the Square Root Property
3.5 Solve Quadratic Equations by Completing the Square and Quadratic Formula

4.1 Distance, Midpoint, and Circles
4.2 Basics of Functions and Analyzing Graphs
4.3 Evaluating Functions and Symmetry
4.4 Increasing, Decreasing, and Piecewise Functions
4.5 Graphs and Transformations

5.1 Functions: Operations and Composition
5.2 Functions: Composition and Inverses
5.3 Slope and Graph Linear Functions
5.4 Equations of Lines; Parallel and Perpendicular Lines

6.1 Graph Quadratic Functions
6.2 Synthetic Division and Solve Polynomial Equations
6.3 Graph Polynomial Functions
6.4 Graph Rational Functions
6.5 Solve Polynomial and Rational Inequalities

7.1 Exponential and Log Functions: Basics and Evaluating
7.2 Properties of Logs
7.3 Solve Exponential Equations
7.4 Solve Log Equations
7.5 Solve Systems of Equations in Two Variables

8.1 Solve Systems of Equations in Three Variables
8.2 Solve Nonlinear Systems
8.3 Solve Systems Using Matrices
8.4 Solve Systems Using Cramer's Rule

Corequisite College Algebra Course Calendar
Spring 2021

Excellent time management is critical to successful course completion! When you see a particular section on a day, that means that you should print the notes for that section, watch the videos to fill in the notes, and then do the homework on that section. Deadlines are highlighted in yellow and are non-negotiable. For days that you are in the classroom, you will work the lab during class and turn it in before you leave. If you are not in the classroom, you will work the lab at home, scan it as a pdf file, and upload it to Blackboard.

	Monday	Tuesday	Wednesday	Thursday	Friday
1	Jan 18 **Martin Luther King Holiday**	Jan 19 Section 1.1 Day One Checklist	Jan 20 Section 1.1 Lab 1: 1.1 Due	Jan 21 Section 1.2	Jan 22 Catch up!
2	Jan 25 Section 1.2 Lab 2: 1.2 Due	Jan 26 Section 1.3	Jan 27 Section 1.4 Lab 3: 1.3 Due	Jan 28 Section 1.5	Jan 29 Catch up!
3	Feb 1 Section 1.6 Lab 4: 1.5 Due	Feb 2 Review	Feb 3 Test 1	Feb 4 Section 2.1	Feb 5 Catch up!
4	Feb 8 Section 2.2 Lab 5: 2.1 Due	Feb 9 Section 2.3	Feb 10 Section 2.4 Lab 6: 2.3 Due	Feb 11 Section 2.5	Feb 12 Catch up!
5	Feb 15 Section 2.6 Lab 7: 2.4 Due	Feb 16 Review	Feb 17 Test 2	Feb 18 Section 3.1	Feb 19 Catch up!
6	Feb 22 Section 3.2 Lab 8: 3.1 Due	Feb 23 Section 3.3	Feb 24 Section 3.4 Lab 9: 3.2,3.3 Due	Feb 25 Section 3.5	Feb 26 Catch up!
7	Mar 1 Review Lab 10: 3.4 Due	Mar 2 Section 4.1	Mar 3 Test 3	Mar 4 Section 4.2	Mar 5 Catch up!

8	Mar 8 Section 4.3 Lab 11: 4.1	Mar 9 Section 4.4	Mar 10 Section 4.5 Lab 12: 4.2,4.3 Due	Mar 11 Review	Mar 12
9	Mar 15 **Spring Break**	Mar 16 **Spring Break**	Mar 17 **Spring Break**	Mar 18 **Spring Break**	Mar 19 **Spring Break**
10	Mar 22 Test 4	Mar 23 Section 5.1	Mar 24 Section 5.2 Lab 13: 5.1 Due	Mar 25 Section 5.3	Mar 26 Catch up!
11	Mar 29 Section 5.4 Lab 14: 5.2,5.3 Due	Mar 30 Section 6.1	Mar 31 Section 6.2 Lab 15: 6.1 Due	Apr 1 Section 6.3	Apr 2 **Easter Break** Catch up!
12	Apr 5 Section 6.4 Lab 16: 6.3 Due	Apr 6 Section 6.4	Apr 7 Section 6.5 Lab 17: 6.4 Due	Apr 8 Review	Apr 9 Catch up!
13	Apr 12 Test 5 Online Registration Opens	Apr 13 Section 7.1	Apr 14 Section 7.2 Lab 18: 7.1 Due	Apr 15 Section 7.3	Apr 16 Catch up!
14	Apr 19 Section 7.4 Lab 19: 7.2,7.3 Due	Apr 20 Section 7.5	Apr 21 Section 7.5 Lab 20: 7.4 Due	Apr 22 Review	Apr 23 Catch up!
15	Apr 26 Test 6	Apr 27 Section 8.1	Apr 28 Section 8.2 Lab 21: 8.1 Due	Apr 29 Section 8.3 Last Day to Drop	Apr 30 Catch up!

16	May 3 Section 8.3 Lab 22: 8.2 Due	May 4 Section 8.4	May 5 Review	May 6 Review	May 7 Review
17	May 10 Final Exam 8:00 – 10:00	May 11	May 12	May 13	May 14