South Plains College
Common Course Syllabus: MATH 0314
Revised August 2020

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1314/0314

Course Title: College Algebra with Support

Available Formats: conventional/flex, internet and ITV

Campuses: Levelland, Reese, Plainview, Lubbock Center

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.

Course Description (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.

Prerequisite: Minimum score of 340 on the TSIA, or a successful completion with a grade of 'C' or better in MATH 0315.

Credit (Math 1314): 3 **Lecture:** 3 **Lab:** 1
Credit (Math 0314): 3 **Lecture:** 3 **Lab:** 1

Textbook/ Supplies: Please see the instructor's course information sheet.

Math 1314 partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)
Math 0314 satisfies a Core Curriculum Requirement: None

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 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: 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.

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: South Plains College 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 South Plains College 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 South Plains College 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 South Plains College 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 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

SPC COVID 19 Response: Return to Campus Plan

College Algebra Support Course
Math 1314.C202 T 3:00 – 4:45 Reese 225
Math 0314.C202 TH 3:00 – 4:45 Reese 225
Instructor Information – Spring 2021

Instructor: Gina Becker, BSE, M Ed   **Phone:**   806.716.4684
Email: gbecker@southplainscollege.edu   **Office:**   Reese 223D

Office Hours

Monday* (virtual)	Tuesday* (virtual)	Wednesday* (in office)	Thursday* (in office)	Friday* (varies every other Friday)
8:30 – 9:00	8:30 – 9:00	8:30 – 9:00	8:30 – 9:00	8:30 – 10:30
10:45 – 12:00	10:45 – 11:00	10:45 – 12:00	10:45 – 11:00	
	4:45 – 5:15		4:45 – 5:15	

or by appointment

Textbook: A textbook is not required for this course. If you prefer to have a supplemental text for your own reference, use: College Algebra with Intermediate Algebra, A Blended Course by Beecher / Penna / Johnson / Bittinger, Pearson Education, 2017. ISBN 9780134556505. This textbook may be found on reserve at the library.

Required Materials: Computer access, printer, webcam, pencils, paper, straightedge, and graph paper (available to print from Blackboard). A scientific or graphing calculator may be used in this course, *with the exception of these calculators: TI-Nspire, TI-89, and TI-92.*

Blackboard: Blackboard is an online course management system. For technical support, call 806.716.2180 or email blackboard@southplainscollege.edu

Attendance Policy: Attendance is monitored through completion of assignments. Eight (8) missing assignments, for any reason, are allotted to each student for each course for the semester. Students exceeding this number of missing assignments may be dropped from the class with a grade of F or an X. Missing four assignments in a row may result in automatic withdrawal from the class.

Course Expectations (Math 1314): Attend class, be on time (missing part of class counts as ½ of an absence), and be prepared to participate. Turn off and put away all electronic devices when you enter the classroom and keep off for the duration of the class. A recording of the class will be available in Blackboard.

Course Expectations (Math 0314): Watch videos on assigned day. Complete homework after watching video.

Communication: Any questions or comments should be sent using SPC email. The instructor will do her best to respond to your email within 24 hours of receipt. Any email sent on a weekend may not be answered until Monday.

Assignments and Grading:
Math 1314
Homework assignments will be assigned on each class day and will be due on Thursday of the following week. You will scan and save your homework as a pdf and then upload your completed homework into Gradescope on or before the due date. Each homework assignment is worth 0.3 points.

Quizzes will be given weekly on non-exam weeks and no makeup quizzes will be offered. To receive credit, all work for each problem must be shown. Each quiz is worth 5 points. Missing a quiz will result in 0 points for that quiz. You will scan and save your quiz as a pdf and then upload your completed quiz into Gradescope.

Exams will cover material from previous sections. Four exams and the required comprehensive final exam will be worth 10 points each. There are no makeup exams. If you miss an exam, your Final Exam grade may be used to replace one missed exam. You will scan and save your exam as a pdf and then upload your completed exam into Gradescope.

Your final point value will determine your letter grade for this class and will be determined by the following scale:

A - 90-100		Homework	10
B - 80-89		Quizzes	40
C - 70-79		Exams	40
D - 60-69		Final Exam	10
F - 0-59		Total	100 points

Math 0314
Class Design
In this corequisite course, you will receive an assignment each Monday/Wednesday. This assignment is designed to give you background information for the topics in the College Algebra course. You should watch the video and complete the assignment before coming to class on Tuesday/Thursday.

Homework assignments will be assigned each Monday and Wednesday and will be due on the following Tuesday at class time. You will scan and save your homework as a pdf and then upload your completed homework into Gradescope on or before the due date. Each homework assignment is worth 0.5 points.

Quizzes will be given weekly and no makeup quizzes will be offered. To receive credit, all work for each problem must be shown. The quiz will be given at the end of class on Tuesday, covering the material from the previous week. Each quiz is worth 6 points. Missing a quiz will result in 0 points for that quiz. You will scan and save your quiz as a pdf and then upload your completed quiz into Gradescope.

Final Exam: The final comprehensive exam taken in the Math 1314 course will be worth 15 points.

Grade
Your final point value will determine your letter grade for this class and will be determined by the following scale:

A - 90-100			
B - 80-89		Homework	13
C - 70-79		Quizzes	72
D - 60-69		Final Exam	15
F - 0-59		Total	100 points

If I receive notification that you are unable to attend class on a quiz or exam date, a quiz may be taken using Blackboard Collaborate at the stated class time. Any exam absence will require the use of Proctorio and the exam must be taken at the stated class time.

~~~The instructor reserves the right to make any changes to the syllabus as needed. Written notification will be given if any changes are made. ~~~

Tentative Schedule

Week	Date	Monday	Tuesday	Wednesday	Thursday
1	January 18-21	**MLK Holiday**	**Introduction** 1.1 Integers, Order of Operations	0314.1 Operations on Integers; Simplifying Fractions; Adding and Subtracting Polynomials; Multiplying Polynomials	1.2 Exponents, Operations on Polynomials
2	January 25-28	0314.2 Operations with Fractions; The Distributive Property; Solve Equations with the Subtraction, Addition, Division and Multiplication Properties of Equality	1.3 Linear Equations Quiz 1	0314.3 Solving One-Step Linear Inequalities and Interval Notation; Absolute Value Inequalities	1.4 Linear Inequalities **Quiz 1**
3	February 1-4	0314.4 The Greatest Common Factor and Factoring by Grouping; Factoring Trinomials with a Leading Coefficient of 1; Factoring Trinomials with a Leading Coefficient Other than 1; Factoring Special Products	1.5 Absolute-Value Equations and Inequalities 2.1 Factoring Summary Quiz 2	0314.5 Introduction to Complex Numbers; Square Roots and Radical Equations	2.2 Properties of Roots and Complex Numbers **Quiz 2**
4	February 8-11	0314.6 Factoring; Solving Quadratic Equations; Complete the Square and Quadratic Formula	2.3 Radical Expressions 2.4 Solving Quadratic Equations Quiz 3	0314.7 Domain of Rational Expressions and Simplifying Rational Expressions; Multiplying and Dividing Rational Expressions;	**Exam 1**
5	February 15-18	0314.8 Radical Equations	2.5 Solving Rational Equations 2.6 Solving Radical Equations Quiz 4	0314.9 Rectangular Coordinate System; Graphing Linear Equations; Intercepts on the Coordinate Plane; The Slope Formula; Slope-Intercept Form	3.1 Linear Functions: Slope and Graphing **Quiz 3**
6	February 22-25	0314.10 Point-Slope Form Parallel and Perpendicular Lines; Basics of Functions	3.2 Linear Functions: Equations, Parallel and Perpendicular Lines 4.1 Basics of Functions Quiz 5	0314.11 Functions and Symmetry	4.2 Evaluating Functions, Symmetry **Quiz 4**
7	March 1-4	0314.12 Functions; Piecewise Functions; Transformations	4.3 Increasing, Decreasing and Piecewise Functions 4.4 Graphs and Transformations Quiz 6	0314.13 Functions: Domain; Combinations	**Exam 2**

8	March 8-11	0314.14 Composite Functions	5.1 Functions: Domain and Operations 5.2 Functions: Compositions Quiz 7	0314.15 Inverse Functions	5.3 Functions: Inverses Quiz 5
	March 15-19	**Spring Break**			
9	March 22-25	0314.16 Parabolas and Their Properties; Graphing Quadratic Equations; Synthetic Division, Rational Zeros	6.1 Graphing Quadratics 6.2 Synthetic Division, Solve Polynomial Equations Quiz 8	0314.17 Polynomial Functions	6.3 Graphing Polynomial Functions Quiz 6
10	March 29-April 1	0314.18 Rational Functions	6.4 Graphing Rational Functions Quiz 9	0314.19 Polynomial Inequalities	**Exam 3**
11	April 5-8	0314.20 Rational Inequalities	6.5 Solve Polynomial and Rational Inequalities Quiz 10	0314.21 Introduction to Exponential and Logarithmic Functions	7.1 Exponential and Log Functions: Basics and Evaluating Quiz 7
12	April 12-15	0314.22 Factoring Review, Exponent Review Logarithm Properties	7.2 Log Functions: Basics and Evaluating 7.3 Properties of Logs Quiz 11	0314.23 Solving Exponential Equations	7.4 Exponential Equations Quiz 8
13	April 19-22	0314.24 Solving Logarithmic Equations	7.5 Logarithmic Equations Quiz 12	0314.25 Solving Systems of Linear Equations	**Exam 4**
14	April 26-29	0314.26 Solving Systems of Linear Equations in Three Variables	8.1 Systems of Linear Equations in Two Variables 8.2 Systems of Linear Equations in Three Variables Quiz 13	0314.27 Determinants	***Last Day to Withdraw*** 8.3 Determinants and Cramer's Rule Quiz 9
15	May 3-6	0314.28 Matrices and Cramer's Rule	8.4 Matrices and GJE		**Review**
16	May 10	**Final Exam** 1:00 – 3:00			