South Plains College
Common Course Syllabus: MATH 1314
Revised August 2020

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1314

Course Title: College Algebra

Available Formats: conventional/flex, internet, and ITV

Campuses: Levelland, Reese, Plainview, Lubbock Center, and Dual Credit

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 350 on the TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 0320.

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 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 Syllabus Statement: Should be provided by the Vice-President of Student Services over email.

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: 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.

SOUTH PLAINS COLLEGE
MATHEMATICS, ENGINEERING
& COMPUTER SCIENCE

Mathematics 1314 – College Algebra
Section 209: Thursday 7:00 AM – 8:45 PM
Room: Building 2, Room 227, Reese Campus

Instructor Information

Contact Information	**Instructor:** Evan Vargas
	Phone: (806) 716-4673
	Email: evargas@southplainscollege.edu
Office Hours	Agriculture Building, 107, Levelland Campus
	Tuesday (AG207): 2:30 PM – 4:30 PM
	Wednesday (Virtual): 9:00 AM – 11:00 AM
	Thursday (Virtual): 9:00 AM – 11:00 AM
	Friday (Reese Bldg. 2, 225): 9:00 AM – 11:00 AM

Course Information

Textbook	*College Algebra with Intermediate Algebra: A Blended Course*, Beecher, Penna Johnson and Bittinger. **ISBN-13: 978-0134555263**
	College Algebra by OpenStax - https://openstax.org/details/books/college-algebra
Materials	Pencils, erasers, paper, and basic calculator

Grading Scale:			**Weights:**		
90-100	**A**			Homework	10%
80-89	**B**			Quiz	10%
70-79	**C**			Exams (4)	15% each
60-69	**D**			Final Exam	20%
0-59	**F**			**Total**	**100%**

Online Homework
Homework is assigned online through My Math Lab. The homework enables students to receive feedback immediately as they work through each assignment. Physical homework is not required to turn in. Each set of online homework assignments are due at the end of each exam period. Students may attempt the Homework as many times as needed before the due date.

Online Quiz
Quizzes will be also be assigned online through My Math Lab. Quizzes contain material pertaining to Homework Assignments and Lecture Videos. Each Quiz will be timed for 30 minutes with only one (1) attempt. No make-up quizzes will be given under any circumstances.

Examinations
Examinations will be available online through Blackboard and will only be available from 8:00 AM to 11:59 PM on the specified dates from the course itinerary. Each exam will cover material from Homework, Quizzes, and Lectures and will be a combination of open answer, fill in the box, and/or multiple choice. Late examination submissions will not be accepted under *any circumstances* and are *non-negotiable.*

Final Examination
A **comprehensive** Final Examination will be given at the end of the semester. Similar to regular Examinations, the Final Examination will be available online through Blackboard from 8:00 AM to 11:59 PM. Failure to attempt the final exam will result in a failing grade for the course. All grades are rounded from the tenths place, e.g. 80.5 = 81 and 80.49 = 80, upon the submission of grades at the end of the semester. If an Examination is missed due to *any reason,* the Final Examination will replace **one (1)**.

Classroom Policies

Lecture Videos and Class Meeting
Instructional videos will be uploaded by the instructor via Blackboard. It is the student's responsibility to view each lecture video before attempting Quiz Assignments or Examinations. Attending face to face class is not required but recommended as long as the classroom can accommodate the social distancing capacity. A weekly sign-up form will be emailed. New material will not be presented during face to face class meetings. These meetings are strictly used for further example demonstrations and to help struggling students.

Attendance Policy
Attendance will be recorded through My Math Lab in lieu of physical presence. 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.

Office Hours
Office hours will be held face to face and virtually. Proper face masks must be worn for face to face meetings. Virtual office hours will be held using Zoom. Please email if the listed office hours do not work for you.

South Plains College Email Policy
The instructor will only acknowledge, respond, and send emails to the student assigned South Plains College email. This ensures the intended recipient receives all correspondence from the instructor. It is the students' responsibility to have their email set up and ready to use by the end of the first week of class.

Drop/Withdrawal
Students should submit a Student Initiated Drop Form online to drop from the course. An instructor signature is not required. If the student wishes to withdraw from this or more courses, the student needs to contact the Advising Office.

Syllabus Statement for COVID-19
It is the policy of South Plains College for the Fall 2020 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.

Course Itinerary

Week 1	• Review of Basic Algebra.
	• Solving Linear Equations and Linear Inequalities
Week 2	• Functions and Graphs. Domain and Range
	• Function Transformations
Week 3	• Graphing Linear Functions and Perpendicular/Parallel Lines
	• System of Equations: 2 Variables & 3 Variables
Week 4	• Graphing Systems of Equations with 2 Variables and Inequalities
	• Solving and Graphing Absolute Value Equations with Inequalities
	Sept. 18: Examination 1; 8:00 AM – 11:59 PM
Week 5	• Complex Number Algebra and Simplifying
	• Factoring and Solving Quadratic Equations
	• Solving Quadratics using AC Method, Complete the Square, and Quadratic Formula
Week 6	• Graphing Quadratic Functions with Inequalities.
	• Simplifying, Solving, and Graphing Radicals
Week 7	• Function Algebra and Composition of Functions.
	• Expressing and Graphing Circles
	Oct. 9: Examination 2; 8:00 AM – 11:59 PM
Week 8	• Simplifying Polynomials, Properties, and Solving Factored Polynomials
	• Long and Synthetic Division of Polynomials
Week 9	• Graphing Polynomial Functions.
	• Simplifying and Solving Rational Expressions and Equations
Week 10	• Graphing Rational Functions
	• Piecewise Functions
Week 11	• Inverse Functions
	Oct. 30: Examination 3; 8:00 AM – 11:59 PM
Week 12	• Exponential Properties and Solving Exponential Equations
	• Logarithm to Exponential Relations; Logarithm Properties
	• Solving Exponential and Logarithm Equations.
Week 13	• Graphing Exponential and Logarithm Functions
	• Exponential and Logarithm Applications
Week 14	• Intro to Matrices. Solving with Gauss and Gauss-Jordan Elimination
	• Solving Matrix Equations using Inverse Matrices and Determinants
	Nov. 24: Examination 4; 8:00 AM – 11:59 PM
Week 15	• Partial Fraction Decomposition
Week 16	**Dec. 8: Final Examination: 8:00 AM – 11:59 PM**