South Plains College
Common Course Syllabus: MATH 1314
Revised August 2021

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1314

Course Title: College Algebra

Available Formats: conventional, hybrid, 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 TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, a successful completion with a grade of 'C' or better in MATH 0320, or successful completion of NCBM-0114.

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 <u>may</u> 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.

COVID Syllabus Statement: It is the policy of South Plains College 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. There will be no requirement for face coverings at any location on any South Plains College campus or classroom. Faculty, staff, or students may continue to wear a mask voluntarily, but there will be no requirements for face coverings in any circumstance. If you are experiencing any of the following symptoms please do not attend class and either seek medical attention or get tested for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at dedens@southplainscollege.edu or 806-716-2376.

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 rcanon@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.

MATH 0314/1314 College Algebra with Support Syllabus Spring

Instructor:	Jason Groves	**Office:**	AG107
e-mail:	jgroves@southplainscollege.edu		
Phone:	806-716-2739		
Office Hours:	Virtual Only Meetings: Tues - Thurs 7:30 pm - 8:30 pm,		
	Physical: M/W/F: 11:30 am - 2 pm		
	or by appointment		

Prerequisites: Appropriate score on TSI/TSIA2 exam or successful completion of NCBM0105.

Materials: College Algebra with Intermediate Algebra by Beecher, Penna, Johnson, Bittinger. Suitable writing instruments and paper for taking notes and completing assignments. Calculators with exponential and logarithmic functions are required. Graphing Calculators are permitted but not required. Access to MyMathLab will be required for doing homework. As such, access to a reliable computer with high-speed internet access, a webcam, and speakers and microphone are required as well. Students should also have access to a scanner, or a scanning app (iOS phones should do this natively, Android users should download the free app GeniusScan).

   IT IS THE RESPONSIBILITY OF THE STUDENT TO BE FAMILIAR WITH SOUTH PLAINS COLLEGE POLICIES. BELOW ARE ITEMS SPECIFIC TO THIS COURSE

Assessment: Grading will be done according to the standard 10 percent scale (i.e. 100% - 90% is an A, etc.) with assignments weighted as follows:

Homework	10%
Quizzes	10%
Writing Assignments	15%
Tests	45%
Final Exam	20%

Class Attendance: Students are responsible for their attendance and the material covered during class. If a student is absent, they are still responsible for using the textbook, videos, and any other resources to cover the material. Questions about the material to the instructor are always recommended and encouraged, but office hours will not be devoted to personalized lecture, as that is unfair to other students who need to use office hours. See the common course syllabus for policies regarding attendance and administrative drops.

Homework: As stated above, MyMathLab will be used as a remote homework system. Students should expect to complete homework assignments daily for best results. All homework assignments will have embedded lecture videos produced by Pearson to assist in learning.

Quizzes: Quizzes will be given weekly as a way to summarize material. The format (in-class or MyMathLab) may vary depending on the needs of the class.

Exams: Midterm exams are given during this course, exclusively during the in-class portions of the course. Questions will be similar to assigned problems from homework, quizzes, discussions, and writing assignments. All exams are cumulative. During exams cell phones, smart-watches, laptops, and other such objects should be turned *off* and put away. There is no tolerance for violations. *Makeup exams are not given*

Final Exam: The final exam is comprehensive, and a required part of the course. Failure to attend the final exam results in an automatic F. If, however, the final exam grade is better than the course average (which includes the final exam, as stated above), then the final exam grade will serve as the grade for the entire course. The Final Exam will take place Tuesday, December 14, at 5:30 pm

Extra Credit: Extra credit is offered to students who have shown adequate participation in the course. This opportunity will apply to the grade for the support course first, and then to the college-level course if the support course grade is already passing. See document *Extra Credit Assignments* for details.

College Algebra with Support

	Topic	Sections
1/18/2022	Arithmetic Review	R.1 - R.3
1/19/2022	Basic Algebra Review	R.4 - R.6
1/20/2022	Review: Exponent Rules	R.7
1/24/2022	Equations and Formulas	1.1, 1.2
1/25/2022	Applications and Problem Solving	1.3
1/26/2022	Inequalities	1.4, 1.5
1/27/2022	Absolute Value	1.6
1/31/2022	Graphs of Equations	2.1
2/1/2022	Functions and Graphs	2.2
2/2/2022	AMA	
2/3/2022	Exam*	Ch. R, 1
2/7/2022	Algebra and Functions	2.3, 2.4
2/8/2022	Linear Functions	2.5, 2.6
2/9/2022	Creating Linear Functions, Applications	2.7
2/10/2022	Systems of Linear Equations	3.1 - 3.3
2/14/2022	Applications of Linear Systems	3.4
2/15/2022	Systems of Linear Equations (3-variables)	3.5, 3.6
2/16/2022	Linear Programming	3.7
2/17/2022	Introduction to Polynomials	4.1, 4.2
2/21/2022	Factoring Review	4.3, 4.4, 4.5
2/22/2022	Special Products	4.6
2/23/2022	AMA	
2/24/2022	Exam*	Ch. 2, 3
2/28/2022	Applications of Polynomials	4.8
3/1/2022	Rational Expressions, part 1 (Multiplication, Division, Simplifying)	5.1
3/2/2022	Rational Expressions, part 2 (LCD, Addition, Subtraction)	5.2
3/3/2022	Dividing Polynomials	5.3
3/7/2022	Compound Rational Expressions	5.4
3/8/2022	Rational Equations	5.5, 5.6
3/9/2022	AMA	
3/10/2022	Exam*	Ch. 4, 5
3/14/2022	SPRING BREAK	
3/15/2022	SPRING BREAK	
3/16/2022	SPRING BREAK	
3/17/2022	SPRING BREAK	
3/21/2022	Radical Expressions and Functions	6.1, 6.2
3/22/2022	Radicals and Rational Exponents	6.3, 6.4
3/23/2022	Dividing Radicals	6.5
3/24/2022	Solving Radical Equations	6.6
3/28/2022	Applications of Powers	6.7
3/29/2022	Function Behavor, Piecewise Functions	6.8
3/30/2022	Symmetry and Transformations of Functions	7.1, 7.2
3/31/2022	Quadratic Equations	7.4
4/4/2022	Graphs of Quadratic Functions	7.5
4/5/2022	Polynomial Functions and Graphs	8.1, 8.2
4/6/2022	AMA	
4/7/2022	Exam	Ch. 6, 7
4/11/2022	Factor and Remainder Theorems	8.3
4/12/2022	Zeros of Polynomial Functions	8.4

Date	Topic	Section
4/13/2022	Rational Functions	8.5
4/14/2022	Polynomial and Rational Inequalities	8.6
4/18/2022	Function Composition	9.1, 9.2
4/19/2022	Exponential and Logarithmic Functions	9.3, 9.4
4/20/2022	Properties of Logarithms	9.5
4/21/2022	Solving Exponential and Logarithmic Equations	9.6
4/25/2022	Applications of Exponential Functions	9.7
4/26/2022	Matrices and Linear Systems	10.1
4/27/2022	Matrix Arithmetic	10.2, 10.3
4/28/2022	Determinants and Cramer's Rule	10.4
5/2/2022	AMA	
5/3/2022	Exam	Ch. 8, 9, 10
5/4/2022	AMA	
5/5/2022	AMA	
5/9/2022	Final Exam	
5/10/2022		
5/11/2022		
5/12/2022		