South Plains College
Common Course Syllabus: MATH 0314 / 1314
Revised December 2019

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0314 / 1314

Course Title: College Algebra with Support

Available Formats:
0314: conventional, and internet
1314: conventional, internet, and ITV

Campuses:
0314: Levelland, Reese, Plainview, Lubbock Center
1314: Levelland, Reese, Plainview, Lubbock Center, and Dual Credit

Course Description:
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.
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:
0314: Minimum score of 340 on the TSIA, or a successful completion with a grade of 'C' or better in MATH 0315.
1314: 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:
0314: 3 **Lecture:** 3 **Lab:** 1
1314: 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
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

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 Policy: Attendance and effort are the most important activities for success in this course. Records of your attendance are maintained throughout the semester. Ten (10) absences, ***for any reason***, are allotted to the student for the semester. Tardies count as one-half (1/2) of an absence. Tardies will be applied for consistently being late to class, as deemed by the instructor and leaving class early. If this number is exceeded, the instructor has the right to drop you with a grade of F or an X, depending on their 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.

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.

MATH 0314/1314 – College Algebra with Support
Spring 2020

Instructor: Jerod Clopton
Office: M102
Email: jclopton@southplainscollege.edu
Phone: 806-716-2738

Section: C002
Class Time: T/Th 7:50 – 9:20
T/Th 12:30 – 2:15
Location: M122

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
10:15 - 11:00	9:30 - 10:00	10:15 - 11:00	9:30 - 10:00	10:00 - 12:00
2:00 - 3:00	2:15 - 3:00	2:00 - 3:00	2:15 - 3:00	
Or by appointment				

Textbook: No textbook is required for the section of Math 0314/1314.

Supplies: Pencils, notebook, lined sheets of notebook paper, 3-ring binder, scientific calculator. Graphing calculators, calculators on cellphones, or any other electronic devises will not be allowed during in class assignments.

Assignments and Grading: All homework assignments with be administered through Knewton or made available in class or as a PDF in Blackboard. For homework through Knewton, do all your work in a notebook in an organized manner; writing down each problem, showing all work, and clearly identifying your answer. Keep all class materials (syllabus, notes, handouts, quizzes, exams) in a 3-ring binder. Your binder and notebook are subject to be turned in at any time for grading. Make sure that you bring all class material with you to class. Homework average and binder / notebook checks will account for 10% of your final grade. Quizzes will be administered at any time during the semester. Your quiz average will account for 10% of your final grade, while all exams will count for 80% of your final grade. Expect to have 6 major exams (10% each) throughout the course and a comprehensive final exam (20%) at the end of the course. No make-up exams will be given. The grade from your final exam will replace your lowest exam grade, provided that the grade from the final exam is greater than your lowest exam grade. Your final average in the course will determine the letter grade posted on your transcript. This grade is determined by the following scale: A (90-100%), B (80-89%), C (70-79%), D (60- 69%), F (0-59%).

Knewton: Knewton is the online platform for which homework assignments with be administered. Instructions for accessing Knewton will be made available in class.

Blackboard: Blackboard is the online course management system that will be utilized for this course. This course syllabus, as well as any class handouts, and Knewton assignments can be accessed through Blackboard. Login at https://southplainscollege.blackboard.com/. The user name and password should be the same as the MySPC and SPC email.

User name: first initial, last name, and last 4 digits of the Student ID Password: Original CampusConnect Pin No. (found on SPC acceptance letter)

Resources:

- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted there.
- A copy of the textbook for this course is available in the Levelland and Reese Campus libraries
- Exam reviews, exam and quiz solutions, links to additional online resources, will be posted in Blackboard

Use of Electronic Devices: Turn off all electronic devices before class. The use of cell phones, music players, smart watches (other than checking time), pagers, personal computers, tablets, etc., will not be tolerated. If consistent violation of this policy persists then consequences will be administered. If an unsanctioned devise is in use during an exam, then its grade will be zero percent (0%) and removal from the course may be applied. During class time where we are in a computer lab, working on Knewton assignments, you may use your own laptop computer or tablet to access Knewton. Any use other than accessing Knewton of a lab computer, laptop computer, or tablet will be allowed.

Disclaimer: The instructor reserves the right to alter any class policies/dates as deemed necessary and will announce any changes in class.

Math0314/1314 Tentative Course Schedule for Spring 2020

Week	Date	Topics (•) and Corresponding Knewton Assignments (-)
1	Tue, Jan 14 – AM & PM	• Introduction • Solving Linear Equations - Linear Equations
	Thu, Jan 16 – AM & PM	• Solving Rational Equations - Rational Equations
2	Tue, Jan 21 – AM & PM	• Linear Applications - Word Problems with Linear Equations - Problem Solving
	Thu, Jan 23 – AM & PM	• Linear and Absolute Value Inequalities - Interval Notation and Inequalities - Absolute Value Equations and Inequalities
3	**Tue, Jan 28 – AM**	**Exam1**
	Tue, Jan 28 – PM	• Complex Numbers - Basics of Complex Numbers - Operations on Complex Numbers
	Thu, Jan 30 – AM & PM	• Quadratic Equations - Solve Quadratic Equations by Factoring - Completing the Square - Quadratic Formula
4	Tue, Feb 04 –AM & PM	• Other Types of Equations - Solve Higher Order Equations with Factoring - Solve Equations Quadratic in Form - Solve Radical Equations - Solve Other Types of Equations
	Thu, Feb 06 – AM & PM	• Functions - Relations and Functions - One-to-One Functions - Function Notation - Domain and Range of Functions - Piecewise Functions - Graphical Properties of Functions - Difference Quotients
5	**Tue, Feb 11 – AM**	**Exam 2**

	Tue, Feb 11 – PM	• Linear Functions and Slope - Identify Slopes and Intercepts - Find Linear Equations
	Thu, Feb 13 – AM & PM	• Linear Functions and Slope - Parallel and Perpendicular Lines • Distance, Midpoint, and Circles - Distance and Midpoints - Graphs of Circles
6	Tue, Feb 18 – AM & PM	• Combinations and Composition of Functions - Combination of Functions - Evaluate Composite Functions - Properties of Composite Functions
	Thu, Feb 20 – AM & PM	• Inverse Functions - Inverse Function Values - Find Inverse Functions
7	**Tue, Feb 25 – AM**	**Exam 3**
	Tue, Feb 25 – PM	• Quadratic Functions and Their Graphs - Graphs and Applications of Quadratic Functions
	Thu, Feb 27 – AM	• Quadratic Functions and Their Graphs - Graphs of Quadratic Functions (handout) • Synthetic Division: - Synthetic Division and the Remainder Theorem - Rational Zeros of Polynomial Functions
8	Tue, Mar 3 – AM & PM	• Polynomial Functions and Their Graphs - End Behavior of Polynomial Functions - Local Behavior of Polynomial Functions
	Thu, Mar 5 – AM & PM	• Rational Functions and Their Graphs - Asymptotic Behavior of Rational Functions - Graphs of Rational Functions
9	**Tue, Mar 10 – AM**	**Exam 4**
	Tue, Mar 10 – PM	• Rational and Quadratic Inequalities - Quadratic Inequalities
	Thu, Mar 12 – AM & PM	• Rational and Quadratic Inequalities - Rational Inequalities • Exponential Functions: - Evaluate and Write Exponential Functions - Applications and Exponential Functions with Base *e* - Exponential Function Graphs

	Tue, Mar 17	**No Class (Spring Break)**
	Thu, Mar 19	**No Class (Spring Break)**
10	Tue, Mar 24 – AM & PM	• Logarithmic Functions - Relate Logarithms and Exponents - Evaluate Logarithmic Expressions - Logarithmic Function Graphs
	Thu, Mar 26 – AM & PM	• Exponential and Logarithmic Equations - Solve Exponential Equations - Solve Logarithmic Equations
11	Tue, Mar 31 – AM & PM	• Solving Systems of Equations - Graphing Systems of Linear Equations - Solving Systems of Linear Equations
	Thu, Apr 2 – AM & PM	• Solving Systems of Equations - Systems of Linear Equations in Three Variables
12	**Tue, Apr 7 – AM**	**Exam 5**
	Tue, Apr 7 – PM	• Matrix Solutions to Systems - Solving Systems with Gaussian Elimination
	Thu, Apr 9 – AM & PM	• Matrix Solutions to Systems - Solving Systems with Gauss-Jordan Elimination
13	Tue, Apr 14 – AM & PM	• Determinants and Cramer's Rule - Finding Determinants of Matrices - Solving Systems Using Cramer's Rule
	Thu, Apr 16 – AM & PM	• Nonlinear Systems and Systems of Inequalities - Linear Inequalities in Two Variables - Systems of Two Nonlinear Equations - Graphing Nonlinear Inequalities and Systems of Inequalities
14	**Tue, Apr 21 – AM**	**Exam 6**
	Tue, Apr 21 – PM	• Binomial Theorem - Binomial Expansion
	Thu, Apr 23 – PM	• Partial Fractions: - Partial Fraction Decomposition with Quadratic Factors - Partial Fraction Decomposition with Quadratic Factors
15	Tue, Apr 28 – AM & PM	• Arithmetic Sequences, Geometric Sequences, and Series
	Thu, Apr 30 – AM & PM	Final Exam Review
16	**Tue, May 5**	**Final Exam: 8:00 - 10:00**