# South Plains College Common Course Syllabus: MATH 0314 Fall 2021

**Department:** Mathematics, Engineering, and Computer Science

**Discipline:** Mathematics

Course Number: MATH 0314

Course Title: College Algebra Support Course

Available Formats: conventional/flex and internet

Campuses: Levelland, Reese, Plainview, Lubbock Center, TTU

**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.

**Prerequisite:** Minimum score of 340 on the TSIA1, minimum diagnostic score of 3 on the TSIA2, a successful completion with a grade of 'C' or better in MATH 0315, or a successful completion of NCBM-0105.

Credit: 3 Lecture: 3 Lab: 1

This course partially 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 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:** 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 smel

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at <u>dedens@southplainscollege.edu</u> 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 <u>activate</u> 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 <u>email cgilster@southplainscollege.edu</u> 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: <a href="http://www.southplainscollege.edu/campuscarry.php">http://www.southplainscollege.edu/campuscarry.php</a> 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.

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

TTU Covid Information: https://www.depts.ttu.edu/communications/emergency/coronavirus/

If you are unable to attend class due to extenuating circumstances and you receive permission to join class through Collaborate, you must turn on your camera and your microphone.

# College Algebra Support Course Math 0314.C251 MWF 9:00 – 9:50 MCOM 270 Math 0314.C252 MWF 11:00 – 11:50 EDUC 300 Instructor Information – Fall 2021

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

# Office Hours

Monday*	Tuesday*	Wednesday*	Thursday*	Friday*
8:45 - 9:00	7:45 - 8:00	8:45 - 9:00	7:45 - 8:00	8:45 - 9:00
9:50 - 11:00	10:50 - 11:05	9:50 - 11:00	10:50 - 11:05	9:50 - 11:00
11:50 – 12:05	**2:30 - 3:30	11:50 – 12:05		11:50 - 12:05
**virtual			*or by app	ointment

**Textbook:** A textbook is not required for this course.

**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 <a href="mailto:blackboard@southplainscollege.edu">blackboard@southplainscollege.edu</a>

Attendance 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 (no more than 6 absences) **and** submit at least eighty percent (80%) of the **total** class assignments (no more than 9 zeroes) 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 cannot receive an X, the instructor will assign an F.

**Course Expectations:** Attend class, be on time (missing part of class counts as an absence), have the previous homework assignment completed before the next class meeting, 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.

**Communication:** Any questions or comments should be sent using your 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:**

Homework assignments will be assigned each class day and will be due on Wednesday of the following week 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/time. 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. Each quiz is worth 6 points. Missing a guiz will result in 0 points for that guiz.

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

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 you make a C or higher (above 69.5) you will receive a grade of P. If you score 69.4 or below, you will receive a grade of F.

**Dismissal from TTAP Program:** If a student is dismissed from the TTAP program, the student may complete the course as an SPC student. Student must meet assignment completion criterion to remain in the class. Exceeding the number of allowed missing assignments may result in the student being dropped from the class with a grade of F or X.

Week	Monday	Wednesday	Friday
1	August 23 No Class today SPC Faculty meeting	August 25 0314.1 Operations on Integers; Simplifying Fractions; Adding and Subtracting Polynomials; Multiplying Polynomials;	August 27 0314.2 Operations with Fractions; The Distributive Property; Solve Equations with the Subtraction and Addition Properties of Equality
2	August 30 0314.3 Solve Equations with the Division and Multiplication Properties of Equality	September 1 0314.4 Solving One-Step Linear Inequalities and Interval Notation; Absolute Value Inequalities Quiz 1	September 2 0314.5 The Greatest Common Factor and Factoring by Grouping; Factoring Trinomials with a Leading Coefficient Other than 1; Factoring Trinomials with a Leading Coefficient of 1; Factoring Special Products; Solve Quadratic Equations
3	September 6 HOLIDAY	September 8 12th Class Day 0314.6 Introduction to Complex Numbers; Square Roots and Radical Equations Quiz 2	September 10 Topic: Factoring and Radicals
4	September 13 0314.7 Factoring; Solving Quadratic Equations; Complete the Square and Quadratic Formula	September 15 0314.8 Domain of Rational Expressions and Simplifying Rational Expressions; Review for Exam Quiz 3	September 17 Topic: Quadratic and Rational Equations
5	September 20 0314.9 Radical Equations	September 22 0314.10 Rectangular Coordinate System; Graphing Linear Equations; Intercepts on the Coordinate Plane; The Slope Formula; Slope-Intercept Form Quiz 4	September 24 Topic: Radicals and Graphing Linear Functions
6	September 27 0314.11 Point-Slope Form Parallel and Perpendicular Lines; Basics of Functions	September 29 0314.12 Evaluating Functions; Symmetry Quiz 5	October 1 Topic: Functions
7	October 4 0314.13 Functions; Piecewise Functions and Transformations	October 6 Quiz 6	October 8 Topic: Piecewise Functions
8	October 11 0314.14 Functions: Domain; Combinations Composite Functions; Quiz 6	October 13 0314.15 Inverse Functions Quiz 7	October 15 Fall Break – No Class
9	October 18 0314.16 Parabolas and Their Properties; Graphing Quadratic Equations Synthetic Division, Rational Zeros Quiz 8	October 20 0314.17 Polynomial Functions	October 22 Topic: Graphing Quadratic and Polynomial Functions
10	October 25 0314.18 Rational Functions	October 27 Exam 3 Review	October 29 Topic: Graphing Rational Functions

11	November 1 0314.19 Polynomial and Rational Inequalities	November 3 0314.20 Introduction to Exponential Functions and Logarithmic Functions Quiz 9	November 5 Topic: Solving Polynomial and Rational Inequalities
12	November 8 0314.21 Factoring Review, Exponent Review Logarithm Properties	November 10 0314.22 Solving Exponential Equations and Logarithmic Equations Quiz 10	November 12 Topic: Exponential and Logarithmic Equations
13	November 15 0314.23 Solving Systems of Linear Equations	November 17 0314.24 Solving Systems of Linear Equations in Three Variables Quiz 11	November 19 Topic: Systems of Linear Equations
14	November 22 0314.25 Matrices, Gaussian Elimination and GJE Quiz 12	November 24 Thanksgiving	November 26
15	November 29 0314.26 Determinants and Cramer's Rule Quiz 13	December 1 TTU Last Class Day Review	December 2 Last Day to Withdraw

**Tentative Course Schedule**