### 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, TTU 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

**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:** Students must take a written end-of-semester assessment (final exam) covering the information from this course.

**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 meetings **and** submit at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class meetings **and** submit 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 cannot 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:** If you are experiencing any of the following symptoms, please do not attend class and either seek medical attention or test 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. Proof of a positive test is required. A home test is sufficient but students must submit a photo of the positive result. The date of test must be written on the test result and an ID included in the photo. If tested elsewhere (clinic, pharmacy, etc.), please submit a copy of the doctor's note or email notification. Results may be emailed to DeEtte Edens, BSN, RN at <u>dedens@southplainscollege.edu</u>.

A student is clear to return to class without further assessment from DeEtte Edens, BSN, RN if they have completed the 5-day isolation period, symptoms have improved, and they are without fever for 24 hours without the use of fever-reducing medication.

Students must communicate with DeEtte Edens, BSN, RN prior to their return date if still symptomatic at the end of the 5-day isolation.

**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, Lubbock Centers (Downtown Center) 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 Health and Wellness Center. 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 Health and Wellness Center at 806-716-2529 or email <u>dburleson@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.

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

## College Algebra Math 1314.C251 TR 9:30 – 10:50 MCOM 157 Instructor Information – Fall 2022

Instructor:	Gina Becker, BSE, M Ed	Phone:	806.716.4684
Email:	gbecker@southplainscollege.edu	Office:	SPC Lubbock Downtown B018
Office Hours	5		

Monday*	Tuesday*	Wednesday*	Thursday*	Friday*
10:00 - 11:00	9:00 - 9:30	10:00 - 11:00	9:00 - 9:30	10:00 - 11:00
*or by appointment				

#### **Class Structure**

The class will meet in person twice a week. If you must miss class for any reason, the notes and videos may be found on Blackboard.

### **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 8 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 or F.

#### **Assignments and Grading**

Homework assignments will be assigned each class day and will be due on the following class day by 10:00pm. 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. Late homework assignments are not accepted. 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 **4 points**. Missing a quiz will result in 0 points for that quiz.

Exams will cover material from previous sections. Three exams will be worth **15 points each** and the comprehensive final exam will be worth **15 points. There are no makeup exams.** If you miss an exam, your final exam grade may be used to replace a missed exam. The final exam is mandatory to complete the course.

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

A - 90-100	Homework	8
B - 80-89	Quizzes	32
C - 70-79	Exams	45
D - 60-69	Final Exam	15
F - 0-59	Total	100 points

## 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. You may also leave a message on my office phone number.

## To maximize potential for successfully completing this course

- Print notes provided on Blackboard and fill in examples during class.
- Attend class prepared to complete notes and ask questions.
- Cell phones provide the opportunity for distraction. You should choose to refrain from checking during class.
- Complete homework assignment on the day it is assigned. If you have difficulty working a problem, come to office hours before class.
- Check Blackboard and your SPC email often for any updates.
- Be prepared for Quizzes and Exams. Makeups are not available.

### **Supplies**

- A textbook is not required for this course. If you prefer to have a supplemental text for your own reference, use: <u>College Algebra with Intermediate Algebra, A Blended</u> <u>Course</u> by Beecher / Penna / Johnson / Bittinger, Pearson Education, 2017. ISBN 9780134556505.
- Homework and notes will be provided on Blackboard.
- Scientific Calculator (TI-30XIIS is a good and inexpensive option.) A scientific or graphing calculator may be used in this course, with the exception of these calculators: **TI-Nspire**, **TI-89**, **and TI-92**.
- pencils, notebook paper, 3" x 5" notecards, straight edge
- Computer or cell phone that you can use to check Blackboard and emails and to upload your homework to Gradescope.

# 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 assignments can be accessed through Blackboard. Login at <u>http://southplainscollege.blackboard.com</u>. 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 Number (found on SPC acceptance letter) Questions regarding Blackboard support may be emailed to <u>blackboard@southplainscollege.edu</u> or call 806-716-2180.

# **SPC Tutoring Options**

• In Person: Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, get to know the tutors and view tutoring locations.

http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

• **Tutor.com** You also have 180 FREE minutes of tutoring with tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tutor.com link on the left-hand tool bar and grab a session with a tutor. You can access tutor.com tutors during the following times:

Monday – Thursday: 8 pm-8 am Friday 6 pm – Monday morning 8am

Free tutoring is available through the college. Check Blackboard for additional information about tutoring.

#### Withdrawal From Course

Fill out the Student Initiated Drop Form found at <u>https://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php</u> SPC might not permit an undergraduate student to drop a total of more than six courses (including any course a transfer student has dropped at another institution of higher education.)

## 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 days/assignments may result in the student being dropped from the class with a grade of F or X.

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.

# **Tentative Course Schedule**

Week	Tuesday	Thursday
1		August 25 Course Introduction 1 Semester Tools
2	August 30 2 Review Real Numbers, Order of Operations; Exponents	September 1 3 Operations on Polynomials; Linear Equations Quiz 1
3	<b>September 6</b> 4 Linear Functions: Slope, Graphing; Parallel and Perpendicular Lines	September 8 5 Solving Systems of Linear Equations Quiz 2
4	<b>September 13</b> 6 Systems of Linear Equations in Three Variables; Matrices, Gaussian Elimination and GJE	September 15 7 Determinants and Solving Systems with Cramer's Rule 8 Review Quiz 3
5	<b>September 20</b> 9 Solve Linear Inequalities; Absolute Value Equations and Inequalities	September 22 Exam 1
6	<b>September 27</b> 10 Basics of Functions, Analyzing Graphs; Evaluating Functions, Symmetry	September 29 11 Functions: Graphs and Transformations Quiz 4
7	<b>October 4</b> 12 Roots and Complex Numbers; Radical Expressions	October 6 13 Summary of Factoring Quiz 5
8	<b>October 11</b> 14 Solve Quadratic Equations	October 13 15 Graph Quadratic Functions 16 Review Quiz 6
9	<b>October 18</b> 17 Synthetic Division, Solve Polynomial Equations	October 20 Exam 2
10	October 25 18 Graphing Polynomial Functions	October 27 19 Solve Rational Equations Quiz 7
11	<b>November 1</b> 20 Graphing Rational Functions	November 3 21 Inequalities - Rational and Quadratic Quiz 8
12	<b>November 8</b> 22 Functions: Domain and Combinations; Compositions	November 10 23 Solve Radical Equations 24 Review Quiz 9
13	<b>November 15</b> 25 Functions: Inverses; Increasing and Decreasing, Piecewise	November 17 Exam 3
14	<b>November 22</b> 26 Exponential Functions and Graphs; Logarithmic Functions and Graphs	November 24 Holiday
15	<b>November 29</b> 27 Properties of Logarithmic Functions; Solve Exponential Equations	<b>December 1 No Class Last Day to Withdraw</b> 28 Solve Logarithmic Equations
16	<b>December 6 TTU Last Class Day</b> 29 Review	December 8 Final Exam 10:30am – 12:30pm