

**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/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 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:** 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 may 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](mailto: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 [dedens@southplainscollege.edu](mailto:dedens@southplainscollege.edu).

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 [dburleson@southplainscollege.edu](mailto:dburleson@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.



### 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: College Algebra with Intermediate Algebra, A Blended Course 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 <http://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 Number (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to [blackboard@southplainscollege.edu](mailto:blackboard@southplainscollege.edu) 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 <https://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php> 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.)

## Tentative Course Schedule

<b>Week</b>	<b>Monday</b>	<b>Wednesday</b>
<b>1</b>	<b>August 29</b> 1 Course Introduction 2 Review Real Numbers, Order of Operations, Exponents	<b>August 31</b> 3 Operations on Polynomials; Linear Equations
<b>2</b>	<b>September 5</b> Student Holiday	<b>September 7</b> 4 Linear Functions: Slope, Graphing; Parallel and Perpendicular Lines <b>Quiz 1</b>
<b>3</b>	<b>September 12</b> 5 Solving Systems of Linear Equations 6 Systems of Linear Equations in Three Variables; Matrices, Gaussian Elimination and GJE	<b>September 14</b> 7 Determinants and Solving Systems with Cramer's Rule 8 Review <b>Quiz 2</b>
<b>4</b>	<b>September 19</b> 9 Solve Linear Inequalities; Absolute Value Equations and Inequalities	<b>September 21</b> <b>Exam 1</b>
<b>5</b>	<b>September 26</b> 10 Basics of Functions, Analyzing Graphs; Evaluating Functions, Symmetry	<b>September 28</b> 11 Functions: Graphs and Transformations <b>Quiz 3</b>
<b>6</b>	<b>October 3</b> 12 Roots and Complex Numbers; Radical Expressions	<b>October 5</b> 13 Summary of Factoring 14 Solve Quadratic Equations <b>Quiz 4</b>
<b>7</b>	<b>October 10</b> Student Holiday	<b>October 12</b> 15 Graph Quadratic Functions 16 Review <b>Quiz 5</b>
<b>8</b>	<b>October 17</b> 17 Synthetic Division; Solve Polynomial Equations	<b>October 19</b> <b>Exam 2</b>
<b>9</b>	<b>October 24</b> 18 Graphing Polynomial Functions	<b>October 26</b> 19 Solve Rational Equations <b>Quiz 6</b>
<b>10</b>	<b>October 31</b> 20 Graphing Rational Functions	<b>November 2</b> 21 Inequalities: Rational and Quadratic <b>Quiz 7</b>
<b>11</b>	<b>November 7</b> Staff Development	<b>November 9</b> 22 Functions: Domain and Combinations; Compositions 23 Solve Radical Equations 24 Review <b>Quiz 8</b>
<b>12</b>	<b>November 14</b> 25 Functions: Inverses; Increasing and Decreasing, Piecewise Functions	<b>November 16</b> <b>Exam 3</b>
<b>13</b>	<b>November 21</b>	<b>November 23</b> <b>Thanksgiving</b>
<b>14</b>	<b>November 28</b> 26 Exponential Functions and Graphs; Logarithmic Functions and Graphs	<b>November 30</b> <i>December 1 Last Day to Withdraw</i> 27 Properties of Logarithmic Functions; Solve Exponential Equations <b>Quiz 9</b>
<b>15</b>	<b>December 5</b> 28 Solve Logarithmic Equations	<b>December 7</b> 29 Review
<b>16</b>	<b>December 12</b> Final Exam Math 1314.342 <b>2:45 – 4:45</b>	