

**South Plains College**  
**Common Course Syllabus: College Algebra (MATH 1314)**  
**Spring 2023**

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

**Discipline:** Mathematics

**Course Number:** MATH 1314

**Course Title:** College Algebra

**Section:** 607 (Mondays and Wednesdays, 11:00am-12:45pm, Lubbock Downtown Center, B009)

**Available Formats:** conventional, hybrid, internet, and ITV. This class will be the conventional format.

**Campuses:** Levelland, Downtown Center, Plainview Center, and Dual Credit. This class meets face-to-face at the Lubbock Downtown Center, in room B009.

**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

**Instructor:** Jerod Clopton

**Office:** Lubbock Downtown Center, B019

**Telephone:** (806) 716-2738

**Email:** [jclopton@southplainscollege.edu](mailto:jclopton@southplainscollege.edu)

**Office Hours:**

- Monday: 3:00 – 5:00 PM
- Tuesday: 3:00 – 5:00 PM
- Wednesday: 3:00 – 5:00 PM
- Tuesdays 3:00 – 5:00 PM
- Alternative times to meet may be scheduled with the instructor.

**Email Policy:** All students at South Plains College are assigned a standardized SPC email. Log into [portal.office.com](http://portal.office.com) to access to you SPC email account. The instructor will only acknowledge, respond, and receive emails to your assigned email address.

- My expected response time to received emails is as follows:
  - For emails sent on Monday-Thursday, I will attempt to respond within 24 hours.
  - For emails sent on Friday-Sunday, I may not respond until the following Monday.
- I will not be checking / responding to messages sent through the Blackboard messaging system.

**Textbook:** A textbook is not required for this section of this course. However, there are a couple of references that are available to the student.

- Freely available online: College Algebra from OpenStax, Print ISBN 1938168380, Digital ISBN 1947172123, [www.openstax.org/details/college-algebra](http://www.openstax.org/details/college-algebra)
- Available at the library of South Plains College: *College Algebra with Intermediate Algebra: A Blended Course*, Beecher, Penna, Johnson, and Bittinger, 2018, 1<sup>st</sup> Edition, Prentice Hall/Pearson Education

**Flipped Classroom:** This is a flipped classroom. Simply put this means that you will be introduced to course content outside of the classroom and then practice the material during class. To be successful in this class you will need to prepare for each class by watching the lecture videos, taking notes on the lecture videos, and begin working on the homework. Class time will be spent addressing any questions that you have over the lecture, subject material, or homework.

### Supplies:

- Scientific calculator (with log, ln, sin, cos, and tan functions). Suggested calculator: TI-30XIIS.
  - Calculators on cell phones, TI-89, TI-92, or TI-Inspire calculators, or any other electronic devices will not be allowed during testing without permission from the instructor.
- Large 3-ring binder, dividers, notebook paper, graph paper (available to print on blackboard), hole punch, pencils, and erasers.
- Printed Notes. A blank copy of the notes will be posted on Blackboard and you will be expected to print them and have them in class. You are expected to fill them out before class. Lecture videos aligning to the notes are available on Blackboard. Your completed notes will be a requirement in the binder check.
- Warning: Do not expect your instructor to have supplies for you to borrow.

**Blackboard:** Blackboard is the online course management system that will be utilized for this course. This course is supplemented online, so all access to course information and your instructor is through the Internet. This course syllabus, as well as all course materials can be accessed through Blackboard. Login at <https://southplainscollege.blackboard.com/>. The username and password should be the same as the MySPC and SPC email.

Username: first initial, last name, and last 4 digits of the Student ID

Password: Original CampusConnect Pin No. (found on SPC acceptance letter)

**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. Assignments, quizzes, binder check, and exam corrections will count for 20% of the final grade, while exams count for 80% of the final grade. Expect 25 assignments, approximately 10 quizzes, and 5 scheduled exams throughout the course. 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%).

- Homework Assignments / Binder Check = 5%
- Quizzes = 15%
- Exam 1 = 15%
- Exam 2 = 15%
- Exam 3 = 15%
- Exam 4 = 15%
- Final Exam = 20%

**Homework Format and Policy:** Assignments are given after each lesson and are collected according to the calendar below. For each question on each assignment:

- Write the question number.
- In solving the problem, show all necessary work. Your work must justify your answer(s).
- Clearly mark your answer.
- Check your answers in Blackboard to make certain you are practicing the exercises correctly.
- Write your name at the top of each page of your work.
- Homework assignments are due by the end of class on the assigned due date.
- Late assignments are not accepted under any circumstances.
  - If a student is going to be absent from class, homework will be accepted as long as it is turned in before the due date.
  - Homework may be submitted by email and will be accepted if
    - It is time stamped before the scheduled due date
    - It is sent as a single PDF file
      - There are many cell phone apps that can be used to create PDF files of paper documents.
- Homework will be graded in two ways:
  1. Completion (50% of HW grade)
  2. Spot check 3-5 questions (50% of HW grade)
- The final five homework assignments will count as extra credit grades.

**Quiz Format and Policy:** Quizzes will be given in class. Quiz dates are given in the course calendar.

- No late quizzes will be given.
- The final two quizzes will count as extra credit grades.

**Exam Format and Policy:** There are four (4) units of study in this course. At the conclusion of each unit an in-class exam will be given on specified days in the course calendar. At the end of the semester

there will be a comprehensive final exam. This final exam will be given on Monday, May 8 from 10:15am-12:15pm.

### **Binder Format and Policy:**

- All students will keep a binder which will be used as a reference and study guide. If done correctly, this binder can serve as a course book and is a great resource to have.
- The binder will be graded randomly by the instructor during the semester. Each time it is graded, you will receive an assignment grade for it.
- Organization guidelines; see Binder Organization document.

**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 can not receive an X, the instructor will assign an F.

### **To maximize your potential for successfully completing this course:**

- login to Blackboard daily
- watch the lecture videos and take notes on them
- thoroughly complete and submit the assignments on time
- practice the exercises repeatedly until you have full mastery of them.

Before arriving for the class meeting, make certain you have:

1. worked through the notes and videos for that day's lessons
2. completed some of the assigned homework problems.

Upon arriving at the class meeting, we will:

1. answer questions over homework assignment
2. work through the homework assignment
3. take in class quiz (on assigned quiz days) and submit assignments

### **Resources:**

- Please come to me first with any questions that you have about this class. Feel free to come by my office during my office hours or email me.
- **SPC Tutoring:** 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, 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 tools option from the left-hand menu bar. Click on the Tutor.com link and you will automatically be logged in for free tutoring. You may access tutor.com tutors during the following times:
  - Monday – Thursday: 8pm-8am
  - 6pm Friday – 8am Monday morning

**Academic Integrity (Plagiarism and Cheating Policy):** “Complete honesty is required of the student in the presentation of any and all phases of course work. This idea applies to quizzes of whatever length as well to final examinations, to daily reports, and to term papers” (SPC General Catalog).

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 from the student and the instructor. Neither the instructor nor the student should be subject to others’ rude, disruptive, intimidating, aggressive, or demeaning behavior. 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.

South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: <https://www.southplainscollege.edu/syllabusstatements/>.

South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: <https://www.southplainscollege.edu/emergency/covid19-faq.php>.

**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.*

**Tentative Course Calendar: College Algebra**  
**Spring 2023 (M/W 11:00-12:45; Lubbock Downtown Center, B009)**

| Date   |             | Topic   | Assignment Due Dates       |
|--|-------------|---|----------------------------|
| <b>Unit 1 – Equations and Inequalities</b>                         |             |   |                            |
| Week 1   | Mon, Jan 16 | <b>Martin Luther King, Jr. Holiday (No Class)</b>                                 |                            |
|  | Wed, Jan 18 | Introduction<br>Asgmt 1: Linear Equations   | Wed, Jan 25                |
| Week 2   | Mon, Jan 23 | Asgmt 2: Rational Equations   | Wed, Jan 25                |
|  | Wed, Jan 25 | Asgmt 3: Linear Applications<br>Quiz 1  | Wed, Feb 1                 |
| Week 3   | Mon, Jan 30 | Asgmt 4: Complex Numbers  | Wed, Feb 1                 |
|  | Wed, Feb 1  | Asgmt 5: Quadratic Equations<br>Quiz 2  | Wed, Feb 8                 |
| Week 4   | Mon, Feb 6  | Asgmt 6: Other Types of Equations   | Wed, Feb 8                 |
|  | Wed, Feb 8  | Asgmt 7: Linear and Absolute Value Inequalities<br>Quiz 3                         | Wed, Feb 15                |
| Week 5   | Mon, Feb 13 | Review over Unit 1  |                            |
|  | Wed, Feb 15 | <b>Exam 1</b>   |                            |
| <b>Unit 2 – Functions and Graphs</b>                               |             |   |                            |
| Week 6   | Mon, Feb 20 | Asgmt 8: Functions and Their Graphs<br>Asgmt 9: Linear Functions and Slope        | Wed, Feb 22<br>Wed, Feb 22 |
|  | Wed, Feb 22 | Asgmt 10: Distance, Midpoint, and Circles<br>Quiz 4                               | Wed, Mar 1                 |
| Week 7   | Mon, Feb 27 | Asgmt 11: Combination and Composition of Functions<br>Asgmt 12: Inverse Functions | Wed, Mar 1<br>Wed, Mar 1   |
|  | Wed, Mar 1  | Asgmt 13: Quadratic Functions and Synthetic Division<br>Quiz 5                    | Wed, Mar 8                 |
| Week 8   | Mon, Mar 6  | Review over Unit 2  |                            |
|  | Wed, Mar 8  | <b>Exam 2</b>   |                            |
| <b>Spring Break – March 13-17</b>                                  |             |   |                            |
| <b>Unit 3 – Polynomial, Exponential, and Logarithmic Functions</b> |             |   |                            |
| Week 9   | Mon, Mar 20 | Asgmt 14: Roots of Polynomials<br>Asgmt 15: Polynomial Functions and Their Graphs | Wed, Mar 22<br>Wed, Mar 22 |

|   |             |   |                            |
|---|-------------|---|----------------------------|
|   | Wed, Mar 22 | Asgmt 16: Rational Functions and Their Graphs<br>Quiz 6   | Wed, Mar 29                |
| Week 10   | Mon, Mar 27 | Asgmt 17: Polynomial and Rational Inequalities  | Wed, Mar 29                |
|   | Wed, Mar 29 | Asgmt 18: Exponential and Logarithmic Functions<br>Quiz 7   | Wed, Apr 5                 |
| Week 11   | Mon, Apr 3  | Asgmt 19: Properties of Logarithms  | Wed, Apr 5                 |
|   | Wed, Apr 5  | Asgmt 20: Exponential Equations<br>Asgmt 21: Logarithmic Equations<br>Quiz 8                                    | Wed, Apr 12<br>Wed, Apr 12 |
| Week 12   | Mon, Apr 10 | Review over Unit 3  |                            |
|   | Wed, Apr 12 | <b>Exam 3</b>   |                            |
| <b>Unit 4 – Systems of Equations and Inequalities, and Matrices</b> |             |   |                            |
| Week 13   | Mon, Apr 17 | Asgmt 22: 2x2 and 3x3 Systems of Equations  | Wed, Apr 19                |
|   | Wed, Apr 19 | Asgmt 23: Matrix Solutions to Systems<br>Quiz 9   | Wed, Apr 26                |
| Week 14   | Mon, Apr 24 | Asgmt 25: Nonlinear Systems and Systems of<br>Inequalities<br>Asgmt 26: Determinant's and Cramer's Rule         | Mon, May 1<br>Mon, May 1   |
|   | Wed, Apr 26 | Review over Unit 4<br>Quiz 10   |                            |
| Week 15   | Mon, May 1  | <b>Exam 4</b>   |                            |
|   | Wed, May 3  | Review for Comprehensive Final  |                            |
| Week 16   | Mon, May 8  | <b>Final Exam – The comprehensive final exam will<br/>be on Monday, May 8 from 10:15 a.m. to 12:15<br/>p.m.</b> | Final Review               |

***Note:** This schedule is tentative and may be altered as deemed necessary by the instructor. If there are any changes, they will be announced **in class and via a Blackboard announcement.***