### South Plains College Common Course Syllabus: College Algebra (MATH 1314) 8-Week Fall 2021

Department: Mathematics, Engineering, and Computer Science

**Discipline:** Mathematics

Course Number: MATH 1314

Section: 081 (hybrid)

Course Title: College Algebra

**Available Formats:** conventional/flex, internet, and ITV. This class is hybrid (partially face-to-face and partially Internet) class.

**Campuses:** Levelland, Reese, Plainview, Lubbock Center, and Dual Credit. This class will meet face-to-face on Tuesdays and Thursdays from 2:30-4:15pm in room 108 of the Math-Engineering building on the Levelland campus.

**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 TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in Intermediate Algebra (MATH 0320).

#### Credit: 3 Lecture: 3 Lab: 1

Instructor: Jay Driver Telephone: (806) 716-2780 Office: Math and Engineering building, office 114 Email: The instructor may be emailed through Blackboard or at jdriver@southplainscollege.edu.

**Email Policy:** All students at South Plains College are assigned a standardized SPC e-mail account. Although personal email addresses will continue to be collected, the assigned SPC e-mail account will be used as the official channel of communication for South Plains College. The Student Correspondence Policy can be found at www.southplainscollege.edu. To access the SPC student e-mail account, log in to portal.office.com. (Copied from SPC Student Guide) Since all students have an assigned SPC email, the instructor will only acknowledge, respond, and send emails to your assigned SPC email. This ensures all correspondence from the instructor is received by the intended recipient.

#### Virtual/Face-to-Face Office Hours:

- Mondays, 10:45-11:30am, 2:30-3:30pm.
- Tuesdays, 1:30-2:30pm.
- Wednesdays, 10:45-11:30am, 2:30-3:30pm.
- Thursdays, 1:30-2:30pm.
- Fridays, 9:00-11:30am.
- And by appointment (scheduled in Blackboard).

\*Office hours may be scheduled in Blackboard.

**Textbook:** A textbook is <u>not</u> required for this course; however, a recommended and freely available textbook for this course may be: College Algebra from OpenStax, Print ISBN 1938168380, Digital ISBN 1947172123, <u>www.openstax.org/details/college-algebra</u>

This textbook is also embedded in your Blackboard course for easier referencing. However, if you prefer a print copy as a reference tool, the ISBN is located at the web link above.

**Supplies:** You will need a scientific calculator and a small supply of graph paper. Graph paper is available in Blackboard. Calculators on cell phones, TI-89, TI-92, or TI-Inspire calculators, or any other electronic devices will <u>not</u> be allowed during testing. Make certain you have access to a scanner or scanning app such as CamScanner, Scannable, OneDrive, etc. in order to scan your practice exercises and quizzes for submitting through Blackboard. Since this course is partially online, make certain you have access to a computer and the Internet.

**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 <u>all</u> course materials can be accessed through Blackboard. Login at <u>https://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 No. (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to <u>blackboard@southplainscollege.edu</u> or by telephone to 806-716-2180.

**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:** Pre- and post-test exercises will be used to determine the extent of improvement that the student has gained during the semester.

Lessons and Assessments: The following is a sequential list of the lessons and assessments for this course.

- 1. Linear and Rational Equations
- 2. Complex Numbers and Quadratic Equations (part 1 of 2)
- 3. Quadratic Equations (part 2 of 2) and Radical Equations
- 4. Other Types of Equations

Assessment 1 (15%)

- 5. Linear and Absolute Value Inequalities
- 6. Functions and Their Graphs
- 7. Linear Functions and Slope
- 8. Distance, Midpoint, and Circles
- 9. Combinations, Compositions, and Inverse Functions

10. Quadratic Functions

Assessment 2 (20%)

- 11. Roots and Graphs of Polynomial Functions
- 12. Rational Functions and Their Graphs
- 13. Polynomial and Rational Inequalities
- 14. Exponential and Logarithmic Functions

Assessment 3 (20%)

- 15. Properties of Logarithms
- 16. Exponential and Logarithmic Equations
- 17. 2x2 and 3x3 Linear Systems
- 18. Matrix Solutions to Systems
- 19. Nonlinear Systems and Systems of Inequalities
- 20. Determinants and Cramer's Rule
- Assessment 4 (20%)

**Course Evaluation:** Each lesson listed above contains notes, videos, and exercises for the student to study. At the completion of each lesson, the student will complete and submit a set of practice exercises. Each set of practice exercises is based upon a larger group of assignment exercises in the lesson. After completing a unit of lessons as listed above, the student will complete an assessment (exam). Practice exercises and quizzes will count for 25% of the final course grade, while assessments (exams) count for 75% of the final grade. Expect twenty (20) sets of practice exercises, three (3) quizzes, and four (4) scheduled assessments (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%).

- Practice Exercises (20 sets) and Quizzes (3) = 25%
- Assessment 1 (covering Lessons 1-4) = 15%
- Assessment 2 (covering Lessons 5-10) = 20%
- Assessment 3 (covering Lessons 11-14) = 20%
- Assessment 4 (covering Lessons 15-20) = 20%

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

- login to Blackboard daily;
- watch the lecture videos and take notes on them;
- attend each class session face-to-face (Tuesdays/Thursdays, 2:30-4:15pm, room M108);
- practice the exercises in each lesson until you have full mastery of them;
- complete each set of practice exercises and submit them on time;
- complete each unit assessment (exam).

Attendance/Student Engagement Policy: Attendance and effort are the most important activities for success in this course. The instructor maintains records of the student's participation throughout the semester. The student will be allowed to miss up to three (3) classes. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion. If the student chooses to drop this class, the student should submit an online <u>Student Initiated Drop Form</u>. Students will not be required to obtain an instructor signature to drop; however, students should communicate with instructors or advisors prior to dropping any course.

#### **Practice Exercises Format and Policy:**

• After viewing each lesson, work through the assigned set of practice exercises until you fully understood the skills needed for the lesson. This set of practice exercises comes from a larger group of exercises in the lesson. Check your answers in Blackboard to make certain you are practicing the exercises correctly. If you need assistance, please schedule an appointment with your instructor as soon as possible. Appointments can be scheduled through Blackboard.

- Complete the set of practice exercises after <u>each</u> lesson. Submit the set of practice exercises in Blackboard as a <u>single pdf file</u>. (Pdf files can be generated easily using a scanner or many freely available phone apps, like CamScanner, Scannable, or OneDrive.)
- Make certain to complete and submit each set of practice exercises in the time provided. Late assignments will be accepted, but with a 20% deduction. All assignments are due no later than the close of the unit's assessment (exam). However, early submissions are welcomed!

Assessment Format and Policy: There are four (4) units of study in this course with an assessment at the end of each unit. <u>There are no makeup assessments</u>. The assessments are scheduled on specific dates (see course calendar). The student is allowed one-and-a-half (1½) hours to take each assessment. The assessments are paper-pencil and must be completed in the classroom. Make certain to plan ahead for each one.

## **SPC Tutors**

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: 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*). You will sign a statement at the end of each exam stating that the work is yours and that you received no outside help.

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 Syllabus Statement:** 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. Students who believe they have been exposed or may be COVID-19 positive, must contact Health Services, DeEtte Edens, BSN, RN at (806) 716-2376 or <u>dedens@southplainscollege.edu</u>.

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 smell

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: 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.

# **Tentative Course Calendar and Study Plan:** Below is a calendar view of when each practice exercise set and each assessment is due.

each assessment is due Monday	Tuesday	Wednesday	Thursday	Friday
Oct 25 (1 <sup>st</sup> day of the term) • Read course syllabus.	Oct 26 • Attend class (face-to- face) in M108.	Oct 27 • View/study Lesson 2.	Oct 28 • Attend class (face-to- face) in M108.	Oct 29 • View/study Lesson 3.
• View/study Lesson 1.	• Class will involve a course introduction and working exercises from Lesson 1.		• Class will involve working exercises from Lesson 2 and Quiz 1.	
Nov 1 • View/study Lesson 4.	<ul> <li>Nov 2</li> <li>Attend class (face-to-face) in M108.</li> <li>Class will involve working exercises from Lessons 3 and 4.</li> </ul>	<ul> <li>Nov 3</li> <li>Complete study preparations for Assessment 1</li> <li>Submit Assignments 1-4 in Blackboard by noon.</li> </ul>	Nov 4 • Attend class (face-to- face) in M108 and complete Assessment 1.	Nov 5 • View/study Lesson 5.
Nov 8 • View/study Lesson 6.	<ul> <li>Nov 9</li> <li>Attend class (face-to-face) in M108.</li> <li>Class will involve working exercises from Lessons 5 and 6.</li> <li>View/study Lesson 7.</li> </ul>	Nov 10 • View/study Lesson 8.	<ul> <li>Nov 11</li> <li>Attend class (face-to-face) in M108.</li> <li>Class will involve working exercises from Lessons 7 and 8 and Quiz 2.</li> </ul>	Nov 12 • View/study Lesson 9.
Nov 15 • View/study Lesson 10.	<ul> <li>Nov 16</li> <li>Attend class (face-to-face) in M108.</li> <li>Class will involve working exercises from Lessons 9 and 10.</li> </ul>	<ul> <li>Nov 17</li> <li>Complete study preparations for Assessment 2.</li> <li>Submit Assignments 5-10 in Blackboard by noon.</li> </ul>	Nov 18 • Attend class (face-to- face) in M108 and complete Assessment 2.	Nov 19 • View/study Lesson 11.
Nov 22 • View/study Lesson 12.	<ul> <li>Nov 23</li> <li>Attend class (face-to-face) in M108.</li> <li>Class will involve working exercises from Lessons 11 and 12.</li> </ul>	<ul> <li>Nov 24</li> <li>View/study Lesson</li> <li>13. SPC classes are not meeting on this day, but a study on your own of Lesson</li> <li>13 would be good.</li> </ul>	Nov 25 • Enjoy the Thanksgiving holiday!	Nov 26 • Continued SPC holiday.
Nov 29 • View/study Lesson 14.	<ul> <li>Nov 30</li> <li>Attend class (face-to-face) in M108.</li> <li>Class will involve working exercises from Lessons 13 and 14.</li> </ul>	<ul> <li>Dec 1</li> <li>Complete study preparations for Assessment 3.</li> <li>Submit Assignments 11-14 in Blackboard by noon.</li> </ul>	Dec 2 • Attend class (face-to- face) in M108 and complete Assessment 3.	Dec 3 View/study Lesson 15.
Dec 6 • View/study Lesson 16.	<ul> <li>Dec 7 <ul> <li>(Last day to drop a class at SPC)</li> <li>Attend class (face-to-face) in M108.</li> <li>Class will involve working exercises from Lessons 14, 15, and 16.</li> </ul> </li> </ul>	Dec 8 • View/study Lesson 17.	<ul> <li>Dec 9</li> <li>Attend class (face-to-face) in M108.</li> <li>Class will involve working exercises from Lesson 17 and Quiz 3.</li> <li>View/study Lesson 18.</li> </ul>	Dec 10 • View/study Lesson 19.
<ul> <li>Dec 13</li> <li>Lesson 21 practice exercises due by 8:00pm.</li> <li>View/study Lesson 20.</li> </ul>	<ul> <li>Dec 14</li> <li>Lesson 22 practice exercises due by 8:00pm.</li> <li>Class will involve work exercises from Lessons 18, 19, and 20.</li> </ul>	<ul> <li>Dec 15</li> <li>Complete study preparations for Assessment 4.</li> <li>Submit Assignments 15-20 in Blackboard by noon.</li> </ul>	Dec 16 • Attend class (face-to- face) in M108 and complete Assessment 4.	