South Plains College Common Course Syllabus: MATH 1314 Summer I 2023

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, Plainview, Lubbock Downtown 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

Supplies: Please see the instructor's course information sheet for specific supplies.

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.

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)

Cheating violations include, but are not limited to, the following:

- 1. Obtaining an examination by stealing or collusion;
- 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, guiz, 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.

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. (SPC General Catalog) Plagiarism and cheating are not tolerated in this course. Under the policies of South Plains College, punishment for cheating may include no credit (failing) on the assignment, quiz, exam, or the course.

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.

Other Policies:

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.

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.

Summer I 2023 Online College Algebra: Math 1314.151

Instructor	Traci Sanders	Phone	806-716-4616
E-mail	tsanders@southplainscollege.edu	Office	Downtown Center B021

Office Hours: I will not be having physical office hours this summer. If you would like to meet with me virtually, just send me an email letting me know what times are good for you, and we will schedule a zoom meeting. I will send you a zoom link once we schedule the time.

Communication: Email is the best way to get in touch with me. You can email me at tsanders@southplainscollege.edu. If you would like to email me from Blackboard without having to type in my address, there is an "Email" link in the main menu on the left side. I will do my best to respond to your email within 24 hours. When I post an announcement on Blackboard, the announcement will also be sent to your SPC email address. Please check your SPC email daily!

Academic coach: Jeffrey Fortner

Email: <u>infortner@southplainscollege.edu</u>

The Academic Coach will work directly with our class to create an inviting, engaging, and collaborative learning environment by tutoring, coaching, and mentoring students. The Academic Coach functions as a tutor, providing in-time tutoring services in a small group setting or one-on-one tutoring. He may also provide students with academic tips and skills for success in the academic setting.

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, 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

Text: No textbook is required.

Required Materials: computer access, good internet connection, printer, webcam, method of scanning, notebook paper, pencils, straightedge, scientific or graphing calculator (cell phones, smart watches, TI-89, TI-92, TI-Nspire calculators, or other electronic devices will not be allowed)

Blackboard: https://southplainscollege.blackboard.com

Blackboard is the online course management system that we will use for this course. For technical support, call 806-716-2180 or email blackboard@southplainscollege.edu.

Scanning Assignments: Your work will have to be scanned as a pdf file to be uploaded to Blackboard. There are many free mobile apps available for scanning. Some of these are the Notes App (on iPhones), OneDrive (free to SPC students), Scannable, and CamScanner. You do not have to use one of these, but please determine which app you want to use for scanning and then practice scanning multiple pages as one pdf file. The app will allow you to name the file and save it. When you upload to Blackboard, you will click on Browse Local Files and then find the file where you saved it.

Attendance: Your attendance is monitored through completion of assignments. If you miss 4 assignments, the instructor may withdraw you from the course with a grade of X. If you wish to drop this class, you should submit a **Student Initiated Drop Form** online. Students will not be required to obtain an instructor signature to drop, however, students should communicate with instructors or advisors prior to dropping a course when they are able.

Lesson Videos and Notes: There are videos and notes posted in Blackboard for each section. To find the videos and notes, click on the unit in the main menu and then the section. Print the notes. Watch the videos to fill in the notes and learn the material. On homework, quizzes, and tests, your work needs to follow the work in the videos. If your work does not follow the work in the videos, you will not receive credit.

Homework: There is a homework assignment posted in Blackboard for each section. Homework is located in the same folder as the videos and notes. Homework should be completed on notebook paper with work shown. The answers are given so that you can check your answers and make sure you are working the problems correctly. Homework is for practice only and will not count as a grade. The homework will help you prepare for quizzes and tests! Doing the homework is a key to success in this course, so make sure you are keeping up with the homework!

Quizzes: There will be 10 quizzes. The deadlines for the quizzes are given in the course calendar. You may turn in quizzes early. The lowest quiz grade will be dropped. The quizzes are located in Blackboard under the Quizzes link in the main menu. Click on the quiz link to open the quiz. The quizzes will be multiple choice, and you will click on your answer choice in Blackboard. Some of the problems will require work to be shown. For those problems, you will write down your work on notebook paper. All pages of your work will need to be scanned and saved as one pdf file and uploaded to Blackboard by clicking on the quiz work link and then Browse Local Files. Blackboard will show your unofficial quiz grade after you submit the quiz. I will grade your work. If you chose the correct answer in Blackboard, but your work is not correct, you will lose credit for that problem. The work needs to follow what I have taught in the videos. You are not allowed to use a math app to show you how to do the work! Once I have graded your work, then you will see your official quiz grade. You will be able to see which problems you missed once the deadline has passed. You are allowed to use notes and homework on the quizzes but no electronic devices other than a calculator. Quizzes are due at 11:59 pm. There will be NO MAKEUP QUIZZES!

Tests: There will be 3 tests and a comprehensive final exam. There will be **NO MAKEUP TESTS!** Dates for all tests are given in the course calendar, so **PLAN AHEAD!** Tests will open at 7:00 am and close at 11:59 pm. Once you begin the test, you will have two hours to complete it. You will be allowed one 8.5" by 11" sheet of notes (front only) on the tests. You will not be allowed any electronic devices other than a calculator. The tests will be found in Blackboard and proctored using an online proctoring program called Proctorio. The tests will be multiple choice with some problems that require work to be shown. For those problems, you will write down your work on notebook paper. All pages of your work will need to be scanned and saved as **one pdf file** and uploaded to Blackboard by clicking on the test work link and then Browse Local Files. Blackboard will show your unofficial test grade after you submit the test. I will grade your work. If you chose the correct answer in Blackboard, but your work is not correct, you will lose credit for that problem. Once I have graded your work, then you will see your official test grade. You will be able to see which problems you missed once the deadline has passed.

Proctorio: Proctorio is a program that will record you as you take your tests. You must use Chrome to take your tests, and you will need to download the Proctorio Chrome Extension. The instructions for downloading and using Proctorio will be posted in Blackboard. Proctorio requires a webcam. It can be an internal or external webcam.

Guidelines for using Proctorio:

• You must show your workspace. Your workspace is your desk area, not your face. You may have to slide your computer back so that the camera picks up your writing space.

- You must put your cell phone on the corner of your workspace in the camera view and you are not allowed to use it during the test. Your calculator and paper also need to be in camera view.
- You are not allowed to have another person in the camera view or talk to another person.
- You must show your ID right side up. It cannot be sideways or the computer will tag it.
- You must have good light so you and your workspace can be seen clearly.
- You are not allowed to move out of the camera view at any time during your test.
- Once you are finished with the test, BEFORE you hit submit, grab your cell phone and take pictures of your work using a mobile scanning app. Once you take the pictures, you are NOT allowed to write anything else on your paper.
- After you click submit, you have 15 minutes to upload your work to Blackboard.
- If any one of these guidelines are not followed, you will receive a zero on your test.

Grading Policy: Grades will be averaged according to the following percentages:

Quiz Average 10% Test Average 65% Final Exam 25%

There will be a category in the Blackboard gradebook titled Course Average. This is the number you should look at throughout the summer session to see your current average in the course.

Grading Scale:

A: 90 and above, B: 80 - 89, C: 70 - 79, D: 60 - 69, F: 59 or below

Course Calendar - Summer I 2023

This calendar is designed to help you stay on track and manage your time. I recommend that you start reviewing factoring before the course begins. I typed the section numbers in the calendar to give you a plan to follow. For each section, you will need to print the notes, watch the videos to fill in the notes, and complete the homework assignment. However, as long as you meet the deadlines, you do not have to complete all the sections on the day it is listed. You may need to use Saturdays to catch up or get ahead. All deadlines are firm and non-negotiable. Late work will not be accepted. You may turn in quizzes early, but tests must be done on the day shown on the calendar. More details about the assignments are found in the syllabus. Excellent time management is critical to successful course completion!

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
June 4	June 5	June 6	June 7	June 8	June 9
Factoring Review (Located in Unit 1)	Factoring Review Day One Checklist	Section 1.1	Section 1.2 Quiz 1: 1.1,1.2 Due 11:59pm	Sections 1.3 & 1.4	Section 1.5 Proctorio Practice Test Due
June 11	June 12	June 13	June 14	June 15	June 16
Quiz 2: 1.3,1.4 Due 11:59pm	Section 1.6	Test 1 Due 11:59pm	Section 2.1	Section 2.2 Quiz 3: 2.1,2.2 Due 11:59pm	Sections 2.3 & 2.4
June 18	June 19	June 20	June 21	June 22	June 23
Quiz 4: 2.3,2.4 Due 11:59pm	Sections 2.5 & 2.6	Section 2.7 Quiz 5: 2.5,2.6 Due 11:59pm	Test 2 Due 11:59pm	Section 3.1	Section 3.2
June 25	June 26	June 27	June 28	June 29	June 30
Quiz 6: 3.1,3.2 Due 11:59pm	Sections 3.3 & 3.4	Section 3.5 Quiz 7: 3.3,3.4 Due 11:59pm	Sections 4.1 & 4.2	Section 4.3 Quiz 8: 4.1,4.2 Due 11:59pm	Section 4.4 Quiz 9: 4.3,4.4 Due 11:59pm
				Last Day to Drop	
July 2	July 3	July 4	July 5	July 6	July 7
Test 3 Due 11:59pm	Section 5.1 Quiz 10: 5.1 Due 11:59pm	Independence Day Holiday	Sections 5.3 & 5.4	Study for Final	Final Exam Closes at 1:00pm

Section Titles

- 1.1 Linear & Absolute Value Equations
- 1.2 Linear Inequalities
- 1.3 Complex Numbers & Simplifying Radical Expressions
- 1.4 Quadratic Equations: Factoring & Square Root Property
- 1.5 Quadratic Equations: Complete the Square & Quadratic Formula
- 1.6 Rational Equations & Radical Equations
- 2.1 Distance, Midpoint, & Circles
- 2.2 Basics of Functions & Analyzing Graphs
- 2.3 Evaluating Functions & Symmetry
- 2.4 Increasing, Decreasing, & Piecewise Functions
- 2.5 Graphs & Transformations
- 2.6 Functions: Operations & Composition
- 2.7 Functions: Composition & Inverses
- 3.1 Linear Functions: Slope, Graph, Parallel, & Perpendicular
- 3.2 Graph Quadratic Functions
- 3.3 Synthetic Division & Polynomial Equations
- 3.4 Graph Polynomial Functions
- 3.5 Graph Rational Functions
- 4.1 Polynomial & Rational Inequalities
- 4.2 Exponential & Log Functions: Basics & Graphs
- 4.3 Properties of Logs
- 4.4 Exponential & Log Equations

- 5.1 Solve Systems in Two Variables & Three Variables
- 5.3 Solve Systems Using Matrices
- 5.4 Solve Systems Using Cramer's Rule

Unit 1: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6

Test 1 covers all the sections in Unit 1.

Unit 2: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7

Test 2 covers all the sections in Unit 2.

Unit 3: 3.1, 3.2, 3.3, 3.4, 3.5

Unit 4: 4.1, 4.2, 4.3, 4.4

Test 3 covers all sections in Units 3 and 4.

Unit 5: 5.1, 5.3, 5.4

The **final** covers 5.1, 5.3, and 5.4 as well as major topics from Units 1 - 4.