South Plains College Common Course Syllabus: MATH 1314 Revised December 2022

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, Downtown Center, Plainview 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

Textbook: College Algebra with Intermediate Algebra: A Blended Course, Beecher, Penna, Johnson, and Bittinger, 2018, 1st Edition, Prentice Hall/Pearson Education

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 <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.

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: <u>https://www.southplainscollege.edu/syllabusstatements/</u>.

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

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 semes

COURSE SPECIFIC INFORMATION FOR MATH 1314

Instructor: Phyllis Cormier Email: <u>pcormier@southplainscollege.edu</u> Office: Lubbock Downtown Center Rm B016 Phone: (806)716-2797

Office hours:

Monday	Tuesday	Wednesday	Thursday	Friday
	11:30 AM – 12:30	10:20 – 10:50 AM		9:00 – 11:30 AM
4:00 – 5:30 PM		4:00 – 5:30 PM	2:30 – 3:30 PM	

Office hours are times I have set aside to work with students on any questions they have about the class. Please use this time to improve your understanding of the material. Appointments may also be made to meet face-to-face or virtual. You may make an appointment through email, in person, or by calling. I will respond to emails within 24 hours. If I am in my office, feel free to stop by without an appointment.

Email: All students at South Plains College are assigned an SPC email account. Although personal email addresses will continue to be collected, the assigned SPC email account will be used as the official channel of communication for South Plains College. To access the SPC student email account, login to MySPC and click the SPC Google Mail option under Campus Bookmarks. Students should make it a habit to check their student email account frequently. (Copied from SPC Student Guide.)

Class Structure: The class will meet in person two days a week. If you must miss class for any reason, the notes and videos are provided for you on Blackboard.

Class Attendance: Attendance and effort are the keys to success in this class. 6 absences are allowed for the semester. If you exceed this number, you may be dropped from the course.

Assignments & Grading:

<u>Practice Problems</u>: Practice problems will be assigned each class day and will be due the following class day at 10:00 PM. Practice problems with the solutions are provided on Blackboard. **Show all work on notebook paper.** Scan your work as a single pdf and submit your work on Gradescope. Practice problems will count 10% of your grade. I will grade practice problems 70% for completion and 30% for correct work. I will grade 3 - 7 problems from each lesson to assess your understanding. Late work will be accepted for a reduced score.

<u>Quizzes:</u> Short in class quizzes will be given most class days. These will closely resemble the assigned practice problems. Answers are not provided for the quizzes. Questions may be asked about the practice problems before the quiz is distributed, but the quizzes are to be completed without assistance. Quizzes will be completed in class without apps or websites, but scientific calculators may be used. **Quizzes cannot be made up. Work must be shown to receive credit.**

<u>Exams</u>: There will be 4 exams and a comprehensive final exam. You may use a scientific or simple graphing calculator on the exams but calculators on cell phones or other electronic devices will not be permitted. Cell phones should be out of sight and not touched during exams. The use of any websites or apps during exams is considered cheating. You may not leave the room during a test. You may bring one sheet of notebook paper with formulas on one side only to use during the exam.

Make-up exams will be available only on rare and well-documented occasions. If you miss an exam for any reason, the final exam will take the place of the missed exam. If you miss two exams, you may be dropped from the course. If you know you will need to miss an exam, let me know before the exam so an alternate testing time can be arranged **before** the exam is taken in class. Comprehensive final exams are required. Students who do not take the final exam will receive a zero for the final exam grade.

You are responsible for completing practice problems, quizzes, and exams on time. Print out the course calendar and keep it with your other course material to help you keep up with deadlines.

Practice Problems	10%
Quizzes	20%
Exam 1	12.5%
Exam 2	12.5%
Exam 3	12.5%
Exam 4	12.5%
Final Exam	<u>20%</u>
Total	100%

Course Evaluation:

Grade Average	Final Grade
89.5 and above	A
79.5 – 89.4	В
69.5 - 79.4	С
59.5 - 69.4	D
59.4 and below	F

To maximize potential for successful completion of this course:

- Attend class prepared to work.
- Print notes provided on Blackboard and fill in examples during class.
- Complete all practice problems to the best of your ability.
- Ask questions on any problems that you had difficulties with.
- Rework the practice problems until you have mastered them.
- Organize all class material in a 3-ring binder.

Supplies:

- The textbook is optional. Practice problems and notes will be provided on Blackboard.
- scientific calculator or simple graphing calculator (TI-89, TI-Nspire, and calculators on cell phones are not allowed)
- pencils, notebook paper, 3-ring binder
- Computer or cell phone that you can use to check Blackboard and emails.
- Scanning app used to make pdfs of your work to submit on Gradescope. I recommend the Gradescope app.

Supplementary Course Information & Tutoring: 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 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 Number (found on SPC acceptance letter) Questions regarding Blackboard support may be emailed to <u>blackboard@southplainscollege.edu</u> or by telephone 806-716-2180.

Check Blackboard and your SPC email often for any updates. Additional study aids may also be added.

Academic Coach: Hanson Schmidt

Email: <u>hschmidt@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 during authorized tutoring sessions. 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, 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 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

For questions regarding tutoring, please email <u>tutoring@southplainscollege.edu</u> or call 806-716-2538.

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College Algebra MATH1314.608 Tentative Course Outline

Week	Dates	Lesson
1	Wed Jan 18 th	Assignment 0 - Review of Factoring
2	Mon Jan 23 rd	Assignment 1 – Linear and Rational Equations
	Wed Jan 25 th	Assignment 2 – Linear Applications
3	Mon Jan 30 th	Assignment 3 – Complex Numbers & Quadratic Equations
	Wed Feb 1 st	Assignment 4 – Quadratic Equations (continued)
4	Mon Feb 6 th	Assignment 5 – Other types of Equations
	Wed Feb 8 th	Assignment 6 – Linear & Absolute Value Inequalities with Review
5	Mon Feb 13 th	EXAM 1
	Wed Feb 15 th	Assignment 7 – Functions & Their Graphs
6	Mon Feb 20 th	Assignment 8 – Linear Functions
	Wed Feb 22 nd	Assignment 9 – Distance, Midpoint & Circles
7	Mon Feb 27 th	Assignment 10 – Composition and Inverse Functions
	Wed Mar 1 st	Assignment 11 – Quadratic Functions, Synthetic Division, and the
		Rational Root Theorem
8	Mon Mar 6 th	Review for Exam 2
	Wed Mar 8 th	EXAM 2
*	Mar $13^{th} - 17^{th}$	Spring Break
9	Mon Mar 20 th	Assignment 12 – Polynomial & Rational Inequalities
	Wed Mar 22 nd	Assignment 13 – Polynomial Functions and Their Graphs
10	Mon Mar 27 th	Assignment 14 – Rational Functions and Their Graphs
	Wed Mar 29 th	Assignment 15 – Exponential and Logarithmic Functions
11	Mon April 3 rd	Assignment 16 – Properties of Logs
	Wed April 5 th	Assignment 17 – Exponential and Logarithmic Equations
	Friday April 7 th	Easter break
12	Mon April 10 th	Assignment 18 - Review
		Online registration for Summer and Fall 2023 opens at 8:00 AM
	Wed April 12 th	EXAM 3
13	Mon April 17 th	Assignment 19 – 2x2 and 3x3 systems
	Wed April 19 th	Assignment 20 – Matrix Solutions
14	Mon April 24 th	Assignment 21 - Cramer's Rule
	Wed April 26 th	Assignment 22 – Nonlinear Systems and Systems of Inequalities
	Thurs April 27 th	Last day to drop Spring semester classes
15	Mon May 1 st	EXAM 4
	Wed May 3 rd	Review for Final exam
16	Wed May 10 th	Final Exam 10:15 – 12:15 Wednesday