# 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, hybrid, 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

**Textbook:** College Algebra with Intermediate Algebra: A Blended Course, Beecher, Penna, Johnson, and Bittinger, 2018, 1<sup>st</sup> 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 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.

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: Consistent with the latest CDC recommendations, we have revised our guidance for students, faculty, and staff who have a known exposure or have tested positive. Anyone with a known exposure should wear a mask for 10 days and should seek a COVID-19 test on day five after exposure. If you test positive or develop symptoms, you should immediately self-isolate and seek a COVID-19 test. Please immediately notify your instructor, supervisor, and DeEtte Edens, Associate Director of Health and Wellness, any time you test positive for COVID-19. Anyone who tests positive is required to self-isolate for five days. Following the five-day isolation period, if you are asymptomatic or your symptoms are resolving, you may return to work or class but should wear a mask for five additional days. If you are still symptomatic, please contact DeEtte Edens at dedens@southplainscollege.edu or 806-716-2376 prior to your return date.

**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 rcanon@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: <a href="http://www.southplainscollege.edu/campuscarry.php">http://www.southplainscollege.edu/campuscarry.php</a> 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.

#### **COURSE SPECIFIC INFORMATION FOR MATH 1314**

Instructor: Phyllis Cormier

Email: pcormier@southplainscollege.edu

Office: Reese Center, Building 2 Rm 223B Phone: (806)716-2797

#### Office hours:

Monday	Tuesday	Wednesday	Thursday	Friday
11:00 – 12:00PM		11:00 – 12:00 PM	10:30 - 11:00 AM	9:30 – 11:00 AM
				Virtual
2:30 – 3:00PM	2:30 – 5:30 PM	2:30 – 3:00 PM		

Face-to-Face office hours will be in my office, room 223B. Office hours are time 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:** This class will be conducted as a flipped classroom. That means you will need to take notes using the notes found on Blackboard and the video links that are provided in the notes, before you come to class. On Tuesdays, you need to be ready to discuss the assignment on the calendar for that day. You are also required to complete the Practice Problems before attending class. The class will meet in person only on Tuesday each week. During these face-to-face meetings, I will

answer and ask questions over the assigned topics and I will have you complete a lab during class. You may use your notes and practice problems to complete the lab.

**Class Attendance**: Attendance and effort are the keys to success in this class. 3 missed labs and 3 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 used as a study guide. Complete all practice problems to the best of your ability before class each day. Practice problems are on Blackboard with the solutions. Time will be given to ask questions each class day. You may turn in practice problems that correspond with one low or missed lab score for one grade replacement for each unit. These may be submitted on the day of the unit exam only. You will receive full credit for the low or missed lab for that unit if all work for all practice problems are shown in a neat and well-organized manner and all problems are attempted.

<u>Labs</u>: Labs consist of 5 -10 problems that will allow me to assess your understanding of the material. Answers are not provided for the labs. Labs will be completed in class without apps or websites but scientific calculators, notes, and practice problems may be used. Work must be shown to receive credit.

<u>Lab Grades</u>: Labs are worth 30% of your final grade. Questions may be asked about the practice problems before the lab is distributed, but the labs are to be completed without assistance. **Work must be shown to receive credit.** These will be completed during class and cannot be made up.

<u>Exams</u>: Four exams will be taken online through Blackboard with the Proctorio extension. You will need to download the Proctorio extension. Go to <a href="https://proctorio.com/support">https://proctorio.com/support</a>. Scroll down to the black button that says "Get set up now". Proctorio will lead you through the simple set up. It should take less than 5 minutes. We will use a Proctorio quiz so you can become familiar with using Proctorio. I will give you feedback on the quiz and allow you unlimited attempts to complete the quiz following the exam guidelines below.

### Online exam guidelines:

- 1. Sign on to Blackboard and navigate to the exam.
- 2. Proctorio will have you perform some checks on your computer and show your ID.
- 3. Proctorio records any websites visited during the exam.
- 4. Show all work on paper. You do not need to type the answers in the blanks.
- 5. Exams are to be completed without the use of outside resources.
- 6. No one should be with you while you are taking the exam.
- 7. Show your workspace. Your hands and paper should be visible on the video throughout the exam
- 8. Show your cell phone. It should also be visible throughout the exam but should not be touched until the end.
- 9. When you have completed the exam, use your cell phone to make a single pdf of your work and formula sheet. Do this while the timer is still running and the camera is showing you making the pdf.
- 10. Upload your work to Blackboard using the tab for exam work.
- 11. If anything happens, such as, you are kicked out of the exam, immediately email your work to me (even if it is incomplete) at <a href="mailto:pcormier@southplainscollege.edu">pcormier@southplainscollege.edu</a>. You must do this within 15 minutes of the test ending. If you were unable to complete the exam, include that explanation in the email with your work. I will try to resolve the problem quickly. Try to remain calm.
- 12. When you are finished, click submit on the exam.

13. Failure to follow these guidelines may result in a zero on the exam or being dropped from the course. I reserve the right to ask you to work any problem on the exam that you answered correctly.

You may use a scientific or graphing calculator on the exams but calculators on cell phones will not be permitted. Cell phones should be in view but not touched during exams. The use of any websites or apps during exams is considered cheating. You may use one sheet of notebook paper with formulas on one side only during the exam.

Make-up exams will not be offered. 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.

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

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

There will be 4 exams and a comprehensive final exam.

### **Determining Grades:**

Labs	30%
Exam 1	12.5%
Exam 2	12.5%
Exam 3	12.5%
Exam 4`	12.5%
Final Exam	<u>20%</u>
Total	100 %

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 before class using the video links in the notes.
- 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.
- Read objectives from each lesson and determine if you have mastered the topic to prepare for the exams.

### Supplies:

- The textbook is optional. Practice problems and notes will be provided on Blackboard. If you
  would like a book for reference, I recommend the following:
  - College Algebra with Intermediate Algebra: A Blended Course, Beecher, Penna, Johnson, and Bittinger, 2018, 1st Edition, Prentice Hall/Pearson Education
- scientific calculator (TI-30XIIS is an inexpensive option)
- pencils, notebook paper, 3-ring binder
- Computer or cell phone that you can use to check Blackboard and emails.

**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 <a href="http://southplainscollege.blackboard.com">http://southplainscollege.blackboard.com</a>. 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 <a href="mailto:blackboard@southplainscollege.edu">blackboard@southplainscollege.edu</a> or by telephone 806-716-2180.

Free tutoring is available through the college. Check Blackboard for additional information about tutoring.

College Algebra MATH1314.210 Tentative Course Outline

Week	Dates	Activity
1	Tuesday January 18 <sup>th</sup>	Getting started
	Due Friday January 21st at 11:59 PM	Proctorio quiz (This will count as the first lab grade)
2	Tuesday January 25 <sup>th</sup>	Assignment 1 – Linear and Rational Equations
		Assignment 2 – Linear Applications
3	Tuesday February 1st	Assignment 3 – Complex Numbers & Quadratic
		Equations
		Assignment 4 – Quadratic Equations (continued)
4	Tuesday February 8 <sup>th</sup>	Assignment 5 – Other types of Equations
		Assignment 6 – Linear & Absolute Value Inequalities
		with Review
	Due Friday February 11 <sup>th</sup> at 11:59 PM	EXAM 1
5	Tuesday February 15 <sup>th</sup>	Assignment 7 – Functions & Their Graphs
		Assignment 8 – Linear Functions
6	Tuesday February 22 <sup>nd</sup>	Assignment 9 – Distance, Midpoint & Circles
		Assignment 10 – Composition and Inverse Functions
7	Tuesday March 1 <sup>st</sup>	Assignment 11 – Quadratic Functions, Synthetic
		Division and the Rational Root Theorem
	Due Friday March 4th at 11:59 PM	EXAM 2
8	Tuesday March 8 <sup>th</sup>	Assignment 12 – Polynomial & Rational Inequalities
		Assignment 13 – Polynomial Functions and Their
		Graphs
Spring Break	Tuesday March 15 <sup>th</sup>	
9	Tuesday March 22 <sup>nd</sup>	Assignment 14 – Rational Functions and Their Graphs
10	Tuesday March 29 <sup>th</sup>	Assignment 15 – Exponential and Logarithmic
		Functions
		Assignment 16 – Properties of Logs
11	Tuesday April 5 <sup>th</sup>	Assignment 17 – Exponential and Logarithmic
		Equations
		Assignment 18 - Review
	Friday April 8 <sup>th</sup>	Online registration for Spring Interim, Summer, Fall 2022 opens at 8:00 AM
	Due Friday April 8 <sup>th</sup> at 11:59 PM	EXAM 3
12	Tuesday April 12 <sup>th</sup>	Assignment 19 – 2x2 and 3x3 systems
14	Tuesday April 12	Assignment 20 – Matrix Solutions
13	Tuesday April 19 <sup>th</sup>	Assignment 21 Cramer's Rule
14	Tuesday April 26 <sup>th</sup>	Assignment 22 – Nonlinear Systems and Systems of
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17	Tuesday Tipin 20	
14	-	Inequalities
17	Thursday April 28 <sup>th</sup>	
15	-	Inequalities Last day to drop Spring semester classes