### South Plains College Mathematics Department

#### College Algebra - MATH 1314.009 M/W 2:30-4:15

Course Syllabus – Spring 2022 – revised January 2022

**Instructor:** Karol Albus:

Office M110 Email: kalbus@southplainscollege.edu (preferred method of contact) Phone: (806)-716-2543

**Office hours:** As listed or by appointment.

Monday	Tuesday	Wednesday	Thursday	Friday
9:30-10:00 am	9:30-11:00 am	8:00-9:00 pm (Zoom)	By Appointment	9:00-12:00
1:00-2:30 pm	(Lev Office M110)			(Lev Office M110)
(Lev Office M110)				Most Fridays

**Disclaimer:** The instructor reserves the right to alter any class policies/dates as deemed necessary by the instructor, and will announce any changes in class.

**Use of Student Email:** The College provides a free, official email account to all students to ensure efficient and secure communications between you and the College. Students will be required to use their college-issued email address to communicate with their instructors and all other college personnel, so it is easy to distinguish a student's email from spam. The College expects that students will utilize their college email addresses to send and receive communications with college personnel and will read email on a frequent and consistent basis.

#### **Course Supplies:**

- NOTE: There is NO book required for this course. All materials are available on Blackboard.
- Required: Reliable Internet Access
- **Required:** Ability to print documents
- Required: Scientific Calculator. Suggested TI-30XIIS. They are inexpensive and user friendly.
- Graphing calculators are not allowed.
- Required: Large 3-ring binder, dividers, notebook paper, graph paper (available to print from blackboard), hole punch, pencils, and erasers.
- Printed Notes: No book is required, but notes will be posted on Blackboard and you will be expected to print them and complete them in class.
- **Optional:** The adopted textbook would only be used for a reference. We will not use it for coursework.

#### Assignments/Quizzes

- Homework will be assigned at each class. Work the problems early enough to seek help if needed.
- Notes/Homework are due at the beginning of the next class. Late homework will not be accepted. Absence = 0.
- Quizzes will be given most days. Make-up quizzes will not be given. Absence = 0.
- At the end of the semester the lowest 2 grades (assignment/quiz) will be dropped.
- All students will keep a binder which will be used as a reference and study guide.
- There is no "extra-credit" offered in this course.

#### Exams:

- 4 Unit Exams, and a Final Exam
- Final Exam is comprehensive and departmental. There are no exemptions for the final.
- If you are going to miss an exam contact your instructor immediately (preferably prior to the exam). Make up exams are very rare and only provided under extreme, documented circumstances.
- Once you begin an exam, you will not be able to leave the classroom until the exam is submitted for grading.

#### **Grading Formula:**

Enrollment in this course does not guarantee advancement to the next course level. The final responsibility for learning lies with the student. The final letter grade for this course will be based on the following:

4 Tests 15% each	.60%
Assignment/Quizzes	.20%
Final Exam	.20%

Final Grade Determination: A 90-100 B 80-89 C 70-79 D 60-69 F 59 or below

#### **Classroom Etiquette:**

- Preparation for class (including printing notes and completing homework) is to be done before (not during) the lecture.
- NO tobacco use of any form is allowed in the classroom.
- Discussion **of course material** among students is encouraged during class when it will not interfere with other students learning or concentrating.
- All electronic communication devices are to be silenced and put away during class.

#### **Resources:**

- Your instructor! I am available to you by Blackboard email, during Zoom office hours virtually, on campus during office hours, or by appointment. When asking a question via email, please take a photo or scan of the work you have done and attach that to your question. This will save so much time and will be much more beneficial to you. It is often as important to know what you are doing RIGHT as it is finding an error you may have made. Email me at kalbus@southplainscollege.edu.
- Blackboard The course syllabus, notes, lecture videos, assignments, and assignment answers, quizzes, quiz solutions, and reviews will all be available on Blackboard.
- SPC Tutors

Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! There are math tutors available in M116. 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

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

Withdrawal Policy: As required by Texas Education Code Section 51.907, all new students who enroll in a Texas public institution of higher education for the first time beginning with the 2007 fall semester and thereafter, are limited to six course drops throughout their entire undergraduate career. All course drops, including those initiated by students or faculty and any course a transfer student has dropped at another institution, automatically count toward the limit. After six grades of W are received, students must receive grades of A, B, C, D, or F in all courses. There are other exemptions from the six-drop limit and students should consult with a Counselor/Educational Planner before they drop courses to determine these exemptions. Students receiving financial aid must get in touch with the Financial Aid Office before withdrawing from a course. It is the student's responsibility to drop. Excessive absences will result in an administrative withdrawal with a Grade of X or F. If you plan to withdraw, please consult with the instructor immediately.

Note: The last day to drop with a grade of W is Thursday, April 28, 2022.

**South Plains College** 

Common Course Syllabus: MATH 1314

**Revised January 2021** 

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

**Discipline:** Mathematics

Course Number: MATH 1314

Course Title: College Algebra

Available Formats: conventional, 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 TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 0320.

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 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 email cgilster@southplainscollege.edu 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.

# College Algebra Tentative Course Outline - Spring 2022 MATH 1314.009 (M/W 2:30-4:15)

Week	Date	Date Lesson / Tentative Assignment	
1	Mon Jan 17	No class – Martin Luther King Holiday	
	Wed Jan 19	Introduction	
		Assignment 1.1: Linear & Rational Equations	
2	Mon Jan 24	Assignment 1.2: Linear Applications	Asgmt 1.1 Quiz 1.1
	Wed Jan 26	Assignment 1.3: Complex Numbers; Quadratic Equations Part 1	Asgmt 1.2 Quiz 1.2
3	Mon Jan 31 Assignment 1.4: Quadratic Equations Part 2, Radical Equations		Asgmt 1.3 Quiz 1.3
	Wed Feb 2	Assignment 1.5: Other Types of Equations; Linear and Absolute Value Inequalities	Asgmt 1.4 Quiz 1.4
4	Mon Feb 7	Feb 7 Unit 1 Review	
	Wed Feb 9	Unit 1 Exam (15%),	Unit 1 Review
5	Mon Feb 14	Mon Feb 14 Assignment 2.1: Function Notation and Graphs	
	Wed Feb 16	Assignment 2.2: Linear Functions and Slope	Asgmt 2.1 Quiz 2.1
6	Mon Feb 21 Assignment 2.3: Distance, Midpoint, & Circles,		Asgmt 2.2 Quiz 2.2
	W 1E 1 22	Combinations of Functions, Composite Functions	A +220-1-22
7	Wed Feb 23	Assignment 2.4: Inverse Functions, Quadratic Functions	Asgmt 2.3 Quiz 2.3
7	Mon Feb 28	Assignment 2.5: Long Division, Synthetic Division	Asgmt 2.4 Quiz 2.4
0	Wed Mar 2	Unit 2 Review	Asgmt 2.5 Quiz 2.5
8	Mon Mar 7	Unit 2 Exam (15%)	Unit 2 Review
	Wed Mar 9	Assignment 3.1: Polynomial Functions & Their Graphs, Roots of Polynomials	
	<i>Mar 14-18</i>	Spring Break	
9	Mon Mar 21	Assignment 3.2: Rational Functions & Their Graphs	Asgmt 3.1 Quiz 3.1
	Wed Mar 23	Assignment 3.3: Polynomial & Rational Inequalities	Asgmt 3.2 Quiz 3.2
10	Mon Mar 28	Mon Mar 28 Assignment 3.4: Exponential Functions; Logarithmic Functions	
	Wed Mar 30	Assignment 3.5: Properties of Logarithms	Asgmt 3.4 Quiz 3.4
11	Mon Apr 4 Assignment 3.6: Exponential & Logarithmic Equations		Asgmt 3.5 Quiz 3.5
	Wed Apr 6	Unit 3 Review	Asgmt 3.6 Quiz 3.6
12	Mon Apr 11	Unit 3 Exam (15%)	Unit 3 Review
	Wed Apr 13	Assignment 4.1: 2x2 Systems; 3x3 Systems	
	Apr 15	Easter Break – No Office Hours	
13	Mon Apr 18	Assignment 4.2: Nonlinear Systems; Graphing Inequalities & Systems of	Asgmt 4.1 Quiz 4.1
		Inequalities, Graphing Nonlinear Systems of Inequalities	
	Wed Apr 20	Assignment 4.3: Solving Systems of Equations by Gauss Jordan Elimination	Asgmt 4.2 Quiz 4.2
	<i>Apr 22</i>	Hosting Regional UIL – No Office Hours	
14	Mon Apr 25	fon Apr 25 Assignment 4.4: Solving Systems of Equations by Determinants & Cramer's Rule	
	Wed Apr 27 Unit 4 Review		Asgmt 4.4 Quiz 4.4
	Apr 28	Last day to drop a course	
15	Mon May 2	Unit 4 Exam (15%)	Unit 4 Review
	Wed May 4	Comprehensive Final Exam Review	
16	Mon May 9	MATH 1314.009 Final Exam (20%) 1:00-3:00	

## College Algebra Tentative Course Outline - Spring 2022 MATH 1314.013 (T/R 7:50-9:20)

Week	Date	Lesson / Tentative Assignment	What is Due?
1	Mon Jan 17	No class – Martin Luther King Holiday	
	Tues Jan 18	Introduction	
		Assignment 1.1: Linear & Rational Equations	
	Thurs Jan 20	Class to review any prerequisite skill	
2	Tues Jan 25	Assignment 1.2: Linear Applications	Asgmt 1.1 Quiz 1.1
	Thurs Jan 27	Assignment 1.3: Complex Numbers; Quadratic Equations Part 1	Asgmt 1.2 Quiz 1.2
3	Tues Feb 1	Assignment 1.4: Quadratic Equations Part 2, Radical Equations	Asgmt 1.3 Quiz 1.3
	Thurs Feb 3	Assignment 1.5: Other Types of Equations; Linear and Absolute Value Inequalities	Asgmt 1.4 Quiz 1.4
4	Tues Feb 8	Unit 1 Review	Asgmt 1.5 Quiz 1.5
	Thurs Feb 10	Unit 1 Exam (15%)	Unit 1 Review
5	Tues Feb 15	Assignment 2.1: Function Notation and Graphs	
	Thurs Feb 17	Assignment 2.2: Linear Functions and Slope	Asgmt 2.1 Quiz 2.1
6	Tues Feb 22	Assignment 2.3: Distance, Midpoint, & Circles,	Asgmt 2.2 Quiz 2.2
	TI - F 1 24	Combinations of Functions, Composite Functions	A +220-1-22
7	Thurs Feb 24	Assignment 2.4: Inverse Functions, Quadratic Functions	Asgmt 2.3 Quiz 2.3
7	Tues Mar 1	Assignment 2.5: Long Division, Synthetic Division	Asgmt 2.4 Quiz 2.4
0	Thurs Mar 3	Unit 2 Review	Asgmt 2.5 Quiz 2.5
8	Tues Mar 8	Unit 2 Exam (15%)	Unit 2 Review
	Thurs Mar 10	Assignment 3.1: Polynomial Functions & Their Graphs, Roots of Polynomials	
	<i>Mar 14-18</i>	Spring Break	
9	Tues Mar 22	Assignment 3.2: Rational Functions & Their Graphs	Asgmt 3.1 Quiz 3.1
	Thurs Mar 24	Assignment 3.3: Polynomial & Rational Inequalities	Asgmt 3.2 Quiz 3.2
10	Tues Mar 29	Assignment 3.4: Exponential Functions; Logarithmic Functions	Asgmt 3.3 Quiz 3.3
	Thurs Mar 31	Assignment 3.5: Properties of Logarithms	Asgmt 3.4 Quiz 3.4
11	Tues Apr 5	Assignment 3.6: Exponential & Logarithmic Equations	Asgmt 3.5 Quiz 3.5
	Thurs Apr 7	Unit 3 Review	Asgmt 3.6 Quiz 3.6
12	Tues Apr 12	Unit 3 Exam (15%)	Unit 3 Review
	Thurs Apr 14	Assignment 4.1: 2x2 Systems; 3x3 Systems	
	Apr 15	Easter Break – No Office Hours	
13	Tues Apr 19	Assignment 4.2: Nonlinear Systems; Graphing Inequalities & Systems of	Asgmt 4.1 Quiz 4.1
		Inequalities, Graphing Nonlinear Systems of Inequalities	
	Thurs Apr 21	Assignment 4.3: Solving Systems of Equations by Gauss Jordan Elimination	Asgmt 4.2 Quiz 4.2
	Apr 22	Hosting Regional UIL – No Office Hours	
14	Tues Apr 26	Assignment 4.4: Solving Systems of Equations by Determinants & Cramer's Rule	Asgmt 4.3 Quiz 4.3
	Thurs Apr 28	Unit 4 Review	Asgmt 4.4 Quiz 4.4
	Apr 28	Last day to drop a course	
15	Tues May 3	Unit 4 Exam (15%)	Unit 4 Review
	Thurs May 5	Comprehensive Final Exam Review	
16	Mon May 9	MATH 1314.009 Final Exam (20%) 1:00-3:00	