

Instructor: Evan Vargas

Office: AG107, Agriculture Building, Levelland Campus

Phone: (806) 716-4673

Email: <u>evargas@southplainscollege.edu</u> Office Hours on Levelland Campus: **M/W:** 4:30-5:15 – Reese, Building 2, 218

T/R: 11:00-12:15 **F:** 9:00-1:00 Or by Appointment

Mathematics 1314 - College Algebra

Section 004: Monday/Wednesday 11:00-12:45 AM Room: Agriculture 105, Levelland Campus

Course Information

Textbook College Algebra by OpenStax - https://openstax.org/details/books/college-algebra

Online Knewton - https://www.knewton.com/ Course Link - https://knerd.me/r792d9 Homework

Materials Pencils, erasers, paper, and scientific calculator

Description This is a standard course in college algebra. Quadratic equations; ratio and proportion; variation;

binomial theorem; inequalities; complex numbers; theory of equations; determinants and

matrices.

Purpose The purpose of the course is to provide a fundamental background in algebra to meet the

mathematics requirement for the core curriculum and to provide a basis for further study in

mathematics.

Requirements A student should attend all class sessions, take notes, participate in class, complete all homework

assignments, pass classroom quizzes, and pass all examinations.

Learning **Outcomes**

- 1. Demonstrate and apply knowledge of function properties, 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 roots of higher degree polynomial and rational functions
- 5. Recognize, solve, and apply systems of linear equations using matrices

Grading

Weights	Homework	10%	Grading Scale	90-100+	A
	Quiz	10%		80-89	В
	Exams (4)	15% each		70-79	C
	Final Exam	20%		60-69	D
	Total	100%		0-59	F

Homework

Homework is assigned online through Knewton. The homework enables students to receive feedback right away as they work through each assignment. Physical homework is not required to turn in. Each set of online homework assignments will be due the day of the corresponding Exam.

Quizzes

Quizzes will be given randomly and will contain material pertaining to the Homework and previous lecture material. Quizzes will not be made up if missed.

Exams

Exams will cover material from Homework, Quizzes, and Lectures as indicated by the course itinerary. Examinations will be a combination of open answer, fill in the box, and/or multiple choice. Students need only bring pencils, lead, and erasers. No other material will be required unless stated in class.

Cell phones, smart watches, tablets, computers, etc. **are not allowed** and students will be asked to remove their device(s) or leave the class. Students seen with and using unapproved devices will receive an automatic 0 for the exam and be dropped from the course at the instructor's discretion.

Final Exam

A **comprehensive** final exam will be given at the end of the semester. Failure to attempt the final exam will result in a failing grade for the course. The final exam will be given on **Monday December 9th, 2019 from 10:15-12:15 P.M.** Conflicting test schedules must be worked out with instructors.

Classroom Policies

Disclaimer

The instructor reserves the right to alter any class policies as deemed necessary by the instructor or South Plains College and will announce any changes in class. If a student has any questions about a change in policy, ask the instructor for clarification.

To successfully complete the course objectives, the students must already be prepared to factor algebraic expressions, reduce, add, subtract, multiply, divide, and simplify rational expressions, and simplify, add, subtract, multiply and divide exponential and radical expressions.

Class Cancellation In the event of the class being canceled by the school, the student will be responsible for the lecture material. The class will continue the calendar presented. All information needed will be on Blackboard and should be accessed by the student.

Attendance

Records of your attendance are maintained throughout the semester. Three absences, for any reason, are allotted to the student for the semester. Tardies count as one-half (1/2) of an absence. Tardies will be applied for consistently being late to class, as deemed by the instructor and leaving class early. If this number is exceeded, the instructor has the right to drop you with a grade of F or an X, depending on their discretion. You can seek temporary reinstatement within a week after being withdrawn, assuming the student submits their syllabus receipt, but you must withdraw yourself from the course via the Admission and Records Office within two days of reinstatement. In the latter case, you will receive a W or a U. After the two days have expired, the instructor has the right to drop you for a final time, after which there will be no reinstatement.

Final Grading

All grades are rounded from the tenths place, e.g. 80.5 = 81, 80.49 = 80. Upon the submission of grades at the end of the semester. **ALL GRADES ARE FINAL**

Email

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 MySPC and click the SPC Google Mail option under Campus Bookmarks.

(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.

Withdrawal

If you wish to withdraw from this class for any reason, you must initiate the appropriate steps on your own. To withdraw from this class, you will need to go to the Admissions and Records office either on the Levelland campus, the Reese Center campus, or the Lubbock Center, and fill out a drop notification form, and pay \$5. The drop form can be obtained online in MySPC, under the Student Forms and Tools link. Please be aware that SPC may not permit an undergraduate student to drop a total of more than six courses (including any course a transfer student has dropped at another institution of higher education) if the student enrolled in college for the first time during the Fall 2007 academic term or any term after the Fall 2007 term

Diversity Statement

In this class, the teacher will establish and support an environment that values and nurtures individual and group difference 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. (copied from current South Plains College Faculty Handbook)

Disabilities 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 Center 806-716-2577, Reese Center (also covers Lubbock Center) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529. (copied from current South Plains College Faculty Handbook)

Religious Holy Days

In accordance with Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the first fifteen (15) days of the semester (Monday, 17 September 2018) in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code. (copied from current South Plains College catalog)

Sexual Misconduct

As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Mr. Christopher Straface, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Mr. Straface at 716-2362 or

cstraface@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

Campus Concealed Carry

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, please refer to the SPC policy at:

http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.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.

Academic Honesty

You are expected to uphold the ideas of academic honesty. All work that is graded must be your own. This policy applies to all work attempted in this course. If this policy is violated via:

- Cheating: copying another student's exam/assignments, using unauthorized materials during exams, and/or allowing another individual to submit assignments on the student's behalf.
- Bribery: offering or accepting for an academic advantage.
- Misrepresentation: lying in an attempt to increase a grade or when confronted with allegations of academic dishonesty
- Plagiarism: Representing another person's work as your own without consent to the original owner's work and/or permission from the instructor.

If any of these items are violated, the student will receive an F for the assignment(s) and may be dropped from the class with an F at the instructor's discretion.

Equal Opportunity

South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability, or age.

Recording Devices

Students are not allowed to use recording devices such as audio or video during class unless approved by the instructor

Resources

Students may utilize free tutoring provided by SPC. Tutoring is available at all SPC campus locations. Please consult with the instructor for further information.

Non-Discriminatio n Statement

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.

Course Itinerary

Week 1	Aug. 26th	Introductions – Review of Basic Algebra
Week I	1145. 20	Linear Equations: Simplifying and Solving; Cartesian Coordinate System
	Aug. 28 th	
*** 1.0)	Graphing Linear Functions and Inequalities
Week 2	Sept. 2 nd	Holiday - No Class
	Sept. 4 th	Absolute Value Equations: Simplifying, Solving, and Graphing
Week 3	Sept. 9 th	System of Equations: 2 and 3 Variables
	Sept. 11 th	Graphing Systems of Equations in Two Variables and Inequalities; Function Notation
Week 4	Sept. 16 th	Examination 1; Homework #1 Due
	Sept. 18 th	Complex Numbers; Quadratic Equations: Factoring and Solving
Week 5	Sept. 23rd	Complete the Square and Quadratic Formula
	Sept. 25 th	Graphs of Quadratic Functions
Week 6	Sept. 30 th	Radical Equations: Simplifying, Solving, and Graphing with Inequalities
	Oct. 2 nd	Determining Inverse Functions; Circles
Week 7	Oct. 7 th	Examination 2; Homework #2 Due
	Oct. 9th	Polynomial Equations: Simplifying and Solving Techniques
Week 8	Oct. 14 th	Polynomial Division – Long and Synthetic Division
	Oct. 16 th	Graphing Polynomial Functions and Inequalities
Week 9	Oct. 21st	Rational Equations: Simplifying, Solving, and Inequalities
	Oct. 23rd	Graphing Rational Functions – Asymptotes and Discontinuities
Week 10	Oct. 28th	Examination 3; Homework #3 Due
	Oct. 30 th	Function Transformations: Exponential Functions: Properties and Solving
Week 11	Nov. 4th	Logarithm Functions: Properties and Solving
	Nov. 6th	Graphing Exponential and Logarithm Functions
Week 12	Nov. 11 th	Growth and Decay and Compound Interest; Piecewise Functions
	Nov. 13 th	Function Algebra and Composition of Functions
Week 13	Nov. 18th	Examination 4; Homework #4 Due
	Nov. 20th	Intro to Matrices: Determinants and Inverses
Week 14	Nov. 25 th	Row Operations; Gauss Elimination
	Nov. 27 th	Holiday - No Class
Week 15	Dec. 2 nd	Gauss Jordan Elimination; Cramer's Rule
	Dec. 4th	Final Exam Review; Homework #5 Due
Week 16	Dec. 9th	Final Exam: 10:15-12:15 PM
		l .