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, 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: It is the policy of South Plains College that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the SPC community. There will be no requirement for face coverings at any location on any South Plains College campus or classroom. Faculty, staff, or students may continue to wear a mask voluntarily, but there will be no requirements for face coverings in any circumstance. If you are experiencing any of the following symptoms please do not attend class and either seek medical attention or get tested for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea

- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at dedens@southplainscollege.edu or 806-716-2376.

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 activate 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 rcanon@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: http://www.southplainscollege.edu/campuscarry.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.

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.

SOUTH PLAINS COLLEGE

Course Information Sheet – MATH 1314.272 – Spring 2022

INSTRUCTOR: Ms. Jody Dean, B.S., M.S.
OFFICE: Rm #125G Lubbock Center **PHONE: (806) 716-4321**
E-MAIL: jdean@southplainscollege.edu
OFFICE HOURS: Monday & Wednesday 100 – 200,
Monday & Wednesday 400 - 500
Tuesday & Thursday 1200 – 100,
Friday 930 – 1230 —by appointment
and almost any time by appointment

Physical Textbook (Optional): College Algebra with Intermediate Algebra, A Blended Course, Beecher, Penna, Johnson, Bittinger. (2017). 1st ed . Pearson. ISBN for Book Only: 97801345556055. ISBN for Bundle (book plus MyMathLab access code): 9780134556017

Supplies (Required):

- MyMathLab access code: You can start with the 14-day free trial, then you can buy an access code to finish the semester. Purchase online from the publisher (usually $25 cheaper) or from SPC Bookstore. MyMathLab includes access to electronic version of textbook. Registration and purchase instructions are posted on Blackboard.
- Calculator with a log function that is NOT your phone and NOT a TI-89 nor a TI-Nspire.

Technology Required:

Working, reliable internet access
Access to your SPC email.
Access to our Blackboard class. Login at http://southplainscollege.blackboard.com
MyMathLab website – login through Blackboard
Gradescope.com website – login through Blackboard
Computer, laptop, or tablet for accessing and completing assignments.

Course Requirements: To maximize the potential to successfully complete this course, a student should spend 10-15 hours per week for the 15 weeks of our semester doing the following:

- login to Blackboard at least three days a week, use the MyMathLab link to login to MML to read the required textbook sections, watch the required lecture videos and take notes, thoroughly complete all homework assignments, and prepare well for examinations.
- Attend all class meetings and be prepared to ask your questions and take notes.
- Additionally, students are expected to check their SPC school email **daily** and respond to email communications promptly. **If you don't normally check your SPC email, make sure to set up your SPC account to forward mail to an account you do check.**

Contacting Your Instructor: I am available by phone or face-to-face visit in my office on the Lubbock Center campus during my posted office hours; you can email me at any time.

Learning Materials/Activities: To be successful in this course, you will use the following materials and complete the given activities for each section of the textbook that we will cover.

- Textbook reading – Read the section in your textbook, whether you use a physical book or the eText inside MyMathLab. As you read, you should write notes on any new vocabulary words (usually in boldface type), formulas, theorems, and calculator commands. The reading may be your first introduction to the concepts.
- Homework assignment – Homework assignments for each section will be posted in MyMathLab under the Assignments button and will contain questions that may be multiple choice or fill-in-the-blank, but are primarily open-ended questions for problems that you work out. The questions generally give you 3 chances to get the question right before marking the problem wrong. You will then have access to a Similar Question button that will give you a new question and 3 more chances to get the question right. You have unlimited attempts on homework questions, so if you are persistent, do your work on time, and learn from your mistakes, you can earn 100% on all homework assignments. Also, every homework question has a Question Help button in the top right corner that will walk you through the solution, show you a similar example, link to the textbook section, sometimes links to a video example, or gives you a button to Ask My Instructor which sends me an email with your question. The purpose of homework is to practice, practice, practice! This is where you actually are learning the concepts, not just watching someone else work problems. If you have to use the Question Help to work a problem, be sure to use the Similar Question button to work it again (and again!) until you can do the problems on your own.

Course Evaluation:

Exams:

- 4 Exams. (see the schedule below for test days and times).
- The Final Exam is comprehensive.
- Exams will be conducted in person. ***You must be in the room to take an exam***, not online.
- There are no exemptions for the final.
- If you are going to miss an exam, contact your instructor immediately. Make up exams are very rare and only provided under extreme, documented circumstances. I do allow you to take the exam early under some circumstances. Just talk to me.
- If your grade on your final exam is higher than one of the unit tests, I will replace that unit test grade with your final exam grade.

GRADING: Your grade will be calculated as follows. A test average (TA) will be found by averaging all the exam grades with the final exam counting twice. Then, the test average will be averaged with your online quiz grade to give your overall average. That is:

(Exam1+Exam2+Exam3+Exam4+2*Final Exam)/6 = TA
[(TA*.60) + (HW*.40)]/2 = Overall Average.

There are **NO MAKE-UP** exams, quizzes or classroom exercises. Final grades will be assigned on the following scale: **A** 90%-100%; **B** 80%-89%; **C** 70%-79%; **D** 60%-69%; **F** below 60% A grade of C (70) or better is required to advance to the next course. Although your grade in this course will not be used in calculating your GPA, your grade is used to determine academic status for financial aid. *This course and its grade will be recorded on your official transcript.*

Something to note, my standard policy is **NO NAME = NO GRADE**. Similarly, **HALF THE NAME = HALF THE GRADE.** There are no exceptions to this rule.

Daily Health Screening: It is critical that you honestly self-screen and STAY HOME if you are experiencing any of the following: fever, cough, chills, muscle pain, shortness of breath or difficulty breathing, new loss of taste or smell, or a sore throat. CONTACT ME if you are having any health issues that interfere with coming to class, taking your exams, or completing other assignments on time.

Cellphones: To limit disruptions to the class and distractions to yourself, please put your cellphone on silent mode or airplane mode. If you feel a call is an emergency that you must answer, please take the phone out in the hall before answering to minimize the disruption to the class. If you feel you must leave class, please do so as quietly as possible.

COURSE OUTLINE / CALENDAR*

* Assignments and deadlines are subject to change at instructor's discretion, and all changes will be announced in class and posted in MyMathLab.

	Content	
	Syllabus; Readiness Assessment; & Graphs, Functions, and Applications (Part 1) • Syllabus Overview, Factoring Review, and Readiness Assessment • 2.2 Functions and Graphs • 2.3 Finding Domain and Range	
	Graphs, Functions, and Applications (Part 2) & Polynomials and Polynomial Functions • 2.4 The Algebra of Functions • 2.7 Finding Equations of Lines; Applications • 4.8 Applications of Polynomial Functions and Equations	
	Rational Expressions, Equations, and Functions & Radical Expressions, Equations, and Functions (Part 1) • 5.5 Solving Rational Equations • 5.6 Applications and Proportions • 5.7 Formulas and Applications • 6.6 Solving Radical Equations	
	Radical Expressions, Equations, and Functions (Part 2) & Review for Exam I • 6.8 Increasing, Decreasing, and Piecewise Functions; Applications • Review for Exam I	
	Exam I & Quadratic Functions and Equations (Part 1) • **Exam I** (Chapters 2, 4, 5, 6) • 7.1 Symmetry • 7.3 The Complex Numbers	
	Quadratic Functions and Equations (Part 2) • 7.2 Transformations • 7.4 Quadratic Equations, Functions, Zeros, and Models	

	Content	
	• 7.5 Analyzing Graphs of Quadratic Functions	
	Polynomial Functions and Rational Functions (Part 1) • 8.1 Polynomial Functions and Models • 8.2 Graphing Polynomial Functions • 8.3 Polynomial Division; The Remainder Theorem and the Factor Theorem • 8.4 Theorems about Zeros of Polynomial Functions	
	Polynomial Functions and Rational Functions (Part 2) • 8.5 Rational Functions • 8.6 Polynomial Inequalities and Rational Inequalities	
	Review & Exam II • Review for Exam II • **Exam II** (Chapters 7 & 8)	
	Exponential Functions and Logarithmic Functions (Part 1) • 9.1 The Composition of Functions • 9.2 Inverse Functions • 9.3 Exponential Functions and Graphs	
	Exponential Functions and Logarithmic Functions (Part 2) • 9.4 Logarithmic Functions and Graphs • 9.5 Properties of Logarithmic Functions	
	Exponential Functions and Logarithmic Functions (Part 3) & Review for Exam 3 • 9.6 Solving Exponential Equations and Logarithmic Equations • Review for Exam 3	

	Exponential Functions and Logarithmic Functions (Part 4) & Matrices (Part 1) • 9.7 Applications and Models: Growth and Decay; Compound Interest • 10.1 Matrices and Systems of Equations	
	Matrices (Part 2)& Review for Final Exam • 10.4 Determinants and Cramer's Rule • Review for Final Exam	
	Comprehensive Final Exam • **Monday, May 9th, 10:15 AM – 12:15 PM**	

* Assignments and deadlines are subject to change at instructor's discretion, and all changes will be announced in class and posted in Blackboard.