**South Plains College**
**Common Course Syllabus: MATH 1314**
**Revised August 2020**

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

**Discipline:** Mathematics

**Course Number:** MATH 1314

**Course Title:** College Algebra

**Available Formats:**  conventional/flex, 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 effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed to miss twenty percent (20%) of class assignments for the semester, *for any reason*. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion.

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:** Should be provided by the Vice-President of Student Services over email.

**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 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: 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.

**Mathematics 1314 – College Algebra**
**Section 206**: Monday/Wednesday 1:00 PM – 2:45 PM
**Room:** Building 2, Room 229, Reese Campus

**Instructor:** Mr. Evan Vargas

**Email:** evargas@southplainscollege.edu

**Office:** Math Building, M101, Levelland Campus

**Phone:** (806) 716-4673

**Office Hours**

| | | |
|---|---|---|
| **M-R:** | 10:40 AM-10:55 AM | **[TA209A]** |
| **M/W:** | 11:00 AM – 11:30 AM | **[M101]** |
| **M:** | 2:45 PM – 5:20 PM | **[Reese: 229]** |
| **W:** | 2:45 PM – 3:00 PM | **[Reese: 229]** |
| **F:** | 9:00 AM – 12:00 PM | **[M101]** |

## Course Information

**Textbooks**      *College Algebra with Intermediate Algebra: A Blended Course*, Beecher, Penna Johnson and Bittinger. **ISBN-13: 9780134555263 (Textbook is NOT required)**

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

**My Math Lab**      My Math Lab Code from the Bookstore OR purchase online **- Required**

**Materials**      Pencils, erasers, paper, and *basic* calculator

## Grading Policy

**Grading Scale:**

| | | | | | |
|---|---|---|---|---|---|
| 90-100 | **A** | **Weights:** | Homework | 10% |
| 80-89 | **B** | | Quiz | 10% |
| 70-79 | **C** | | Exams (4) | 15% each |
| 60-69 | **D** | | Final Exam | 20% |
| 0-59 | **F** | | **Total** | **100%** |

**Online Homework**      Homework is assigned online through My Math Lab. The homework enables students to receive feedback immediately as progress is made through each assignment.
- Physical homework is not required to turn in.
- Students have unlimited attempts before the due date without penalty.
- Homework assignments cannot be made up after the due date.

**Quiz**      Quizzes are assigned in class and contain material pertaining to Homework Assignments and Lectures.
- Make-up quizzes are not given under any circumstances. Please contact if an emergency occurs.

**Exams**      Exams are scheduled in-class. Each exam will cover material from Homework, Quizzes, and Lectures.
- You will have the entire class period to complete each Exam.
- Exams will contain a combination of open answer, fill in the blank, and True/False problems.
- Refer to the Calendar for each Exam date.
- The Final Exam is comprehensive. **Wednesday, May 11ᵗʰ, 10:15 AM – 12:15 PM**
  - Failure to attempt the Final Exam will result in a failing grade for the course.
  - The Final Exam will replace one (1) missed Exam or your lowest scored Exam.

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| **Extra Credit** | Extra credit is offered for Homework, Quiz, and Exams: |

- 10% Extra credit for completing all Review Homework Assignments on Pearson
- 10% Extra credit on each Quiz Assignment as a Bonus
- 10% Extra credit on each Examination as a Bonus
- 10% Extra credit on the Final Examination as a Bonus

## Class Policies

### Attendance 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 submit at least eighty percent (80%) of the class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor can remove the student from the class with an X or F upon their discretion.

### Pearson – My Math Lab
Students are expected to purchase Pearson's My Math Lab either from the Levelland/Reese bookstore OR online on the Pearson website. It is a **required** course material item, without obtaining access to the online software the student will be removed from the course. **The textbook is not required.** A free-trial access code is offered by Pearson if the student needs extra time to purchase the software. Students must have full access to the software by the second week of class or risk being removed from the course. Instructions can be found here, chose the Blackboard Learn option for Handout (PDF), Handout (Word), or Video.

### Additional Support
Supplemental material for this class is available in online instructional videos and an open educational resource (OER) textbook.

- Online instructional videos are provided to the student via Blackboard located in each week's folder.
- A free, online textbook, is available for online viewing or digital download.

SPC also offers **free tutoring**. This information is located here.

### Office Hours
Office hours will be held at the listed times or virtually. Virtual office hours will be held using Zoom. Please make an appointment here to ensure time availability.

### South Plains College Email Policy
The instructor will only acknowledge, respond, and send emails to the student assigned South Plains College email. This ensures the intended recipient receives all correspondence from the instructor. It is the students' responsibility to have their email set up and ready to use by the end of the first week of class.

### Drop/Withdrawal
Students should submit a Student Initiated Drop Form online to drop from the course. An instructor signature is not required. If the student wishes to withdraw from this or more courses, the student needs to contact the Advising Office.

### 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.

**Course Calendar**

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|---|---|---|
| **Week 1** | Jan. 17 | Review Basic Algebra; Solving Linear Equations and Inequalities |
| | Jan. 19 | Functions: Domain, Range, Intercepts; Graphing Lines and Linear Functions |
| **Week 2** | Jan. 24 | Graphing Parallel and Perpendicular Lines; Solving Absolute Value Equations |
| | Jan. 26 | Absolute Value Inequalities, Graphing Absolute Value Functions. |
| **Week 3** | Jan. 31 | System of Equations: 2 Variables & 3 Variables: Substitution and Elimination |
| | Feb. 2 | Graphing Systems of Equations and Linear Inequalities; **Exam 1 Review** |
| **Week 4** | Feb. 7 | **February 7th : Examination 1** |
| | Feb. 9 | Complex Number Algebra; Factoring and Solving Quadratic Equations |
| **Week 5** | Feb. 14 | Solving Quadratics using AC Method and Complete the Square |
| | Feb. 16 | Graphing Quadratic Functions with Inequalities; Radical Algebra and Simplifying |
| **Week 6** | Feb. 21 | Solving Radical Equations; Graphing Radical Functions |
| | Feb. 23 | Function Algebra and Composition |
| **Week 7** | Feb. 28 | Circle Equations and Graphing; **Exam 2 Review** |
| | Mar. 2 | **March 2nd : Examination 2** |
| **Week 8** | Mar. 7 | Polynomial Algebra and Simplifying; Solving Factored Polynomials |
| | Mar. 9 | Long and Synthetic Division of Polynomials |
| Mar. 14 – Mar. 18 | | **Spring Break** |
| **Week 9** | Mar. 21 | Graphing Polynomial Functions |
| | Mar. 23 | Rational Algebra and Simplifying; Solving Rational Equations |
| **Week 10** | Mar. 28 | Graphing Rational Functions; Piecewise Functions |
| | Mar. 30 | Inverse Functions; **Exam 3 Review** |
| **Week 11** | Apr. 4 | **April 4th : Examination 3** |
| | Apr. 6 | Exponential Properties and Solving Exponential Equations; Logarithm Properties |
| **Week 12** | Apr. 11 | Solving Logarithm Equations; Log to Exponent Relationships; Solving Uncommon Bases |
| | Apr. 13 | Function Transformations; Graphing Exponential Functions |
| **Week 13** | Apr. 18 | Graphing Logarithm Functions; Exponential and Logarithm Applications |
| | Apr. 20 | Intro to Matrices; Solving with Gauss and Gauss-Jordan Elimination |
| **Week 14** | Apr. 25 | Inverse Matrices and Determinants; Cramer's Rule; **Exam 4 Review** |
| | Apr. 27 | **April 27th : Examination 4** |
| **Week 15** | May 2 | Partial Fraction Decomposition |
| | May 4 | **Final Examination Review** |
| **Week 16** | **May 11** | **Final Examination: 10:15 AM – 12:15 PM** |