

South Plains College
Common Course Syllabus: MATH 0314
Revised August 2020

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0314

Course Title: College Algebra Support Course

Available Formats: conventional/flex and internet

Campuses: Levelland, Reese, Plainview, Lubbock Center

Course Description: Math 0314 is to be taken concurrently with MATH 1314. Background topics which are necessary for a student to successfully complete MATH 1314 will be covered, with an emphasis on fractions, factoring polynomials, functions, exponents, and operating with radical and rational expressions.

Prerequisite: Minimum score of 340 on the TSIA, or a successful completion with a grade of ‘C’ or better in MATH 0315.

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: None

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: It is the policy of South Plains College for the Fall 2020 semester 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. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings while in SPC buildings including in classrooms, labs, hallways, and restrooms. Failure to comply with this policy may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Dean of Students on the Levelland campus or the Dean/Director of external centers for Student Code of Conduct Violation.

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.

**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:

6. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
7. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
8. Apply graphing techniques.
9. Evaluate all roots of higher degree polynomial and rational functions.
10. Recognize, solve and apply systems of linear equations using matrices.

South Plains College
 Department of Mathematics and Engineering
 College Algebra with Support – MATH 0314.C001, MATH 1314.C001
 Fall 2020 Course Policies

Instructors:

Karol Albus

Office: M110, Telephone: (806) 716-2543, Email: kalbus@southplainscollege.edu

Office Hours: As listed or by appointment.

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--|--|------------------------------------|------------------------------------|--|
| 9:30-10:30 (Levelland office M110) | 8:00-10:00 (Levelland office M110) | 9:30-10:30 (virtual using zoom) | 8:00-10:00 (virtual using zoom) | 8:00-10:00 (Levelland office M110) |

Kaylan K Thompson

Office: M111, Telephone: (806) 716-4886, Email: kthompson@southplainscollege.edu

Office Hours: As listed or by appointment.

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|--|---|
| 12:00 pm – 2:30 pm (Levelland office M111 and virtual using zoom) | 9:30 am – 10:00 am (Levelland office M111 only, no virtual hours during this time) 1:00 pm – 2:00 pm (Levelland office M111 and virtual using zoom) | 10:00 am – 11:00 am (virtual using zoom) | 9:30 am – 10:00 am (Levelland office M111 only, no virtual hours during this time) 12:30 pm – 1:30 pm (Levelland office M111 and virtual using zoom) | 1:00 pm – 2:30 pm (virtual using zoom) |

Supplies: You will need a large 3-ring binder, dividers, notebook paper, graph paper, a 3-hole punch, and pencils with an eraser. You will be allowed to use a scientific calculator most of the time. Phone/tablet and graphing calculators will not be allowed in class. Do not expect instructors to loan you supplies. You will need reliable internet service, a way to print documents, a way to scan and upload documents and a device with the capability to participate in a zoom meeting with video and audio.

Course Requirements: To maximize the potential to complete this course, a student should attend all class and laboratory meetings, take notes and participate in class, complete all homework assignments and examinations including final examinations.

Hybrid Class: Half of our class time is allotted to online learning. During our face-to-face meetings, you will be assessed over the material covered since the last quiz. All exams will be face-to-face. It is your responsibility to print notes, view videos and complete homework on a daily basis. Monday and Wednesday's lessons will be taught online in a video format. Tuesday and Thursday's lessons will be taught during the face-to-face class. All assignments must be printed, completed in a paper/pencil format, scanned and uploaded as a PDF into Blackboard.

Grading Policy:

Homework/Quizzes/Lab Assignments 10%

7 Unit Exams 70%

Final Exam 20%

Homework/Quizzes/Lab Assignments/Binder Checks:

- Each homework assignment must be submitted through Blackboard as a SINGLE PDF document. Work the problems early enough to seek help if needed. You should expect to spend as much time outside of class as you do in class practicing homework problems and studying. Absolutely no late homework assignments will be accepted.

- Quizzes will be given during almost all class periods to demonstrate that you have practiced the skills from the previous class/classes. Make-up quizzes will not be given and a zero will be given.
- Periodically, lab assignments will be given, completed, and turned in during a class period. If absent, a zero will be given.
- All students will keep a binder which will be used as a reference and study guide. Your binder should be brought to class every day! Neatness and organization of a 3-ring binder are important.

Exams: There will be 7 unit exams given and a comprehensive final. Dates for the exams are on the course calendar. If for any reason you are going to miss an exam, you must contact us PRIOR to class time. Make-up exams will be given at the discretion of the instructor. Once you begin an exam, you will not be able to leave the classroom until the exam is submitted for grading. If classes are moved to an online format, exams will be videoed.

Grading Scale:

MATH 0314: A 90-100 B 80-89 C 70-79 D 65-69 F below 65

MATH 1314: A 90-100 B 80-89 C 70-79 D 60-69 F below 60

If you make a grade of A, B, or C then that is the grade you will be awarded for both halves of the course.

However, if you COMPLETE THE COURSE and make a grade of D or F in 1314, then your grade for the 0314 course will be assessed at your instructor's discretion. If you pass MATH 0314 but not the MATH 1314 portion of the course, you will be able to register for MATH 1314 in future semesters.

Student Responsibilities and Expectations:

1. Read the syllabus.
2. Check your email.
3. Come to class on time and prepared to learn. (Pencils, homework, notebook, calculator)
4. Print the necessary notes and assignments.
5. Take notes, participate in class, and complete course assignments early enough to seek help if needed.
6. Food and drink are not allowed in class, with the exception of bottled water.
7. Cell phones and any other electronic devices must be silenced and put away before entering the classroom. The only use of these devices will be to scan and turn in work. Other use of these devices during class will result in a zero for that day's quiz, homework, or exam.

Resources:

- Blackboard is the online course management system that will be used for this course. The course syllabus, handouts for notes, reviews, as well as any other class handouts can be accessed through Blackboard. Your grades will also be posted there. You will want to check Blackboard regularly.
- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted by the door of M116 and I will also post them on Blackboard.
- We are available to help you! Feel free to come by during our office hours or email us at kalbus@southplainscollege.edu or kthompson@southplainscollege.edu .

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 instructor 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.

| Date | Topic | Notes, Assignment |
|-------------|---|---|
| Aug 25 - T | Course Introduction/ Integers, Fraction Multiplication & Division | Notes P1, Assignment P1 |
| Aug 26 - W | Fraction Addition & Subtraction, Order of Operations | Notes P2, Assignment P2 |
| Aug 27 - R | Solving Linear and Absolute Value Equations | Notes 1, Assignment 1 |
| Aug 31 – M | Solving Linear and Absolute Value Inequalities | Notes 2, Assignment 2 |
| Sept 1 – T | Polynomials: Exponent Rules | Notes 3, Assignment 3 |
| Sept 2 - W | Polynomials: Add, Subtract & Multiply Factoring: GCF, Trinomials with a Coefficient of 1 | Notes 4, Assignment 4 Factoring Flowchart/Tips |
| Sept 3 – R | Factoring: Trinomials, Grouping & Special Products | Notes 5, Assignment 5 Chart of Squares and Cubes |
| Sept 7 - M | <i>Labor Day Holiday – no class</i> | |
| Sept 8 – T | Summary of Factoring/ Solving by Factoring | Notes 6, Assignment 6 |
| Sept 9 – W | Review 1 | Review 1 |
| Sept 10 – R | Exam 1 | |
| Sept 14 – M | Multiply and Divide Rational Expressions | Notes 7, Assignment 7 |
| Sept 15 - T | Add and Subtract Rational Expressions | Notes 8, Assignment 8 |
| Sept 16 - W | Add and Subtract Rational Expressions | Assignment 8B |
| Sept 17 - R | Multiply, Divide, Add & Subtract Rational Expressions | Notes 9, Assignment 9 |
| Sept 21 – M | Solving Rational Equations | Notes 10, Assignment 10 |
| Sept 22 - T | Review 2 | Review 2 |
| Sept 23 - W | Continue Review | |
| Sept 24 - R | Exam 2 | |
| Sept 28 – M | Simplifying Radicals/Rational Exponents | Notes 11, Assignment 11 |
| Sept 29 - T | Add, Subtract & Multiply Radicals | Notes 12, Assignment 12 |
| Sept 30 - W | Rationalizing Radical Expressions & The Complex Number System Part 1 | Notes 13, Assignment 13 |
| Oct 1 - R | The Complex Number System Part 2 & Solving Radical Equations Part 1/Begin Review 3 | Notes 14, Assignment 14 Review 3 |
| Oct 5 - M | Solving Radical Equations Part 2/ Complete Review 3 | Notes 15, Assignment 15 Complete Review 3 |
| Oct 6 - T | Exam 3 | |
| Oct 7 - W | Functions Day 1 | Notes 16, Assignment 16 |
| Oct 8 - R | Functions Day 2 | Notes 17, Assignment 17 |
| Oct 12 - M | Function Operations, Compositions & Inverses | Notes 18, Assignment 18 |
| Oct 13 - T | Linear Functions: Slope & Graphing/Begin Review 4 | Notes 19, Assignment 19 Review 4 |
| Oct 14 - W | Linear Functions: Equations, Parallel & Perpendicular Lines/ Complete Review 4 | Notes 20, Assignment 20 Complete Review 4 |
| Oct 15 - R | Exam 4 | |
| Oct 16 | <i>Fall Break – No Office Hours</i> | |
| Oct 19 - M | Solving Quadratics by Factoring and the Square Root Property | Notes 21, Assignment 21 |

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|------------|---|--------------------------------|
| Oct 20 - T | Solving Quadratics by Completing the Square and the Quadratic Formula | Notes 22, Assignment 22 |
| Oct 21 - W | Graphing Quadratics | Notes 23, Assignment 23 |
| Oct 22 - R | Distance, Midpoint & Circles | Notes 24, Assignment 24 |
| Oct 26- M | Review 5 | Review 5 |
| Oct 27 - T | Exam 5 | |
| Oct 28 - W | Long Division & Synthetic Division | Notes 25, Assignment 25 |
| Oct 29 - R | Roots of Polynomials | Notes 26, Assignment 26 |
| Nov 2 - M | Graphing Polynomials | Notes 27, Assignment 27 |
| Nov 3 - T | Rational Functions | Notes 28, Assignment 28 |
| Nov 4 - W | Polynomial and Rational Inequalities | Notes 29, Assignment 29 |
| Nov 5 - R | Review 6 | Review 6 |
| Nov 9 - M | Complete Review 6 | Review 6 |
| Nov 10 - T | Exam 6 | |
| Nov 11 - W | Exponential & Logarithmic Functions (no calculator) | Notes 30, Assignment 30 |
| Nov 12 - R | Properties of Logarithms & Compound Interest | Notes 31, Assignment 31 |
| Nov 16 - M | Solving Exponential Equations | Notes 32, Assignment 32 |
| Nov 17 - T | Solving Logarithmic Equations | Notes 33, Assignment 33 |
| Nov 18 - W | Review 7 | Review 7 |
| Nov 19 - R | Exam 7 <i>Last Day to Drop a Course with a grade of W</i> | |
| Nov 23 - M | 2x2 Systems, 3x3 Systems | Notes 34, Assignment 34 |
| Nov 24 - T | Non-Linear Systems | Notes 35, Assignment 35 |
| Nov 25,26 | <i>Thanksgiving Holiday – No Class</i> | |
| Nov 30 - M | Systems of Inequalities | Notes 36, Assignment 36 |
| Dec 1 - T | Matrix Methods | Notes 37, Assignment 37 |
| Dec 2 - W | Review for Comprehensive Final | Review for Comprehensive Final |
| Dec 3 - R | Review for Comprehensive Final | Review for Comprehensive Final |
| Dec 8 - T | Final Exam | 10:15-12:15 |