

## Mathematics 1314 – College Algebra Section 024: Monday/Wednesday 11:00-12:45 PM Room: Building 2, 221, Reese Campus

#### **Course Information**

Textbook	College Algebra with Intermediate Algebra A Blended Course by Beecher, Penna, Johnson,
	Bittinger, 2017, Pearson

- Materials Pencils, 3 ring binder, loose 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 examinations.
- Learning1.Demonstrate and apply knowledge of function properties, domain and range, operations,<br/>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	Binder	5%	Grading Scale	90-100	А
	Homework	10%		80-89	В
	Quiz	10%		70-79	С
	Exam	15% each		60-69	D
	Final Exam	20%		0-59	F

- **Binder** Students are expected to organize all course material in a single three ring binder as a portfolio of work completed. This binder should be brought to class every day as it will be periodically checked at random by the instructor during the semester; Assignments and Quizzes must all be separated by a labeled divider. Neatness and organization will be graded.
- **Homeworks** Every student must complete homework. Homework will be assigned daily/weekly via class or Blackboard. Homework must be collected at the beginning of class without Receiving penalty. Late homework will be accepted as follows.

- 1. -15% for tardiness
- 2. -50% for next class
- 3. -100% otherwise

# **Quizzes** Quizzes will be given once a week and will contain material pertaining to Homework and Lecture. No make-up quizzes will be allowed.

**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, erasers, and approved calculators. 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.

Final ExamA comprehensive final exam will be given at the end of the semester. Failure to attempt the<br/>final exam will result in a failing grade for the course. The final exam will be given on Monday<br/>December 10th 2018 from 10:15-12:15 A.M. Conflicting test schedules must be worked out<br/>with instructors.

### **Classroom Policies**

- **Disclaimer** The instructor reserves the right to amend 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.
- ComputerABSOLUTELY NO FOOD ALLOWED. Drinks must have a threaded cap to be allowed and mustClass Policybe put away when not in use. Music devices during lab assignment times are acceptable. Each<br/>workstation must be cleaned and straightened before leaving the area.
- ClassIn the event of class being canceled by the school/instructor, the student will be responsibleCancellationfor the lecture material missed. The class will continue on the following class day. AllPolicyinformation will be on Blackboard and/or sent via email to be accessed by the student.
- AttendanceRecords of student attendance are maintained throughout the semester. Three absences, for<br/>any reason, are allotted to the student for the semester. Tardies count as one-half of an<br/>absence and will be applied for leaving early. Once this condition is exceeded, the instructor<br/>has the right to drop the student with an F or X grade at their discretion.
- **Withdrawal** To withdraw from this class, the student will need to go to the Admissions and Records office either on the Levelland campus or the Reese Center campus, and fill out a drop notification form.
- **Email Policy** The instructor will only acknowledge, respond, and send emails to your assigned SPC email. This ensures the intended recipient receives all correspondence from the instructor.

Final Grading<br/>PolicyAll grades are rounded from the tenths place, e.g. 80.5 = 81, 80.49 = 80. Upon the submission<br/>of grades at the end of the semester. ALL GRADES ARE FINAL!

**Returning** The instructor will attempt to return grades by the next class meeting; however, the instructor reserves the right to have at least one (1) week to grade assignments and post grades from the due date.

- **Religious** 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 (**Friday, 14 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.
- **Disabilities** 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 appropriate arrangements may be made.
- **Diversity** The instructor 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 everyone to learn about others, the larger world, and 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.
- Sexual It is important for students to know that all faculty members are mandated reporters of any incidents of sexual misconduct. Faculty cannot keep information about sexual misconduct confidential if students share that information. SPC offers advisors that students can confidentially seek out in the Health & Wellness Center. These advisors have the best interest in students and information can be accessed on campus or even in the local community.
- CampusCampus Concealed Carry Texas Senate Bill 11 (Government Code 411.2031, et al.)Concealedauthorizes the carrying of a concealed handgun in South Plains College buildings only byCarrypersons who have been issued and are in possession of a Texas License to Carry a Handgun.<br/>Qualified law enforcement officers or those who are otherwise authorized to carry a concealed<br/>handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035<br/>and South Plains College policy, license holders may not carry a concealed handgun in<br/>restricted locations.
- AcademicStudents are expected to uphold the ideas of academic honesty; all work that is submitted for<br/>grading must be your own. Violation of this policy will result in an F for the assignment(s) and<br/>the student dropped with an F. For more details on what is considered cheating, see the South<br/>Plains College catalog.
- **Equal** 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.

Holiday/If a student has any pre-existing plans to travel during scheduled class times, the student must<br/>inform the instructor no later than Wednesday, September 5th, 2018. Failure to properly<br/>inform of any missed class will result in forfeiture of any graded class work with no allowable<br/>replacement/make-up work.

RecordingStudents are not allowed to use recording devices such as audio or video during class unless<br/>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.

**Course Itinerary** Planned schedule; subject to change as necessary.

Week 1	August 27	Introduction, Review of Basic Algebra
	August 29	Solving Linear Equations and Inequalities, Formulas
Week 2	September 3	Applications, Interval Notation, Absolute Value Equations and Inequalities
	September 5	Graphs of Functions, Domain and Range, Slope
Week 3	September 10	Equation of Lines, Applications
	September 12	Systems of Equations in Two Variables, Solve by Substitution and Elimination
Week 4	September 17	Applied Problems: Two Equations, Systems with Three Variables
	September 19	Polynomial Functions, Multiplication, Factoring
Week 5	September 24	Trinomial Factoring, Special Factoring, Strategies
	September 26	Examination 1
Week 6	October 1	Rational Expressions and Functions, Operations and Simplifying
	October 3	LCM, LCD, Division of Polynomials, Complex Rational Expressions**
Week 7	October 8	Radical Expressions, Equations, and Functions, Radial Numbers as Exponents
	October 10	Simplifying, Operations, Solving Radical Equations, Powers and Roots**
Week 8	October 15	Quadratic Functions and Equations, Symmetry and Transformations
	October 17	Complex Numbers, Zeroes, and Analyzing Quadratic Functions
Week 9	October 22	Polynomial and Rational Functions, Graphing Functions
	October 24	Zeros of Polynomials, Polynomial and Rational Inequalities
Week 10	October 29	Examination 2
	October 31	Exponential and Logarithmic Functions, Inverse Functions
Week 11	November 5	Graphing, Properties of Logs, Solving Exponential and Log Equations, Apps
	November 7	Matrices and Systems of Equations, Operations
Week 12	November 12	Inverse of Matrices, Determinants and Cramer's Rule
	November 14	Conic Sections, Parabolas, Circles, Ellipses
Week 13	November 19	Hyperbolas, Nonlinear Systems of Equations and Inequalities
	November 21	Thanksgiving Break
Week 14	November 26	Examination 3
	November 28	Sequences, Series, and Combinations
Week 15	December 3	Probability
	December 5	Final Examination Review
Week 16	December 10	Final Exam