SOUTH PLAINS COLLEGE™

Fall 2018 – College Algebra with Intermediate Algebra

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Office Hours: T/TH: 3:00–5:20 & F: 9:00–12:20
Other times may be available by appointment.

Course Descriptions:
MATH 0320. INTERMEDIATE ALGEBRA. (3:3:1) Prerequisite: MATH 0315 (Beginning Algebra) or one year of high school algebra. This course is designed for the student who needs MATH 1314 or 1324. It includes factoring, fractions, linear equations in one unknown, graphs, systems of linear equations, exponents, radicals, and quadratic equations. Time in a math lab is required. This course will not satisfy graduation requirements. (Copied from the current SPC catalog.)

MATH 1314. COLLEGE ALGEBRA. (3:3:1) Prerequisite: Two units of high school algebra or MATH 0320. A standard course in college algebra. Quadratic equations; ratio and proportion; variation, binomial theorem; progressions; inequalities; complex numbers; theory of equations; determinants and matrices; linear programming; mathematical induction; permutations and combinations. (Copied from the current SPC catalog.)

Textbook: College Algebra with Intermediate Algebra: A Blended Course by Beecher, Penna, Johnson, and Bittinger
The hardcopy is optional. MyMathLab will be required.

Texas Success Initiative (TSI): The Texas Success Initiative is a state program designed to ensure that all Texas institutions provide placement testing, personal advisement and appropriate instruction to students to enhance their opportunities for success in their college studies. All new students entering Texas colleges and universities are required to take a placement test prior to enrolling in college-level courses, unless exempt from testing under specified state standards (i.e., scores on ACT, SAT or TAKS). Testing will indicate whether a student possesses adequate basic college-level skills in reading, writing and mathematics necessary to begin an undergraduate program of study. (Copied from the current SPC catalog.)

Attendance: ***Attendance and effort are the most important activities for success in this course.*** Class attendance may be taken at any time during the class period, so please do not be late or leave early. You may be dropped from this course with a grade of X or F if you are absent four consecutive classes or if you exceed six absences throughout the semester. Be on time and turn off any cell phones before entering the classroom.

Supplies: You will need pencils, a scientific calculator, notebook paper, graph paper, and a 3-ring binder. Calculators on cell phones or other electronic devices with a computer algebra system will not be allowed during testing.

SOUTH PLAINS COLLEGE™

Course Objectives: MATH 0320: Successful completion of this course should reflect mastery of the following objectives.

1. Define, represent, and perform operations on real and complex numbers.
2. Recognize, understand, and analyze features of a linear equation and a function.
3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, rational, and radical expressions.
4. Identify and solve absolute value, polynomial, rational, and radical equations.
5. Identify and solve absolute value and linear inequalities.
6. Model, interpret, justify mathematical ideas and concepts using multiple representations.
7. Connect and use multiple strands of mathematical situations and problems, as well as in the study of other disciplines.

MATH 1314: Successful completion of this course should reflect mastery of the following objectives.

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.

Assignments: Homework assignments are based on graded problems worked online via MyMathLab. I encourage you to purchase your textbook immediately and use the Access Code Packet (bundled with your textbook) to register for this class online. If you were enrolled in a Beginning Algebra or Intermediate Algebra class that used MyMathLab, you do not need a new packet.

Important Note: The homework problems assigned online via MyMathLab are required and are the only homework grades given in this class. If you do not have a personal computer or your computer is in serious need of an upgrade, there are many computer labs on the Reese Center campus, the Levelland campus, and the Lubbock Center which have very liberal hours. These problems on-line (homework) are chosen as representative of the basic concepts presented in the sections. These few questions will not adequately prepare you for the unit test. A more comprehensive assignment for each section is located in the textbook. The textbook exercises will not be taken up or graded, but should be used to ask questions in class over the assignment. Before completing the online homework for a grade, you should work the textbook problems for a more complete understanding of the topics

Exams: There will be 6 unit tests and a comprehensive final exam. Dates for the exams are given on the course outline. If for any reason you are unable to take an exam at the designated time you must contact me *prior* to class time. Make-up exams will be given at the discretion of the instructor.

SOUTH PLAINS COLLEGE™

Follow these steps for a painless registration procedure:
Before you start, you will need:

- A student's access code is found in your MyMathLab Student Access Kit that comes with the book.
- The course ID number will be given to you the first day of class.
  Course ID number for your course: **franks60905**
- Or you can purchase online an access code using a credit card.
- A valid email address that you check on a regular basis.
- SPC Zip Code: 79336

To register and enroll in a pearsonmylabandmastering course (same as Course Compass which has been changed):

1. Go to www.pearsonmylabandmastering.com and click the Register button for student and follow instructions to register. I suggest you bookmark this if you are using your personal computer.
2. After you have register, enter the Login Name and Password you created during registration.
3. You will be taken to MyLabandMastering – the online learning environment for MyMathLab. From this page, simply click the name of your course to begin exploring MyMathLab.

If you want to register as a previous user, use the following instructions:

1. Click on Login. Do not enter login name or password.
2. Click on students register.
3. Click on continue a course, re-take a course, or switch to a different course section.
4. Enter user name and password from previous semester and course ID number.
5. Click on login.

OR you can:

1. Log in using username and password from a previous time.
2. Under name of previous MyMathLab course, click on enroll in a new course.
3. Put in new course ID number.

Grading:

Homework	30%
Unit Exams	60%
Final Exam	10%

Grading Scale:

A	90-100
B	80-89
C	70-79
D	60-69
F	59 or below

A grade of C (70) or better is required to advance to the next course. Although your grade in MATH 0320 will not be used in calculating your GPA, your grade is used to determine academic status for financial aid. The grade you earn is the grade you will be awarded in both courses, MATH 0320 and MATH 1314. *These courses and their grades will be recorded on your official transcript.*

SOUTH PLAINS COLLEGE™

Tutoring: Free tutoring is available in room M116 of the Math Building in Levelland, or room 208 in building 2 at the Reese campus, or in the Learning Lab at the Lubbock Center. Digital versions of tutorial videos can be viewed on your personal computer on Blackboard, http://spc.blackboard.com. Login using "mvideos" and password "mvideos". Click on Math-Math Videos and locate the appropriate course and topic in which you are interested.

Student Conduct: You are expected to be respectful to others in the classroom. Please assist in maintaining a classroom environment conducive to learning. Any student disrupting the learning environment will be asked to leave and may be dropped from the course.

Disability: 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.

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.

Diversity: 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.

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.

SOUTH PLAINS COLLEGE™

Fall 2018 – College Algebra with Intermediate Algebra
Tentative Course Outline

Week	Day	Date	Lesson
1	Monday	August 27	WELCOME!
	Tuesday	August 28	1.1 Solving Equations
	Wednesday	August 29	1.4 Sets, Inequalities, & Interval Notation
	Thursday	August 30	1.5 Intersections, Unions, & Compound Inequalities
2	Monday	September 3	**Labor Day!**
	Tuesday	September 4	1.6 Absolute-Value Equations & Inequalities
	Wednesday	September 5	2.1 Graphs of Equations
	Thursday	September 6	2.2 Functions & Graphs
3	Monday	September 10	2.3 Finding Domain & Range
	Tuesday	September 11	2.5 Linear Functions: Graphs & Slope & 2.6 More on Graphing Linear Equations
	Wednesday	September 12	2.7 Finding Equations of Lines
	Thursday	September 13	**Exam 1**
4	Monday	September 17	3.1 Systems of Equations in Two Variables
	Tuesday	September 18	3.2 Solving by Substitution & 3.3 Solving by Elimination
	Wednesday	September 19	3.5 Systems of Equations in Three Variables
	Thursday	September 20	10.1 Matrices
5	Monday	September 24	3.7 Systems of Inequalities
	Tuesday	September 25	4.3 Introduction to Factoring
	Wednesday	September 26	4.4 Factoring Trinomials with Lead Coefficient 1
	Thursday	September 27	4.5 Factoring Trinomials with Lead Coefficient Not 1
6	Monday	October 1	4.6 Special Factoring
	Tuesday	October 2	4.7 Factoring Review
	Wednesday	October 3	4.8 Applications of Factoring
	Thursday	October 4	**Exam 2**
7	Monday	October 8	5.1 Rational Expressions and Functions
	Tuesday	October 9	5.2 Adding & Subtracting Rational Expressions
	Wednesday	October 10	5.3 Division of Polynomials
	Thursday	October 11	5.4 Complex Rational Expressions

SOUTH PLAINS COLLEGE™

8	Monday	October 15	5.5 Solving Rational Equations
	Tuesday	October 16	5.6 Applications and Proportions
	Wednesday	October 17	5.7 Formulas and Applications
	Thursday	October 18	**Exam 3**
9	Monday	October 22	6.1 Radical Expressions & Functions
	Tuesday	October 23	6.2 Rational Numbers as Exponents
	Wednesday	October 24	6.3 Simplifying Radical Expressions
	Thursday	October 25	6.4 Add, Subtract, & Multiply Radicals
10	Monday	October 29	6.5 Division of Radical Expressions
	Tuesday	October 30	6.6 Solving Radical Equations
	Wednesday	October 31	6.7 Applications Involving Roots
	Thursday	November 1	**Exam 4**
11	Monday	November 5	7.3 The Complex Numbers
	Tuesday	November 6	7.4 Quadratic Equations, Functions, & Zeros
	Wednesday	November 7	7.5 Analyzing Graphs of Quadratic Functions
	Thursday	November 8	8.1 Polynomial Functions
12	Monday	November 12	8.2 Graphing Polynomial Functions
	Tuesday	November 13	8.3 Polynomial Division
	Wednesday	November 14	8.4 Zeros of Polynomial Functions
	Thursday	November 15	**Exam 5**
13	Monday	November 19	9.3 Exponential Functions & Graphs
	Tuesday	November 20	9.4 Logarithmic Functions
	Wednesday	November 21	**Happy**
	Thursday	November 22	**Thanksgiving!**
14	Monday	November 26	9.5 Properties of Logarithmic Functions
	Tuesday	November 27	9.6 Solving Exponential & Logarithmic Equations
	Wednesday	November 28	9.7 Applications: Growth & Compound Interest
	Thursday	November 29	11.2 The Circle
15	Monday	December 3	11.4 Nonlinear Systems of Equations & Inequalities
	Tuesday	December 4	**Exam 6**
	Wednesday	December 5	Final Exam Review
	Thursday	December 6	Final Exam Review
16	Monday	December 10	**Final Exam 5:30 p.m.-7:30 p.m.**

*Last Day to Drop: November 15th

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