

South Plains College  
 Mathematics Department  
**Intermediate Algebra – MATH 0320.004**  
 Course Syllabus – Fall 2016

**Instructor:** Karol Albus      **Office:** M109 Levelland Campus Math Building      **Telephone:** (806)-716-2543  
**Email:** [kalbus@southplainscollege.edu](mailto:kalbus@southplainscollege.edu) (preferred method of contact)      Do NOT email me through Blackboard  
**Office hours:** Monday: 3:00-4:30, Tuesday: 10:00-11:00, Wednesday: 9:30-10:00, Thursday: 10:00-11:00,  
 Friday: 8:00-12:00 Other times by appointment.

**Disclaimer:** The instructor reserves the right to alter any class policies/dates as deemed necessary by the instructor, and will announce any changes in class.

**Please check your email regularly as it is the only way I have to contact you outside of class.**

**Text:** *Elementary & Intermediate Algebra*, 3<sup>rd</sup> edition, by Sullivan, Struve, & Mazarella. ISBN 978-0-321-88011-6. Older versions of the textbook are acceptable. Please do not try to use an electronic device for a book. If you purchase a loose leaf book, you should secure a binder for the book. Your homework will be in handout form, but additional problems, as well as additional explanations, will be in the book.

**Supplies:** You will need a 3 ring binder (1.5 inch), paper, graph paper, textbook, pencils, and erasers. **You will be allowed the use of a scientific calculator most of the time. However, it will be restricted on some days. You may NOT use TI-89, TI-92, TI-Nspire, or your cell phone/iPad as your calculator.** These are pretty basic supplies, but you will need to bring them to each class. I require pencil on all graded work. You will have one warning, and after that, you will earn a zero on that work.

**Course Description:** MATH 0320 (3:3:1) Prerequisite: MATH 0315 or one year of high school algebra. This course is designed for the student who needs MATH 1314 or 1324. It includes a study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a specific emphasis on linear and quadratic expressions and equations. Semester Hours: 3, Lecture Hours: 3, Lab Hours: 1. Note: Time in a math lab is required. **This course will not satisfy graduation requirements.**

### Learning Outcomes

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

Chapter and section numbers are indicated in parentheses.

1. Define, represent, and perform operations on real and complex numbers. (9.9)
2. Recognize, understand, and analyze features of a linear equation and a function. (8.3, 8.4 including topics from 3.3, 3.4 and 3.5)
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.  
(6.1, 6.2, 6.3, 6.4, 6.5, 7.1, 7.2, 7.3, 7.4, 7.5, 9.1, 9.2, 9.4, 9.5, 9.6)
4. Identify and solve absolute value, polynomial, rational, and radical equations.  
(6.6, 7.7, 8.7, 9.8, 10.1, 10.2)
5. Identify and solve absolute value and linear inequalities. (8.6, 8.7)
6. Model, interpret, justify mathematical ideas and concepts using multiple representations.  
(6.7, 7.8, 8.2, 8.5, 9.8)
7. Connect and use multiple strands of mathematical situations and problems, as well as in the study of other disciplines. (The word problems in Chapters 6, 7, 8, 9, and 10.)

**TSI:** The Texas Success Initiative (TSI) 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, such as 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. **If testing indicates a need for building certain skills in any or all of the skill areas, students will be required to enroll in and successfully complete the developmental programs.**

**Attendance:** Attendance and effort are the most important activities for success in this course. Records of your attendance are maintained throughout the semester. If your lack of attendance (i.e., excessive absences) is determined by the instructor to put you at risk of failing the course, you may be dropped from the class with an For X as a final grade. **Excessive absences consist of four consecutive or 5 cumulative days.** Leaving early and being tardy will be considered ½ absence. Sleeping in class constitutes an absence. If you unfortunately happen to incur an absence, please contact the instructor by email, another student or refer to the syllabus to complete the assignment before the next class. Please read the “Drops and Withdrawals” policies in the current South Plains College catalog. **Late homework and makeup quizzes are not an option.** I will drop 4 daily grades which may include zeros from absences. Make ups for Exams will only be provided under extreme, documented circumstances. If at all possible, the instructor should be notified prior to the exam day.

**Assignment Policy:** Homework will be assigned at each class meeting. The homework is not a tool by which I torture you, but rather an opportunity for you to practice the skills presented in class which you will be responsible to demonstrate on a quiz the following class period. If you are interested in passing the class, you will need to do well on the quizzes. To do well on the quizzes, you will need to complete the homework. No late assignments will be accepted. You should show all work when doing homework. Simply writing the problem and the answer from the back of the book is not “doing homework.” Using a solutions manual or an app that shows you the steps, and copying them down is NOT “doing homework.” **Remember your effort is key to your success. You have to focus your effort on being able to complete the problems on a quiz without any outside resources.** You will turn in your homework when you take a quiz. 50% of your grade will be from the homework and 50% from the quiz.

**Grading:** Daily work (homework, quizzes and notebook) will be 16% of your final grade. You can expect 4 major exams (16% each), and a cumulative final exam that will count 20%. Your final average in the course will determine the letter grade posted on your transcript. The scale used is: A (90-100%), B (80-89%), C (70-79%), D (60-69%), F (0-59%). **In order to advance to College Algebra you must earn at least a C.**

**Grade Reporting:** Grades will be posted on blackboard. If you think I have recorded a grade incorrectly, please notify me immediately. I keep a hard copy of my grades and will be glad to check it.

**Phones and other electronics:** All electronic devices are inappropriate. Suspected use will earn you a zero for that day’s quiz / homework. If you use an electronic device (cell phone, iPad, iPod, headphones) during an exam, you will earn a zero on the exam and may be dropped from the course. Do not use a phone or iPad as a book.

**Test days:** Test days are very serious days. **Once you begin the exam, you will not be allowed to leave the classroom until the exam is submitted for grading.** Use the restroom before class and bring plenty of sharp pencils Use of electronics on an exam day earns you a zero on the exam and possible dismissal from the course.

#### **Where to Get Help:**

- Me! –I am available by appointment. Email is a great way to contact me – much faster than phone calls and messages. Sometimes I can help on email if you will send a photo of the problem you are doing. Even if I am not in the office, I can work the problem, take a photo and send back. You CANNOT ask for #35 – I won’t have my book with me.
- Free tutoring and video tapes are available in M116 on the Levelland campus. The hours for tutors are posted by that door and I will post it on blackboard as it becomes available to me. Digital versions of the videos are available on YouTube. I will post the links to these videos on Blackboard. Occasionally I will post helpful items on blackboard such as solution sets. **If you are not familiar with Blackboard, you should become familiar.** The login and password should be the same as your MySPC.
- Your book is a great resource and it is already purchased!
- You can also seek videos from [www.patrickjmt.com](http://www.patrickjmt.com) and [www.khanacademy.org](http://www.khanacademy.org) or others.
- **I also strongly recommend forming study groups so that you can work with others. Networking is an essential tool both in the classroom and in the workforce.**

*You should expect to spend as much time outside of class as you do in class practicing homework problems and studying. The goal is for you to acquire the skills necessary to be successful in your next MATH course that will earn you College Credit and fulfill part of your graduation requirements. I WILL NOT send you to the next course if you cannot demonstrate that you have those skills.*

**Religious Holy Days:** In accordance with 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 (Monday, September 19, 2016) 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. (copied from current South Plains College catalog)

**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. (copied from current South Plains College Faculty Handbook)

**Disabilities 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 Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611.

**Academic Honesty:** You are expected to uphold the ideals of academic honesty. All work that is graded must be your own. This policy applies to all work attempted in this course. If this policy is violated the student will receive an F for the assignment and will be dropped with an F. For more details on what is considered cheating, see the South Plains College catalog.

**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, sexual orientation, disability, or age.

**Communication Skills:** effective development, interpretation, and expression of ideas through written, oral, and visual communication.

- Develop, interpret, and express ideas through written communication

- Develop, interpret, and express ideas through oral communication

- Develop, interpret, and express ideas through visual communication

**Critical Thinking:** creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information.

- Generate and communicate ideas by combining, changing, and reapplying existing information

- Gather and assess information relevant to a question

- Analyze, evaluate, and synthesize information

**Empirical and Quantitative Competency Skills:** the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

- Manipulate and analyze numerical data and arrive at an informed conclusion

- Manipulate and analyze observable facts and arrive at an informed conclusion

Tentative Course Outline Fall 2016  
 Karol Albus Office M109  
 Intermediate Algebra MATH 0320.004 T/Th 8:00-9:45

Day	Date	Topic to be covered	Homework for next class
Tues	Aug 30	2.2, 2.3 Linear Equations: Using Properties Together	Assignment 1
Thurs	Sept 1	8.6 Compound Inequalities 8.7 Absolute Value Equations and Inequalities	Assignment 2
Tues	Sept 6	6.1 Greatest Common Factor 6.2 Factoring Trinomials 6.3 More Factoring Trinomials	Assignment 3
Thurs	Sept 8	6.1-6.3 Practice Factoring Trinomials	Assignment 4
Tues	Sept 13	6.1 Factoring by Grouping 6.4 Factoring Special Products	Assignment 5
Thurs	Sept 15	6.5 Summary of Factoring Techniques	Assignment 6
Tues	Sept 20	6.6 Solving Polynomial Equations by Factoring	Assignment 7 and Study
Thurs	Sept 22	<b>Exam 1 (16%)– Notebook 1 Due</b>	
Tues	Sept 27	7.1 Simplifying Rational Expressions 7.2 Multiplying and Dividing Rational Expressions	Assignment 8
Thurs	Sept 29	7.3 Add/Subtract Rational Exp with Common Denominator 7.4 Finding the Least Common Denominator	Assignment 9
Tues	Oct 4	7.5 Add/Subtract without Common Denominator	Assignment 10
Thurs	Oct 6	7.7 Solving Rational Equations	Assignment 11
Tues	Oct 11	Review	Study
Thurs	Oct 13	<b>Exam 2 (16%)– Notebook 2 Due</b>	
Friday	Oct 14	<i>Fall Break</i>	
Tues	Oct 18	8.2 Relations 8.3 Introduction to Functions 8.4 Functions and their Graphs	Assignment 12
Thurs	Oct 20	3.3 Slope 3.4 Slope-Intercept Form of a Line	Assignment 13
Tues	Oct 25	3.5 Point-Slope Form of a Line 8.4 Functions and their Graphs	Assignment 14
Thurs	Oct 27	Review 3	Study
Tues	Nov 1	<b>Exam 3 (16%)– Notebook 3 Due</b>	
Thurs	Nov 3	9.1 Square Roots 9.2 nth Roots and Rational Exponents	Assignment 15
Tues	Nov 8	9.4 Simplifying Radical Exp Using Properties of Radicals 9.5 Add/Subtract and Multiply Radical Expressions	Assignment 16
Thurs	Nov 10	9.6 Rationalizing Radical Expressions 9.9 The Complex Number System	Assignment 17
Tues	Nov 15	9.8 Solving Radical Equations	Assignment 18
Thurs	Nov 17	Review 4	Study
Thurs	Nov 17	<i>Last Day to Drop a Course</i>	
Tues	Nov 22	<b>Exam 4 (16%)– Notebook 4 Due</b>	
Thurs	Nov 24	Thanksgiving – No class	
Tues	Nov 29	10.1 Solving Quadratic Equations by Square Root Property and Completing the Square	Assignment 19
Thurs	Dec 1	10.2 Solving Quadratic Equations by Quadratic Formula	Assignment 20
Tues	Dec 6	Stated Problem Practice including sections 6.7, 7.8, 8.5	Selected Problems
Thurs	Dec 8	Comprehensive Review	Study
Tues	Dec 13	<b>Final Exam (20%) 8:00-10:00</b>	