



Course Syllabus – Intermediate Algebra

Math 0320.501 – Fall 2016

Department: Mathematics and Engineering

Instructor: Denise Johansen

Discipline: Mathematics

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Course Number: Math 0320

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Course Title: Intermediate Algebra

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Credit: 3 **Lecture:** 3 **Lab:** 1

Time/Place: TR 11am-12:45pm/PC 116

Office Hours: MW 10:15am-11am and 12:15pm-1:30pm, TR 10am-11am and 4:15pm-5:15pm,
or by appointment

This course satisfies a core curriculum requirement: No

Prerequisites: Minimum score of 343 on TSI-exam or successful completion (C or better) of
Math0315

Available Formats: conventional/internet/ITV

Campuses: Levelland Campus, Reese Campus, Plainview Center, Byron Martin ATC

Textbook: *Elementary and Intermediate Algebra*, Sullivan/Struve/Mazzarella, 2014, 3rd Edition,
Prentice Hall/Pearson Education. NOTE: If you previously bought the text for MATH 0315
or MATH 0320, you do not need to buy it again for this class.

Supplies: MyMathLab access (Course ID: **johansen74925**); a scientific calculator that is NOT
your phone will be allowed. NOTE: If you previously bought a MyMathLab access code for
MATH 0315 or MATH 0320, you do NOT need to buy another one for this class.

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Course Specific Instructions: There are video tapes of the lectures available that can be viewed on Blackboard. Username and password are: MVIDEOS. These tapes do not replace class meetings, but can be used as supplemental material for students' use.

Course Description: 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.

Course Purpose/Rationale/Goal: The purpose of the course is to provide a background in algebra concepts necessary for MATH 1314, 1324, or 1342. **You must earn a grade of 'C' or better to continue to the next course.**

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.

Course Evaluation:

- There will be in-class assignments collected daily. By their very nature, in-class assignments can NOT be made up. The in-class average is worth 10% of your grade, and the lowest 2 in-class grades will be dropped.
- Daily online homework assignments will be due weekly on Tuesdays. Late homework will be accepted with 10% per day late submission penalty! The homework average is worth 10% of your grade, and the lowest 3 homework grades will be dropped.
- Daily pre-class assignments will be posted, worth 5% of your grade. The lowest 2 PreClass grades will be dropped.
- There will be 6 online Quizzes to be **completed on your own and without references**. The quiz average is worth 10% of your grade, and the lowest quiz grade will be dropped.
- There will be 3 in-class hour exams. These will each be worth 15% of your grade.
- There will be 1 in-class cumulative final exam on **Tuesday, December 13th from 10:15am-12:15pm**, worth 20% of your grade.

Letter Grades:

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

**Students who earn 69% or below and have 4 or less absences will qualify for a grade of 'PR'. Any student with a PR, D, or F must repeat the class. However, a PR doesn't affect the student's GPA or financial aid status.

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Student Learning Outcomes/Competencies:

Upon completion of this course and receiving a passing grade, the student will be able to:

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

Attendance Policy: Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus. *[Absences for this course are considered excessive if you have 4 in a row or a total of 7. If you reach 4 consecutive absences or a total of 7 absences, you will be administratively withdrawn from the class with a grade of 'X' or 'F'.]*

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first class meeting.

Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.

Last day to drop is Thursday, November 17th.

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SPC School Holidays:

Monday, 9/5, Labor Day

Friday, 10/14, Fall Break

Wednesday-Friday, 11/23-11/25, Thanksgiving Break

Dress Code: Reasonable standards of decency apply to the college community. The student should dress in a manner which does not distract from the academic atmosphere. Revealing attire or clothing carrying obscene or offensive slogans is not permitted. In all academic buildings, classrooms, offices, the Student Center, and dining facilities, students are required to wear shirts and shoes.

Language: Please be respectful of others and use language that is appropriate to the workplace.

Campus Carry: The Texas Campus Concealed Carry law went into effect on university campuses on August 1st, 2016. The law does NOT go into effect for community colleges until August 1st, 2017. Therefore, NO firearms of any kind are allowed on South Plains College property, regardless of your Concealed Carry status.

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.

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 Special 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 Special Services Coordinator. For more information, call or visit the Special Services Office in the Student Services Building, 716-2529 or 716-2530.

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COURSE OUTLINE / CALENDAR*

Problems are assigned online for each section of the textbook that we cover. To access online assignments, you must have an access code (you can buy a code for MyMathLab bundled with your textbook or you can buy just the code at www.mymathlab.com) and register for our course (Course ID: **johansen74925**) at www.mymathlab.com. Assignments have due dates, and you will lose 10% per day for work completed after the due date passes. To master the material and prepare for the exams, you **MUST** work extra problems!

* Assignments and deadlines are subject to change at instructor's discretion, and all changes will be announced in class and posted in MyMathLab.

Date	Content	Required Readings
Week 1 8/30 9/1	Factoring Polynomials (Part 1) <ul style="list-style-type: none"> • Syllabus Overview and Initial Assessment • Greatest Common Factor and Factoring by Grouping • Factoring Trinomials of the Form $x^2 + bx + c$ 	<u>Readings</u> Chapter 6: 6.1-6.2
Week 2 9/6 9/8	Factoring Polynomials (Part 2) <ul style="list-style-type: none"> • Factoring Trinomials of the Form $ax^2 + bx + c$, $a \neq 1$ • Factoring Special Products • Summary of Factoring Techniques • Solving Polynomial Equations by Factoring 	<u>Readings</u> Chapter 6: 6.3-6.6
Week 3 9/13 9/15	Equations and Inequalities in One Variable (Part 2) & Rational Expressions and Equations (Part 1) <ul style="list-style-type: none"> • Modeling and Solving Problems with Quadratic Equations • Simplifying Rational Expressions • Multiplying and Dividing Rational Expressions 	<u>Readings</u> Chapter 6: 6.7 Chapter 7: 7.1-7.2
Week 4 9/20 9/22	Rational Expressions and Equations (Part 2) <ul style="list-style-type: none"> • Adding and Subtracting Rational Expressions with a Common Denominator • Finding the Least Common Denominator and Forming Equivalent Rational Expressions • Adding and Subtracting Rational Expressions with Unlike Denominators 	<u>Readings</u> Quiz 1 Due (Chapter 6) Chapter 7: 7.3-7.5

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<p>Week 5 9/27 9/29</p>	<p>Rational Expressions and Equations (Part 3)</p> <ul style="list-style-type: none"> • Rational Equations • Models Involving Rational Equations 	<p><u>Readings</u> Chapter 7: 7.7-7.8</p>
<p>Week 6 10/4 10/6</p>	<p>Exam I</p> <ul style="list-style-type: none"> • Review for Exam I • Exam I 	<p><u>Readings</u></p>
<p>Week 7 10/11 10/13</p>	<p>Introduction to Graphing and Equations of Lines</p> <ul style="list-style-type: none"> • Slope • Slope-Intercept Form of a Line • Point-Slope Form of a Line 	<p><u>Readings</u> Quiz 2 Due (Chapter 7) Chapter 3: 3.3-3.5</p>
<p>Week 8 10/18 10/20</p>	<p>Graphs, Relations, and Functions (Part 1)</p> <ul style="list-style-type: none"> • Relations • An Introduction to Functions • Functions and Their Graphs 	<p><u>Readings</u> Quiz 3 Due (Chapter 3) Chapter 8: 8.2-8.4</p>
<p>Week 9 10/25 10/27</p>	<p>Graphs, Relations, and Functions (Part 2)</p> <ul style="list-style-type: none"> • Linear Functions and Models • Compound Inequalities • Absolute Value Equations and Inequalities 	<p><u>Readings</u> Chapter 8: 8.5-8.7</p>
<p>Week 10 11/1 11/3</p>	<p>Exam II</p> <ul style="list-style-type: none"> • Review for Exam II • Exam II 	<p><u>Readings</u> Quiz 4 Due (Chapter 8)</p>
<p>Week 11 11/8 11/10</p>	<p>Radicals and Rational Exponents (Part 1)</p> <ul style="list-style-type: none"> • Square Roots • Nth Roots and Rational Exponents • Simplifying Radical Expressions Using Properties of Radicals 	<p><u>Readings</u> Chapter 9: 9.1-9.2, 9.4</p>

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Week 12 11/15 11/17	Radicals and Rational Exponents (Part 2) <ul style="list-style-type: none"> • Adding, Subtracting, and Multiplying Radical Expressions • Rationalizing Radical Expressions 	<u>Readings</u> Chapter 9: 9.5-9.6
Week 13 11/22 11/24	Radicals and Rational Exponents (Part 3) <ul style="list-style-type: none"> • Radical Equations and Their Applications • The Complex Number System • Thanksgiving Holiday – No Classes! 	<u>Readings</u> Chapter 9: 9.8-9.9
Week 14 11/29 12/1	Exam III <ul style="list-style-type: none"> • Review for Exam III • Exam III 	<u>Readings</u> Quiz 5 Due (Chapter 9)
Week 15 12/6 12/8	Quadratic Equations and Functions <ul style="list-style-type: none"> • Solving Quadratic Equations by Completing the Square • Solving Quadratic Equations by the Quadratic Formula • Review for Final Exam 	<u>Readings</u> Chapter 10: 10.1-10.2
Week 16 12/13	Final Exam <ul style="list-style-type: none"> • Final Exam, 10:15am-12:15pm 	<u>Readings</u> Quiz 6 Due (Chapter 10)

* Assignments and deadlines are subject to change at instructor's discretion, and all changes will be announced in class and posted in MyMathLab.