South Plains College<br>Department of Mathematics \& Engineering<br>Math0315 - Beginning Algebra<br>Course Syllabus - Spring 2018

Math0315.002.172S: MW - 10:00am-11:45am, Math Building, M124
Math0315.005.172S: MW - 2:30pm-4:15pm, Math Building, M124
Math0315.006.172S: TR - 8:00am-9:45am, Math Building, M122

Instructor: Jerod Clopton
Office: M102
Email: jclopton@southplainscollege.edu
Phone: 806-716-2738
Office Hours:

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :--- | :--- | :--- | :--- | :--- |
| Or by appointment |  |  |  |  |

Course Description: MATH 0315 - Beginning Algebra. (3:3:1) Prerequisite: MATH 0310 or appropriate test score. This course is designed for students who need MATH 0320. Topics include signed numbers, algebraic expressions, linear equations and inequalities in one unknown, and graphing. Time in a math lab is required. This course will not satisfy graduation requirements. Semester Hours: 3 Lecture Hours: 3 Lab Hours: 1 Note: This course will not satisfy graduation requirements. This course is required if testing indicates a need. (Copied from course catalogue.)

Student Learning Outcomes/Competencies: Successful completion of this course should reflect mastery of the following objectives. Chapter and section numbers are indicated in parentheses.

| 1. | Add, subtract, multiply and divide real numbers. (1.5) |
| :--- | :--- |
| 2. | Use the order of operations to simplify an expression. (1.7) |
| 3. | Simplify algebraic expressions. (1.8) |
| 4. | Solve linear equations. $(2.1,2.2,2.3)$ |
| 5. | Translate and solve word problems. $(2.5,2.6,2.7)$ |
| 6. | Solve linear inequalities. $(2.8)$ |
| 7. | Graph equations in two variables by the intercept method and the slope intercept method. $(3.1,3.2,3.3,3.4)$ |
| 8. | Solve systems of equations by graphing, substitution, and elimination. $(4.1,4.2,4.3)$ |
| 9. | Evaluate expressions using exponent rules. $(5.2,5.4)$ |
| 10. | Add, subtract, multiply and divide polynomials. (5.1, $5.3,5.5)$ |
| 11. | Factor polynomials, (6.1, $6.2,6.3,6.4,6.5)$ |
| 12. | Solve quadratic equations by factoring. $(6.6)$ |

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

Textbook: The purchase or use of a textbook is not required for this class. This class is modeled from the text: Elementary and Intermediate Algebra, $4^{\text {th }}$ edition, by Sullivan, Struve, \& Mazzarella. ISBN 9780134556079. A copy of this text is available in the SPC library and can be utilized for your reference.

Supplies: Notebook, lined loose-leaf paper, 3-ring binder, pencils, ruler, graph paper, stapler, calculator. Calculators will only be allowed after the first exam. Only a basic non-graphing calculator (such as a TI-30) will be allowed in class. Calculators on cell phones, graphing calculators, and other electronic devices will NOT be allowed during tests or in-class assignments.

Attendance: Your attendance and active participation is vital to your success in this class. Attendance will be taken at the beginning of each class meeting. Failure to be in attendance will result in you being marked as absent for that class meeting. Should you arrive after attendance has been taken or leave class early, you will be marked as being tardy for that class meeting. Each account of being tardy will be considered as $\frac{1}{2}$ of an absent account. If you exceed 5 absences during the course of the semester you will be dropped from this course with a grade of X or F .

Be on time for class and turn of any cell phones or other electronic devices before class starts. Note: unless allowed under special circumstances, no laptops or tablets are shall be used during class.

Homework: Homework will be assigned for each section of material covered. Homework will be collected at the end of class on the day that it is due. Late homework will not be accepted. The problems from the homework will not be graded; instead the assignment will be assessed by participation. In order to receive full credit for an assignment it is required that show all work required to derive the answer(s) for each problem and clearly identify your answer(s). If no work is shown then no credit will be given. The homework problems will be reflected onto in-class labs, quizzes, and exams; therefore, it is essential that you participate in the homework assignment so that you are prepared for these other assessments. Time will be given at the beginning of class to address questions from the homework.

Labs: Except for exam days, you can expect that the last 30 minutes of class will be used as "lab time". During this time you will either be given a lab assignment, which could include one or a combination of the following:

- A lab assignment in which you will work, either independently or cooperatively, on problems from that days lecture, that will be turned in with your homework and graded. If you are absent then you will receive a zero for that lab assignment.
- A quiz in which you will independently work on problems from previous assignments. This will be turned in with your homework and graded. If you are absent that you will receive a zero for that lab assignment.
- A lab assignment in which you work on homework problems. As long as you are present and participating, you will receive a 100 for that lab assignment.

Exams: There will be four unit exams and one comprehensive final exam for this class. The dates for exams are given in the course colander. There will be no make up exams. (If you are going to be absent on the day of an exam and you have, prior to the exam date, explained to me the reason of your absence, then, at my discretion, we can talk about making up the exam.) There is an opportunity to replace your lowest exam grade. If your final exam grade is greater than your lowest exam grade, then that lowest exam grade will be replaced by the grade from your final exam.

Grading Policy: Your final average will determine your letter grade for this class; determined by the following scale: $\mathrm{A}(90-100 \%), \mathrm{B}(80-89 \%), \mathrm{C}(70-79 \%), \mathrm{D}(60-69 \%), \mathrm{F}(0-59 \%)$

| Homework and Lab Average | $20 \%$ |
| :--- | :--- |
| Exams (4 @ 15\% each) | $60 \%$ |
| Final Exam | $20 \%$ |

Blackboard is the online course management system that will be utilized for this course. The course syllabus, homework assignments, as well as any class handouts can be accessed through Blackboard. Login at http://southplainscollege.blackboard.com. The user name and password should be the same as the MySPC and SPC email.

User name: first initial, last name, and last 4 digits of the Student ID
Password: Original Campus Connect Pin No. (found on SPC acceptance letter)

Check Blackboard often for the latest tutoring schedule and course supplements (handouts, online practice quizzes, additional notes, sample problems for practice, etc.).

Free Math Videos: Visit SPC's website, www.southplainscollege.edu. At the top right of the home page, click on Blackboard. Blackboard will ask for a user name and password. Use the following for both: mvideos. What will you find here? You will find videos (ordered by topic) from SPC professors and handouts (PDF) that accompany most videos. This is a great resource to use if you missed class, did not fully understand the lesson, or just simply forgot the lesson.

Tutoring: Students can obtain free tutoring in room M116 in the math building at the South Plains College campus in Levelland, and in rooms 206 and 208 in Building 2 at the Reese Campus.

Classroom Civility: Students are expected to be respectful of their fellow classmates and maintain a classroom environment that is conducive to learning. Turn off all cell phones and other electronic devices before entering the room. The instructor reserves the right to ask a student to leave if his/her cell phone is left on and disrupts the class. Refrain from using offensive language, reading newspapers, chewing tobacco products, or otherwise being disruptive in class. Food and/or drinks are NOT allowed in the classroom.

Academic Honesty: Students are expected to uphold the ideas of academic honesty. Academic dishonesty includes, but is not limited to, cheating on tests, collaborating with another student during a test, copying another student's work, using materials not authorized, and plagiarism. Use of a calculator, cell phone, or other electronic device during any in-class assignment or exam will result in a grade of zero. Students who do not follow the academic honesty policy will receive a grade of zero for the assignment, and may be dropped from the course with an F, or face possible suspension from the college.

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 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) \& Lubbock Center 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

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.

## Beginning Algebra Course Schedule for Spring 2018 - MW Classes*

| Week | Date | Topic (textbook reference) | Assignment |
| :---: | :---: | :---: | :---: |
| 1 | Mon, Jan 15 |  |  |
|  | Wed, Jan 17 | Operations with Integers (1.4) | 1 |
| 2 | Mon, Jan 22 | Operations with Rational Numbers (1.5) | 2 |
|  | Wed, Jan 24 | Exponents and Order of Operations (1.7) | 3 |
| 3 | Mon, Jan 29 | Simplifying Algebraic Expressions (1.8) | 4 |
|  | Wed, Jan 31 | Adding and Subtracting Polynomials (5.1) | 5 |
| 4 | Mon, Feb 5 | Exam 1 |  |
|  | Wed, Feb 7 | Linear Equations: Additions and Multiplication Properties (2.1) | 6 |
|  |  | Linear Equations: Using Properties Together (2.2) |  |
| 5 | Mon, Feb 12 | Solving Linear Equations Involving Fractions and Decimals (2.3) | 7 |
|  | Wed, Feb 14 | Problem Solving: Direct Translation (2.5) | 9 |
| 6 | Mon, Feb 19 | Problem Solving: Problems Involving Percent (2.6) | 10 |
|  |  | Problem Solving: Geometry and Uniform Motion (2.7) |  |
|  | Wed, Feb 21 | Solving Linear Inequalities (2.8) | 8 |
| 7 | Mon, Feb 26 | Exam 2 |  |
|  | Wed, Feb 28 | Multiplying Monomials (5.2) | 11 |
| 8 | Mon, Mar 5 | Multiplying Polynomials (5.3) | 12 |
|  | Wed, Mar 7 | Dividing Monomials (5.4) | 13 |
|  | Mon, Mar 12 | Spring Break |  |
|  | Wed, Mar 14 | Spring Break |  |
| 9 | Mon, Mar 19 | Dividing Polynomials (5.5) | 14 |
|  | Wed, Mar 21 | Exam 3 |  |
| 10 | Mon, Mar 26 | Greatest Common Factor and Factoring by Grouping (6.1) | 15 |
|  | Wed, Mar 28 | Factoring Trinomials, Part 1 (6.2) | 16 |
|  |  | Factoring Trinomials, Part 2 (6.3) |  |
| 11 | Mon, Apr 2 | Easter Holiday |  |
|  | Wed, Apr 4 | Factoring Special Products (6.4) | 17 |
|  |  | Summary of Factoring Techniques (6.5) | 18 |
| 12 | Mon, Apr 9 | Solving Polynomial Equations by Factoring (6.6) | 19 |
|  | Wed, Apr 11 | Exam 4 |  |
| 13 | Mon, Apr 16 | The Rectangular Coordinate System (3.1) | 20 |
|  |  | Graphing Equations in Two Variables (3.2) |  |
|  | Wed, Apr 18 | Slope (3.3) | 21 |
|  |  | Slope-Intercept Form of a Line (3.4) |  |
| 14 | Mon, Apr 23 | Solving Systems of Equations by Graphing (4.1) | 22 |
|  | Wed, Apr 25 | Solving Systems of Equations by Substitution (4.2) | 23 |
|  |  | Solving Systems of Equations by Elimination (4.3) |  |
| 15 | Mon, Apr 30 | Solving Problems Using Systems of Equations, Part 1 (4.4) | 24 |
|  |  | Solving Problems Using Systems of Equations, Part 2 (4.5) |  |
|  | Wed, May 2 | Review for Final Exam |  |
| 16 |  | Finals |  |

* This is a tentative calendar is subject to change. Any changes to the tentative calendar will be announced in class.


## Other important dates:

Feb, 5 - Last day 70\% Refund
Feb, 12 - Last day $25 \%$ Refund
April 2, - Easter Holiday
April 26, - Last day to drop

## Beginning Algebra Course Schedule for Spring 2018 - TR Classes*

| Week | Date | Topic (textbook reference) | Assignment |
| :---: | :---: | :---: | :---: |
| 1 | Tue, Jan 16 |  |  |
|  | Thu, Jan 18 | Operations with Integers (1.4) | 1 |
| 2 | Tue, Jan 23 | Operations with Rational Numbers (1.5) | 2 |
|  | Thu, Jan 25 | Exponents and Order of Operations (1.7) | 3 |
| 3 | Tue, Jan 30 | Simplifying Algebraic Expressions (1.8) | 4 |
|  | Thu, Feb 1 | Adding and Subtracting Polynomials (5.1) | 5 |
| 4 | Tue, Feb 6 | Exam 1 |  |
|  | Thu, Feb 8 | Linear Equations: Additions and Multiplication Properties (2.1) | 6 |
|  |  | Linear Equations: Using Properties Together (2.2) |  |
| 5 | Tue, Feb 13 | Solving Linear Equations Involving Fractions and Decimals (2.3) | 7 |
|  | Thu, Feb 15 | Problem Solving: Direct Translation (2.5) | 9 |
| 6 | Tue, Feb 20 | Problem Solving: Problems Involving Percent (2.6) | 10 |
|  |  | Problem Solving: Geometry and Uniform Motion (2.7) |  |
|  | Thu, Feb 22 | Solving Linear Inequalities (2.8) | 8 |
| 7 | Tue, Feb 27 | Exam 2 |  |
|  | Thu, Mar 1 | Multiplying Monomials (5.2) | 11 |
| 8 | Tue, Mar 6 | Multiplying Polynomials (5.3) | 12 |
|  | Thu, Mar 8 | Dividing Monomials (5.4) | 13 |
|  | Tue, Mar 13 | Spring Break |  |
|  | Thu, Mar 15 | Spring Break |  |
| 9 | Tue, Mar 20 | Dividing Polynomials (5.5) | 14 |
|  | Thu, Mar 22 | Exam 3 |  |
| 10 | Tue, Mar 27 | Greatest Common Factor and Factoring by Grouping (6.1) | 15 |
|  | Thu, Mar 29 | Factoring Trinomials, Part 1 (6.2) | 16 |
|  |  | Factoring Trinomials, Part 2 (6.3) |  |
|  | Mon, Apr 2 | Easter Holiday |  |
| 11 | Tue, Apr 3 | Factoring Special Products (6.4) | 17 |
|  | Thu, Apr 5 | Summary of Factoring Techniques (6.5) | 18 |
| 12 | Tue, Apr 10 | Solving Polynomial Equations by Factoring (6.6) | 19 |
|  | Thu, Apr 12 | Exam 4 |  |
| 13 | Tue, Apr 17 | The Rectangular Coordinate System (3.1) | 20 |
|  |  | Graphing Equations in Two Variables (3.2) |  |
|  | Thu, Apr 19 | Slope (3.3) | 21 |
|  |  | Slope-Intercept Form of a Line (3.4) |  |
| 14 | Tue, Apr 24 | Solving Systems of Equations by Graphing (4.1) | 22 |
|  | Thu, Apr 26 | Solving Systems of Equations by Substitution (4.2) | 23 |
|  |  | Solving Systems of Equations by Elimination (4.3) |  |
| 15 | Tue, May 1 | Solving Problems Using Systems of Equations, Part 1 (4.4) | 24 |
|  |  | Solving Problems Using Systems of Equations, Part 2 (4.5) |  |
|  | Thu, May 3 | Review for Final Exam |  |
| 16 |  | Finals |  |

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## Other important dates:

Feb, 5 - Last day 70\% Refund
Feb, 12 - Last day $25 \%$ Refund
April 2, - Easter Holiday
April 26, - Last day to drop

