# **South Plains College**

# MATH 0320 - Intermediate Algebra

| Section 008, T R 12:30 – 2:15 pm | Section 009, T R 2:30 – 4:15 pm

Math Bldg., Rm. 105
Math Bldg., Rm. 105
, respectively

**Instructor:** Miss S. Davis **Office:** 103 MATH Bldg.

**Phone:** (806) 894 – 9611 ext. 2699

E-mail address:

sdavis@SouthPlainsCollege.edu

Text: Elementary & Intermediate Algebra, 3<sup>rd</sup> Edition, by Sullivan, Struve, & Mazzarella, 2007 Prentice Hall/Pearson (ISBN: 978-0-321-88011-6)

# **Office Hours:**

| Monday            | Tuesday       | Wednesday | Thursday      | Friday  |  |  |
|-------------------|---------------|-----------|---------------|---------|--|--|
| 4:20 - 5:20 p     | 9:30 – 11:30a |           | 9:30 – 11:30a | 1 - 4 p |  |  |
| (Reese)           |               |           |               |         |  |  |
| or by appointment |               |           |               |         |  |  |

At the times with this designation, I will be in my office to help you. You **do not** need an appointment to come see me at these times. When you come, I will be doing something else, but I will stop and help you. I am available at other times, but please give me a courteous call before coming to make sure I am there.

Supplies: Graph paper, a ruler, (at least a 3 in ring) notebook, hole puncher, stapler, a staple puller, & a red pen/pencil. (If your lack of responsibility results in you asking to borrow any of the supplies from me then there will be 5 point deduction from your final grade. Bring your supplies to class everyday!)

Purpose: This course is to provide the fundamental algebraic basis that the student can use to lay a foundation for the study of College Algebra and other freshmen level mathematics courses as well as exposure to *some* concepts present on the Accuplacer/THEA placement test.

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 a F as a final grade. Excessive absences consist of two consecutive weeks or 5 cumulative days. If you unfortunately happen to incur an absence, please contact the instructor either by phone or email and refer to the website to get the assignment before the next class. Please read the "Drops and Withdrawals" policies in the current South Plains College catalog.

Assignment Policy: Homework will be assigned daily. The homework assignments may be graded periodically. However, the practice is required in order to more fully understand each topic and to successfully negotiate the quizzes and the tests.

#### Late homework is not accepted.

Homework, quizzes, tests, and other useful material will be kept in a notebook.

**Notebook:** Homework, quizzes, tests, and other useful material will be kept in a notebook in which the notebook will be used as a reference and study guide. The notebook will be brought to class everyday! The following material will be placed in the notebook in the order listed:

- 1. Cover sheet including Name, Class, and Semester
- Assignment sheet
  - Grade sheet
- 7. Quizzes

- 2. <mark>Syllabus</mark>
- 5. Notes
- 8. Tests

- 3. Procedures
- 6. Work
- 9. Miscellaneous

Each section will be separated by a labeled divider and contain the appropriate procedure page corresponding to the section. The "procedure" pages are: the *notebook procedure*, the *classroom conduct*, the "How to Study" guide, "How is College Different than High School" sheet, the *hygiene etiquette*, the *note-taking procedure*, the *homework procedure*, and the *classroom testing etiquette*. All homework assignments are to be prepared by the homework procedure. The above order of the notebook does not constitute its order. Reference the notebook procedure for proper order.

\*\*To print the above material, visit my **Blackboard**. All printed material needs to be read at least once during the term of this course.\*\*

Quizzes & Tests: There will be random quizzes given over the assigned homework in which no make-ups will be allowed. The total number of quizzes for the semester is unpredictable but only a portion will count as the quiz grade. Make-up quizzes will NOT be given. There will be four tests (final exam exclusive). Any excused (notification must be made in advance) missed exam will be discussed with the instructor. The final exam will be comprehensive since the intent of this class is preparation for College Algebra. The final exam can replace your lowest test course provided that it is greater than the lowest test grade (the exception is the H.E.R.)

**Grading Policy:** Homework will be graded either by completion or by correctness. If the homework procedure is not followed, deductions will be made. Below is the legend for homework graded on completion

| √++ | 100 |
|-----|-----|
| √+  | 75  |
|     | 50  |
| √-  | 25  |

In order to advance to MATH 1314 – College Algebra, at least a C must be attained in this course.

Make-up Policy: There is no automatic provision for making up exams. Only under extreme circumstances (e.g., death in the family or hospitalization) will make-up exams be given, and these circumstances must be documented. If at all possible, the instructor should be notified prior to missing an exam. If you happen to miss an exam, a grade of 0 will be administered, and under the H.E.R. (Honest Effort Rule), this missed exam of grade 0 will not be replaced by the final exam even if the final exam is greater.

Study: You should normally spend approximately 2-3 hours outside of class in study for each hour of lecture. Try to study the assigned lesson as soon after the class meets as is possible. Refer to the "How to Study" sheet for further detailed studying suggestions.

# **Grading Scale:**

 Quizzes: 35%
 A: 90 and above
 D: 60 – 69

 Tests: 45%
 B: 80 - 89
 F: 59 or below

 Final: 20%
 C: 70 - 79

**Borderline Grades:** These grades will be evaluated with regard to attendance and mature conduct in class.

# **Critical Dates:**

| Sept 4     | Labor Day        | Nov 13     | WEB Pre-registration for Spring 2018 |
|------------|------------------|------------|--------------------------------------|
| Oct 13     | FALL Break       | Nov 10     | Advising Day for MECS                |
| Nov 16     | Last day to drop | Final Exam |                                      |
| Nov 22- 24 | Thanksgiving     | Dec 12     | (8 – 10 a, Tuesday)                  |

**Tutoring:** Free tutoring is available in the room 116 of the Mathematics-Engineering Building. For times and tutor names, please refer to posted tutor schedules in the math building or visit this math class on Blackboard.

Videotapes: Videotapes for many topics in this course are available in the Math. Department AVT lab (Rm. 116 of the Levelland campus). The web address for the online videos is as follows (<a href="http://spc.blackboard.com/webct/entryPageIns.dowebct">http://spc.blackboard.com/webct/entryPageIns.dowebct</a>). For username and password, please use *mvideos*. For the AVT lab on the Levelland campus, students are allowed to check the tapes out, view them in the office, or duplicate them with the equipment available in Rm. 116.

**Blackboard:** Some information for this class will exist on Blackboard such as syllabus, homework, etc. Please be responsible to log in to Blackboard and navigate to the appropriate site for this class.

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# Student Responsibilities:

- Attend class and be aware of announcements made in class.
- Work homework problems early enough to seek help if needed.
- Read and know the attendance policy.
- Attend math tutoring lab sessions.
- \*\* Turn off cell phones and pagers during class! \*\*
  - o If the instructor determines that activation of a cell phone, pager, PDA, Ipod, laptop, or any electronic device interrupts the lecture or classroom discussion or impedes the progress of any student then the instructor may ask the student to leave the class temporarily or permanently.
  - No technologic devices such as cell phones, PDA's, etc. are to be used during tests or in-class during quizzes, lectures, or discussions.
- Follow the classroom policy, no food or drink allowed in the classroom if posted.
- In addition to the No Food or Drink classroom policy, no tobacco products are to be consumed in class.
- Do not dress for the beach or bed.
- You will obtain your final grade for the class through MySPC and CampusConnect.

Cell Phone Policy: All students will, during each class period and for its duration, place and keep their cell phone, provided that they are at the present time in possession of said device, face-down in the right-hand corner and on the top surface of their desk. If a student's cell phone activates and/or the student engages in text messaging during class at anytime during the semester, the student, by the instructor's discretion, could be permanently dismissed from the class for the remainder of the semester. If a student's cell is activated during class and/or the student engages in text messaging determined by the instructor, and the student chose not to place their phone on top of their desk as mentioned above then the student will be dismissed from the class by the instructor permanently.

**Academic Misconduct:** Complete honesty is required from students in all facets of course work including homework assignments, tests, and the final exam. See the South Plains College Catalog for more detail.

Sanctions for Cheating or Plagiarizing: A grade of "F" in the course will be assigned to any student caught cheating or plagiarizing; additional sanctions may also be considered. Students are responsible for understanding the meanings of the words cheating and plagiarizing.

<u>Special Requests</u>: If you happen to become **ill** during the semester, please <u>respect</u> your instructor and your classmates by making your best effort to prevent contamination of the rest of the class including the instructor.

**Questions:** I invite all your questions **except** the following:

- 1. I wasn't able to make it to class. Did I miss anything? (Yes.)
- 2. Is this going to be on the test? (Perhaps, not directly, but if the ideas were not important, I would not be discussing them in class.)
- 3. Do you have the tests graded? (I put forth my best effort to have the tests graded so as to return them the next class session, however, there are times due to uncontrollable factors that this may not be possible.)

**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 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, 894-9611 ext. 2529.

#### Sexual Misconduct

It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Dr. Lynne Cleavinger, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Dr. Cleavinger at 716-2563 or lcleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

Campus Concealed Carry: 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.

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**Objectives:** Upon completion of this course and obtaining a passing grade, the student should have mastered at least 70% of the course objectives. These course objectives are the following:

# a.) Specific

- 1.) Factor polynomials
- 2.) Graph linear equations & write the equation of a straight line
- 3.) Add, subtract, multiply, divide, & simplify:
  - (i.) Rational expressions
- (ii.) Radical expressions, &
- (iii.) Complex Numbers

- 4.) Solve
- 5.) Rational equations & Radical equations
- 6.) Quadratic equations by
  - (i.) Factoring

(ii.) Square Root Property

(iii.) Competing the Square, &

(iv.) Quadratic Formula

- 7.) Systems of Equations by
  - (i.) Graphing

(ii.) Addition

(iii.) Substitution

8.) Systems of Inequalities by Graphing

#### b.) Core

### 9.) Communication Skills:

- > Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through oral communication
- Develop, interpret, and express ideas through visual communication

# 10.) Critical Thinking:

- Generate and communicate ideas by combining, changing, and reapplying existing information
- ➤ Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information

## 11.) Empirical and Quantitative Competency Skills:

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

|          |                                     | Course Outline  |  |  |  |
|----------|-------------------------------------|---|--|--|--|
| ***      |                                     | This schedule is tentative and subjective to change. Changes will be announced in class.  |  |  |  |
| Week     |                                     | Topics and Sections Covered   |  |  |  |
| 1        | 8/29, Tues                          | ASSESSMENT TEST   |  |  |  |
|          |                                     | 2.2 Linear Equations in One Variable  |  |  |  |
|          | 8/31, Thurs                         | 8.8 (3.7) Variation   |  |  |  |
|          | 9/5, Tues                           | 8.3 Functions   |  |  |  |
| 2        | 9/7, Thurs                          | <ul><li>4.1 Solving Systems of Linear Equations by Graphing</li><li>4.2 Solving Systems of Linear Equations by Substitution</li></ul>                               |  |  |  |
|          | 0/12 Tues                           |   |  |  |  |
| 3        | 9/12, Tues<br>9/14, Thurs           | <ul> <li>4.3 Solving Systems of Linear Equations by Elimination</li> <li>4.4 (Application) Direct Translation, Geometry, &amp; Uniform Motion Problems *</li> </ul> |  |  |  |
|          | 9/14, Thurs                         | 4.5 (Application) Mixture Problems *  |  |  |  |
| 4        |                                     | 3.7 (3.8) Linear Inequalities in Two Variables  |  |  |  |
|          | 9/21, Thurs                         | 4.6 Systems of Linear Inequalities *, Review  |  |  |  |
|          | 9/26, Tues                          | Review  |  |  |  |
| 5        | 9/28, Thurs                         | TEST #1   |  |  |  |
|          | 10/3, Tues                          | [6.1] GCF & Factor by Grouping  |  |  |  |
|          | j                                   |   |  |  |  |
| 6        | 10/5, Thurs                         | [6.2] Factoring Trinomials of the form: $1x^2 + bx + c$   |  |  |  |
|          |                                     | [6.3] Factoring Trinomials of the form: $ax^2 + bx + c$ , $a \ne 0$   |  |  |  |
| 7        | 10/10, Tues                         | [6.4] Factoring Special Products  |  |  |  |
|          | 10/12, Thurs                        | [6.6] Solving Polynomial Equations by Factoring   |  |  |  |
| 8        | 10/17, Tues [6.5] Factoring Summary |   |  |  |  |
|          | 10/19, Thurs                        | TEST #2   |  |  |  |
|          | 10/24, Tues<br>10/26, Thurs         | 7.1 Simplifying Rational Expressions  |  |  |  |
| 9        |                                     | 7.2 Multiplying & Dividing Rational Expressions   |  |  |  |
|          |                                     | 7.3 Adding & Subtracting Rational Expressions   |  |  |  |
| <b></b>  |                                     | 7.5 Adding & Subtracting Rational Expressions with a LCD  |  |  |  |
| 10       | 10/31, Tues<br>11/2, Thurs          | <ul><li>7.6 Complex Rational Expressions (#)</li><li>7.7 Rational Equations</li></ul>   |  |  |  |
|          | 11/2, Thurs<br>11/7, Tues           | Review  |  |  |  |
| 11       | 11/7, Tues<br>11/9, Thurs           | TEST #3   |  |  |  |
|          | ·                                   | 9.1 Square Roots  |  |  |  |
| 12       | 11/14, Tues                         | 9.2 nth Roots & Rational Exponents  |  |  |  |
| 12       | 11/16, Thurs                        | 9.3 Simplify Expressions Using Law of Exponents   |  |  |  |
| 4.5      | 11/21, Tues                         | 9.4 Simplifying Radical Expressions   |  |  |  |
| 13       | 11/23, Thurs                        | Thanks giving   |  |  |  |
| 4.4      | 11/28, Tues                         | 9.5 Adding, Subtracting, & Multiplying Radical Expressions  |  |  |  |
| 14       | 11/30, Thurs                        | 9.6 Rationalizing Radical Expressions   |  |  |  |
| 15       | 12/5, Tues                          | 9.8 Radical Equations   |  |  |  |
|          | 12/7, Thurs                         | Review for Final Exam   |  |  |  |
| Final(s) | 12/12                               | Tuesday, 1 – 3 p  |  |  |  |
|          | 12/13                               | Wednesday, 10:15 – 12:15 p  |  |  |  |

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# MATH 0320 (3:3:1) INTERMEDIATE ALGEBRA

# MATHEMATICS DEPARTMENT

Division of Arts & Sciences

South Plains College

FALL 2017

Shirley Davis