### South Plains College Math 1332 – Contemporary Mathematics (3:3:0) Course Syllabus Spring 2017

Instructor: Diane Eagle Office: M106 (mathematics building) Phone: 806-716-2736 E-mail: deagle@southplainscollege.edu

#### **Office Hours:**

Monday	Tuesday	Wednesday	Thursday	Friday
10:30 - 11:00	10:30 - 11:00	10:30 - 11:00	10:30 - 11:00	9:00 - 12:00
1:45 - 2:30	2:45 - 3:30	1:45 - 2:30	2:45 - 3:30	

Prerequisites: Successful completion of MATH 0320 or 2 units of high school algebra.

**Textbook:** <u>College Mathematics</u>, Cheryl Cleaves and Margie Hobbs, 9<sup>th</sup> edition, Pearson Ed. This textbook is available on reserve in the library.

**Supplies:** Pencils, paper, straightedge, and graph paper. **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. Arrive prepared to take notes every day.

**Course Description:** This course is designed specifically for those students who will terminate their mathematical training with one or two courses in mathematics. It includes the fundamentals and principles of algebra, introduction to geometry and trigonometry, use of graphs, proportions, percentages, and logarithms, with heavy emphasis on applications.

#### **Student Learning Outcomes/Competencies:**

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

- 1. Apply the arithmetic of real numbers and the concepts of ratio and proportion, percent, variation, and measure to practical problems.
- 2. Be able to manipulate polynomial, radical, exponential, and logarithmic expressions.
- 3. Find the solution set for linear equations in one or two variables, quadratic equations in one variable, and exponential equations in one variable, and apply these techniques to practical problems.
- 4. Find the solution to a 2x2 system of linear equations, and apply this technique to practical problems.
- 5. Recognize different geometric shapes and calculate area and volume.
- 6. Use the six trigonometric functions to solve right triangles and oblique triangles, and be able to apply these techniques to practical problems.
- 7. Organize statistical data, depict the data graphically, and find measures of central tendency, variation, and position. Solve simple probability and counting problems.

#### **Core Objectives:**

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

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

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

**Course Evaluation:** Your final grade will be determined by the average of 4 major tests (400 points) the comprehensive final exam (100 points) and daily homework assignments (100 points.) A total of 600 points are possible. The number of points earned will follow the grading scale below:

<b>Grading Scale:</b>	А	90 to 100	537 to 600 points
	В	80 to 89	477 to 536 points
	С	70 to 79	417 to 476 points
	D	60 to 69	357 to 416 points
	F	Below 60	0 to 356 points

**Exams:** Dates for the 4 major tests and comprehensive final exam are listed on the calendar. **There are NO makeup tests!** If you miss one of the 4 major tests, your final exam will count twice to replace the missing grade. A second missed test will be averaged as a zero. The final exam grade (if higher) will also replace the lowest major exam grade; however, if the final exam is lower than any of the 4 major exam grades, then it will only count once in the course average.

**Homework Assignments:** Homework is assigned from each section covered, and time will be available at the beginning of each class to ask questions. Consistently working problems reinforces the skills and concepts presented, and is essential for success in this course. In addition, many test questions come directly from the assigned problems and examples worked in class. Homework assignments will be collected the following class period. All steps/work must be shown and the answer clearly indicated to receive credit. Do not submit "answer sheets." In the event of an absence, you must email your assignment to me on or before the day it is due. **Absolutely NO late homework assignments will be accepted.** Daily grades comprise 100 points, or approximately 17%, of your overall average.

**Bonus Points:** Students will have the opportunity to make corrections on **one** test (final exam not included) of their choice, for up to 50% of the points missed. Corrections are due the following class period after the test is handed back and must be turned in on a separate sheet of paper WITH the exam. Occasionally, opportunities for extra points will be posted on Blackboard, or a bonus problem may be assigned to complete outside of class.

**Tutoring:** Students can obtain free tutoring in room M116 in the math building on the South Plains Campus in Levelland or in Building 2 at the Reese Center. Tutoring schedules will be posted on campus. Please remember to sign in when you seek the help of a tutor in each of these places.

**Course Specific Instructions:** Videotapes of many topics are available in room M116 in the math building at the Levelland campus. These tapes can be viewed in the lab, or checked out and taken home for viewing. A link is provided on Blackboard for online viewing. Additional free tutorial videos are also available at the following sites: http://patrickjmt.com/, http://www.mathtv.com/, and http://www.khanacademy.org/.

Attendance Policy: Attendance will be taken every class period. Students who arrive late, leave early, sleep during class, or fail to sign the attendance sheet may be counted absent. Whenever absences become excessive and, in the instructor's opinion, minimum course objectives cannot be met due to absences, the student will be withdrawn from the course. Any student who misses 3 consecutive classes or exceeds 5 absences throughout the semester will be administratively dropped and receive a grade of X or F. Students wishing to drop this class must see the registrar by Thursday, April 27, 2017 to officially withdraw and receive a grade of W.

**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 classroom. 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, talking loudly or off-topic, working on outside assignments, 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 graphing calculator, cell phone, or other electronic device during any in-class assignment or exam will result in a grade of zero. Leaving the classroom during an exam will not be permitted. Students who do not follow the academic honesty policy will receive a grade of zero for the assignment, 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.

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

# **PLEASE NOTE:** Texas SB 11 (Campus Concealed Carry) does NOT go into effect for community colleges until August 1, 2017.

Week	Monday			Wednesday	
1	Jan. 16	Martin Luther King Day	Jan. 18	Syllabus 1.3 p. 42 3–63	
2	Jan. 23	2.2 p. 79 3–144 2.3 p. 86 3–51	Jan. 25	2.4 p. 98 3–45 3.1 p. 117 3–51	
3	Jan. 30	3.2 p. 131 3–117 3.3 p. 141 29–32 all, 35, 38, 40	Feb. 1	4.1, 4.2, 4.3, 4.4 Homework TBA	
4	Feb. 6	7.2 p. 329 39–111	Feb. 8	7.3 p. 341 3–75	
5	Feb. 13	8.2 p. 385 3–54 8.3 p. 391 3–48	Feb. 15	TEST 1 (13 sections)	
6	Feb. 20	8.4 p. 400 3–36	Feb. 22	9.1 p. 421 9–15 all, 29–50 all 9.2 p. 433 1–22 all	
7	Feb. 27	9.3 p. 439 1–20 all 9.4 p. 447 3–21, 23–28 all	Mar. 1	10.1, 10.2, 10.3, 10.4 Homework TBA	
8	Mar. 6	15.3 p. 624 3–36 (omit 30)	Mar. 8	TEST 2 (11 sections)	
Spring Break					
9	Mar. 20	16.1 p. 682 1–15 all, 24–45	Mar. 22	16.2 p. 693 3–27, 30–47 all	
10	Mar. 27	17.2 p. 725 3–54 17.3 p. 740 3–24, 37–39 all	Mar. 29	17.3 p. 740 49–51 all, 59–63 all 17.4 p. 750 3–33	
11	Apr. 3	18.1 p. 774 4–16 all 18.2 p. 781 1–13 all	Apr. 5	TEST 3 (6 sections)	
12	Apr. 10	18.4 p. 795 1–20 all 19.1 p. 817 7–12, 19–28, 45–53 all	Apr. 12	19.2 p. 828 3–39, 41, 48–53 all, 62	
13	Apr. 17	Easter	Apr. 19	20.4, 20.5 Homework TBA	
14	Apr. 24	6.1 p. 265 3–42 6.2 p. 275 3–48, 55–64 all, 67, 69	Apr. 26	TEST 4 (7 sections)	
15	May 1	6.3 p. 287 3–39 (omit 18, 33) p. 306 64, 65	May 3	REVIEW	
16	May 8	NO CLASS	May 10	FINAL EXAM section 001 3:15pm – 5:15pm	

## MATH 1332.001- SPRING 2017

All assignments are every third problem (ex. 13, 16, 19, 22 ...) unless otherwise noted. \*\*\*Last day to drop is Thursday, April 27, 2017\*\*\*

## MATH 1332.002- SPRING 2017

Week	Tuesday		Thursday		
1	Jan. 17	Syllabus	Jan. 19	1.3 p. 42 3–63	
2	Jan. 24	2.2 p. 79 3–144 2.3 p. 86 3–51	Jan. 26	2.4 p. 98 3–45 3.1 p. 117 3–51	
3	Jan. 31	3.2 p. 131 3–117 3.3 p. 141 29–32 all, 35, 38, 40	Feb. 2	4.1, 4.2, 4.3, 4.4 Homework TBA	
4	Feb. 7	7.2 p. 329 39–111	Feb. 9	7.3 p. 341 3–75	
5	Feb. 14	8.2 p. 385 3–54 8.3 p. 391 3–48	Feb. 16	TEST 1 (13 sections)	
6	Feb. 21	8.4 p. 400 3–36	Feb. 23	9.1 p. 421 9–15 all, 29–50 all 9.2 p. 433 1–22 all	
7	Feb. 28	9.3 p. 439 1–20 all 9.4 p. 447 3–21, 23–28 all	Mar. 2	10.1, 10.2, 10.3, 10.4 Homework TBA	
8	Mar. 7	15.3 p. 624 3–36 (omit 30)	Mar. 9	TEST 2 (11 sections)	
	Spring Break				
9	Mar. 21	16.1 p. 682 1–15 all, 24–45	Mar. 23	16.2 p. 693 3–27, 30–47 all	
10	Mar. 28	17.2 p. 725 3–54 17.3 p. 740 3–24, 37–39 all	Mar. 30	17.3 p. 740 49–51 all, 59–63 all 17.4 p. 750 3–33	
11	Apr. 4	18.1 p. 774 4–16 all 18.2 p. 781 1–13 all	Apr. 6	TEST 3 (6 sections)	
12	Apr. 11	18.4 p. 795 1–20 all 19.1 p. 817 7–12, 19–28, 45–53 all	Apr. 13	19.2 p. 828 3–39, 41, 48–53 all, 62	
13	Apr. 18	20.4, 20.5 Homework TBA	Apr. 20	6.1 p. 265 3–42	
14	Apr. 25	6.2 p. 275 3–48, 55–64 all, 67, 69	Apr. 27	TEST 4 (7 sections)	
15	May 2	6.3 p. 287 3–39 (omit 18, 33) p. 306 64, 65	May 4	REVIEW	
16	May 9	FINAL EXAM section 002 10:15am – 12:15pm	May 11	NO CLASS	

All assignments are every third problem (ex. 13, 16, 19, 22 ...) unless otherwise noted. \*\*\*Last day to drop is Thursday, April 27, 2017\*\*\*