South Plains College Department of Mathematics & Engineering Math1332 – Contemporary Math Course Syllabus – Spring 2017

Math1332.0271.162S Scheduled Class Time: MW – 5:30pm-6:45pm, Byron Martin ATC, ATC104

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

Monday	Tuesday	Wednesday	Thursday	Friday			
10:00-10:45	9:45-10:30	10:00-10:45	9:45-10:30	9:00-12:00			
4:30-5:00 (@ ATC)	3:45-4:15	4:30-5:00 (@ ATC)	3:45-4:15				
Or by appointment							

Supplies: Notebook, lined loose-leaf paper, 3-ring binder, pencils, straight edge, graph paper. Only a basic, non-graphing calculator, (TI-30XIIS is recommended) 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.

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.

Textbook: Cleaves, C. & Hobbs, M. College Mathematics, 9th Edition. ISBN 13: 978-0-13-611632-5

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.

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. For every 3 accounts that you are marked as being tardy, you will receive 1 mark of being absent; i.e. 3 tardies = 1 absent. 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 and Quizzes: Homework will be assigned for each section of material covered and will be collected on the due date at the end of class. Homework is assigned to reinforce the learning and mastery of concepts taught in class. Late homework will not be accepted and a

grade of zero will be assigned. Quizzes may be given at any time. The average of all homework and quiz grades will account for 20% of your final grade.

Exams: There will be four unit exams, each worth 15% of your final grade, and one comprehensive final exam for this class. The average of your exam grades will account for 60% of your final grade. **There will be no make up exams.** The final exam will account for 20% of your final grade. If your final exam grade is greater than your lowest exam grade, then that grade will be replaced by the grade from your final exam.

Calculation of Final Grade				
Homework	20%			
Average				
Exam Average	60%			
Final Exam	20%			

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

Supplementary Course Information & Tutoring:

Blackboard is the online course management system that will be utilized for this course. This 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, room 206 and 208 in Building 2 at the Reese Campus, and in room _____ at the ATC.

The Instructor: Students are encouraged to come see me, the instructor, during my office hours for assistance for homework or further understanding of material.

The Internet: The topics, along with the examples and solutions of problems that are covered in this class are freely available to you through the Internet. There are numerous webpages, PDFs, and videos that will relate to everything that is covered in this class. Various web links will be posted in Blackboard throughout the semester for you to reference. I encourage that you search for other references and utilize these to gain a more solid understanding of the martial.

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 graphing 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.

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 through the Guidance and Counseling Centers at Reese Center (Building 8) 716-4606, or Levelland (Student Services Building) 716-2577.

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.

Tentative Course Schedule for Math1332.001.161S \ast

Spring 2017: MW classes

Week	Day	Lesson	Homework	
			Assignment	
1	Wed, Jan 18	Syllabus		
		1.3 - Order of Operations and Problem	#3-63 (x3)	
		Solving		
2	Mon, Jan 23	2.2 - Equivalent Fractions and Decimals	#3-144 (x3)	
		2.3 - Adding and Subtracting Fractions	#3-51 (x3)	
	Wed, Jan 25	2.4 - Multiplying and Dividing Fractions	#3-45 (x3)	
		3.1 - Percents	#3-51 (x3)	
3	Mon, Jan 30	3.2 - Percentage Problems	#3-117 (x3)	
		3.3 - Increase and Decrease	#29-32 (all),	
	Wed, Feb 1	Chapter 4 - Measurement	#35, #38, #40 Worksheet	
4	Mon, Feb 6	7.2 - Solving Linear Equations	#39-72 (x3),	
		1.2 Solving Linear Equations	#81-111 (x3)	
	Wed, Feb 8	7.3 - Solving Linear Equations with	#3-75 (x3)	
	,	Fractions		
5	Mon, Feb 13	8.2 - Proportions	#3-54 (x3)	
	,	8.3 - Direct and Joint Variation	#3-48 (x3)	
	Wed, Feb 15	Exam 1 (20%) (though 7.3)		
6	Mon, Feb 20	8.4 - Inverse and Combined Variation	#3-36 (x3)	
	Wed, Feb 22	9.1 - Graphical Representations of Linear	#9-15, #35-50,	
		Functions	#71-74 (all)	
		9.2 - Graphing Linear Functions	#1-22 (all)	
7	Mon, Feb 27	9.3 - Slope	#1-15 (all)	
		9.4 - Linear Equations of a Line	#3-27 (x3), #23	
	Wed, Mar 1	Chapter 10		
8	Mon, Mar 6	15.3 - Solving Quadratic Equations	#3-36 (x3)	
	Wed, Mar 8	Exam 2 (20%) (through chapter 10)		
	Mon, Mar 13	Spring Break		
	Wed, Mar 15	Spring Break		
9	Mon, Mar 20	16.1 - Exponential Expressions, Equations,	#1-15 (all),	
		and Formulas	#24-45 (x3),	
			#81, #82	
	Wed, Mar 22	16.2 - Logarithmic Expressions, Equations,	#3-27 (x3),	
		and Formulas	#30-47 (all)	

10	Mon, Mar 27	17.9 Delycong	#254(m2)	
10	Mon, Mar 27	17.2 - Polygons	#3-54 (x3)	
		17.3 - Circles and Radians	#3-27 (x3),	
			#37, #39	
	Wed, Mar 29	17.3 - Circles and Radians	#49-51, #59-61,	
			#63 (all)	
		17.4 - Volume and Surface Area	#3-33 (x3)	
11	Mon, Apr 3	18.1 - Special Triangle Relationships	#11-16 (all)	
		18.2 - Pythagorean Theorem	#1-13 (all)	
Wed, Apr 5		Exam 3 (20%) (through 17.4)		
12	Mon, Apr 10	18.4 - Distance and Midpoints	#1-19 (all)	
		19.1 - Trigonometric Functions	#7-12, #19-28,	
			#45-53 (all)	
	Wed, Apr 12	19.2 - Solving Right Triangles	#3-39 (x3),	
			#41, #48-52	
			(all), $\#62$	
13	Mon, Apr 17	Easter Holiday		
	Wed, Apr 19	20.4 - Law of Sines	Worksheet	
		20.5 - Law of Cosines	Worksheet	
14	Mon, Apr 24	6.1 - Reading Circle, Bar, and Line Graphs	#3-42 (x3)	
		6.2 - Measures of Central Measures	#3-48 (x3),	
			#55-64 (all),	
			#67, #69	
	Wed, Apr 26	Exam 4 (20%) (through 20.5)		
15	Mon, May 1	6.3 - Measures of Dispersion	#3-39 (x3)	
	Wed, May 3	Review		
16	Wed, May 10	Final Exam (20%) - 5:30-7:30		

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