

South Plains College
Department of Mathematics & Engineering
Math1332 – Contemporary Math
Course Syllabus – Spring 2016

Math1332.001.161S

Scheduled Class Time: MW – 2:30pm-3:45pm, Math Building, AG105

Math1332.002.161S

Scheduled Class Time: TR – 11:00am-12:15pm, Math Building, AG105

Instructor: Jerod Clopton

Office: M102

Email: jclopton@southplainscollege.edu

Phone: 806-716-2738

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
9:45-10:30	9:45-10:30	9:45-10:30	9:45-10:30	9:00-12:00
4:00-4:45	2:30-3:00	4:00-4:45	2:30-3:00	
Or by appointment				

Supplies: Notebook, lined loose-leaf paper, pencils, straight edge, 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.

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 off 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 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 Average	20%
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%)

Bonus Points: Students will have the option to correct **one** exam to improve that exam grade (final exam excluded) for up to 50% of the points missed. If the student chooses to correct an exam, the corrected exam must be turned in at the beginning of the following class meeting, with all work done on separate sheets of paper with the exam.

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 or room _____ in Building 2 at the Reese Campus or 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 every thing 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 *

Week	Date	Lesson	Homework Assignment
1	Mon, Aug 29	Syllabus	
		1.3 - Order of Operations and Problem Solving	#3-63 (x3)
	Wed, Aug 31	2.2 - Equivalent Fractions and Decimals	#3-144 (x3)
		2.3 - Adding and Subtracting Fractions	#3-51 (x3)
2	Mon, Sep 5	Labor Day	
	Wed, Sep 7	2.4 - Multiplying and Dividing Fractions	#3-45 (x3)
		3.1 - Percents	#3-51 (x3)
3	Mon, Sep 12	3.2 - Percentage Problems	#3-117 (x3)
		3.3 - Increase and Decrease	#29-32 (all), #35, #38, #40
	Wed, Sep 14	Chapter 4 - Measurement	Worksheet
4	Mon, Sep 19	7.2 - Solving Linear Equations	#39-72 (x3), #81-111 (x3)
	Wed, Sep 21	7.3 - Solving Linear Equations with Fractions	#3-75 (x3)
5	Mon, Sep 26	8.2 - Proportions	#3-54 (x3)
		8.3 - Direct and Joint Variation	#3-48 (x3)
	Wed, Sep 28	Exam 1 (though 7.3)	
6	Mon, Oct 3	8.4 - Inverse and Combined Variation	#3-36 (x3)
	Wed, Oct 5	9.1 - Graphical Representations of Linear Functions	#9-15, #35-50, #71-74 (all)
		9.2 - Graphing Linear Functions	#1-22 (all)
7	Mon, Oct 10	9.3 - Slope	#1-15 (all)
		9.4 - Linear Equations of a Line	#3-27 (x3), #23
	Wed, Oct 12	Chapter 10	
8	Mon, Oct 17	15.3 - Solving Quadratic Equations	#3-36 (x3)
	Wed, Oct 19	Exam 2 (through chapter 10)	
9	Mon, Oct 24	16.1 - Exponential Expressions, Equations, and Formulas	#1-15 (all), #24-45 (x3), #81, #82
	Wed, Oct 26	16.2 - Logarithmic Expressions, Equations, and Formulas	#3-27 (x3), #30-47 (all)
10	Mon, Oct 31	17.2 - Polygons	#3-54 (x3)
		17.3 - Circles and Radians	#3-27 (x3), #37, #39
	Wed, Nov 2	17.3 - Circles and Radians	#49-51, #59-61, #63 (all)
		17.4 - Volume and Surface Area	#3-33 (x3)
11	Mon, Nov 7	18.1 - Special Triangle Relationships	#11-16 (all)
		18.2 - Pythagorean Theorem	#1-13 (all)
	Wed, Nov 9	Exam 3 (through 17.4)	
12	Mon, Nov 14	18.4 - Distance and Midpoints	#1-19 (all)
		19.1 - Trigonometric Functions	#7-12, #19-28, #45-53 (all)
	Wed, Nov 16	19.2 - Solving Right Triangles	#3-39 (x3), #41, #48-52 (all), #62
13	Mon, Nov 21	20.4 - Law of Sines	Worksheet
		20.5 - Law of Cosines	Worksheet
	Wed, Nov 23	Thanksgiving	
14	Mon, Nov 28	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, Nov 30	Exam 4 (through 20.5)	
15	Mon, Dec 5	6.3 - Measures of Dispersion	#3-39 (x3)
	Wed, Dec 7	Review	
16	Wed, Dec 14	Final Exam: 3:15-5:15	

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

Tentative Course Schedule for Math1332.002.161S *

Week	Date	Lesson	Homework Assignment
1	Tue, Aug 30	Syllabus	
	Thu, Sep 1	1.3 - Order of Operations and Problem Solving	#3-63 (x3)
	Tue, Sep 6	2.2 - Equivalent Fractions and Decimals	#3-144 (x3)
2		2.3 - Adding and Subtracting Fractions	#3-51 (x3)
	Thu, Sep 8	2.4 - Multiplying and Dividing Fractions	#3-45 (x3)
		3.1 - Percents	#3-51 (x3)
3	Tue, Sep 13	3.2 - Percentage Problems	#3-117 (x3)
		3.3 - Increase and Decrease	#29-32 (all), #35, #38, #40
	Thu, Sep 15	Chapter 4 - Measurement	Worksheet
4	Tue, Sep 20	7.2 - Solving Linear Equations	#39-72 (x3), #81-111 (x3)
	Thu, Sep 22	7.3 - Solving Linear Equations with Fractions	#3-75 (x3)
5	Tue, Sep 27	8.2 - Proportions	#3-54 (x3)
		8.3 - Direct and Joint Variation	#3-48 (x3)
	Thu, Sep 29	Exam 1 (though 7.3)	
6	Tue, Oct 4	8.4 - Inverse and Combined Variation	#3-36 (x3)
	Thu, Oct 6	9.1 - Graphical Representations of Linear Functions	#9-15, #35-50, #71-74 (all)
		9.2 - Graphing Linear Functions	#1-22 (all)
7	Tue, Oct 11	9.3 - Slope	#1-15 (all)
		9.4 - Linear Equations of a Line	#3-27 (x3), #23
	Thu, Oct 13	Chapter 10	
8	Tue, Oct 18	15.3 - Solving Quadratic Equations	#3-36 (x3)
	Thu, Oct 20	Exam 2 (through chapter 10)	
9	Tue, Oct 25	16.1 - Exponential Expressions, Equations, and Formulas	#1-15 (all), #24-45 (x3), #81, #82
	Thu, Oct 27	16.2 - Logarithmic Expressions, Equations, and Formulas	#3-27 (x3), #30-47 (all)
10	Tue, Nov 1	17.2 - Polygons	#3-54 (x3)
		17.3 - Circles and Radians	#3-27 (x3), #37, #39
	Thu, Nov 3	17.3 - Circles and Radians	#49-51, #59-61, #63 (all)
		17.4 - Volume and Surface Area	#3-33 (x3)
11	Tue, Nov 8	18.1 - Special Triangle Relationships	#11-16 (all)
		18.2 - Pythagorean Theorem	#1-13 (all)
	Thu, Nov 10	Exam 3 (through 17.4)	
12	Tue, Nov 15	18.4 - Distance and Midpoints	#1-19 (all)
		19.1 - Trigonometric Functions	#7-12, #19-28, #45-53 (all)
	Thu, Nov 17	19.2 - Solving Right Triangles	#3-39 (x3), #41, #48-52 (all), #62
13	Tue, Nov 22	20.4 - Law of Sines	Worksheet
		20.5 - Law of Cosines	Worksheet
	Thu, Nov 24	Thanksgiving	
14	Tue, Nov 29	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
	Thu, Dec 1	Exam 4 (through 20.5)	
15	Tue, Dec 6	6.3 - Measures of Dispersion	#3-39 (x3)
	Thu, Dec 8	Review	
16	Tue, Dec 13	Final Exam: 10:15-12:15	

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