

South Plains College  
Math 1316 – Plane Trigonometry (3:3:0)  
Course Syllabus  
Spring 2019

**Instructor:** Diane Eagle

**Office:** M106 (mathematics building)

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**Office Hours:**

Monday	Tuesday	Wednesday	Thursday	Friday
1:45 to 3:00	1:45 to 3:00	1:45 to 3:00	1:45 to 3:00	9:00 – 12:00

**Prerequisites:** Successful completion of MATH 1314 or two units of high school algebra.

**Textbook:** Trigonometry, by Dugopolski, 4<sup>th</sup> edition, Pearson Education, Inc., ISBN-10: 0321923480. 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.** Graphing calculators and calculators on cell phones or other electronic devices or apps will **NOT** be allowed during tests or in-class assignments. Calculators may not be allowed on certain assignments and/or portions of exams. Arrive on time and come prepared to take notes every day.

**Course Description:** Topics will include trigonometric functions, radian measure, logarithms, oblique triangles, functions of composite angles, trigonometric identities and equations, and inverse trigonometric functions. Note: This course satisfies a 020 Mathematics Core Curriculum requirement.

**Student Learning Outcomes/Competencies:**

Upon successful completion of this course, students will:

1. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
2. Graph trigonometric functions and their transformations.
3. Prove trigonometric identities.
4. Solve trigonometric equations.
5. Solve right and oblique triangles.
6. Use the concepts of trigonometry to solve applications.

**General Education Core Objectives:**

1. **Critical Thinking:** Students will develop habits of mind, allowing them to appreciate the processes by which scholars in various disciplines organize and evaluate data and use the methodologies of each discipline to understand the human experience.

2. **Communication Skills:** Students will communicate ideas, express feelings and support conclusions effectively in written, oral and visual formats.
3. **Empirical and Quantitative Skills:** Students will develop quantitative and empirical skills to understand, analyze and explain natural, physical and social realms.

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

<b>Grading Scale:</b>	A	90 to 100	537 to 600 points
	B	80 to 89	477 to 536 points
	C	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 and Quizzes:** 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. Short quizzes will be given, worth 5–10 points each. To do well on the quizzes, you will need to complete the homework. Completed homework assignments may be used to work these quizzes, but not the textbook or your notes. Focus your effort on being able to complete the problems on a quiz/exam without any outside resources. **There is NO makeup for quizzes and a grade of zero will be assigned.** Quizzes account for 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 choosing, for up to 50% of the points missed. Corrections are due the following class period after the test is handed back. Test corrections must have complete and correct solutions and be turned in on a separate sheet of paper **with** the exam.

**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 and on Blackboard. Please remember to sign in when you seek the help of a tutor in each of these places.

**Additional Resources:** Blackboard is the online management system used for this course. Your grades, along with the course syllabus, handouts, reviews, and other resources can all be accessed through Blackboard. Opportunities for additional points are occasionally posted. Free tutorial videos are available at the following sites: <http://patrickjmt.com/>, <http://www.mathtv.com/>, and <http://www.khanacademy.org/>. These links are posted on Blackboard. **Be sure to check Blackboard and your SPC email account regularly for class announcements and updates.**

**Attendance Policy:** Attendance will be taken every class period. Students who arrive late, leave early, sleep during class, or **access their cell phones during class**, 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 25, 2019 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. **Use of cell phones during class will not be tolerated! You will receive ONE verbal warning, after which you will be asked to leave and receive a zero for that day's assignment.** 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 devices or apps 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, and may be dropped from the course with an F, or face possible suspension from the college.

**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.

**Disabilities 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.

**Non-Discrimination Statement:** South Plains College does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number: 806-716-2360.

## MATH 1316.005 – SPRING 2019 (tentative schedule)

Week	Tuesday		Thursday	
1	Jan. 15	Syllabus Prerequisites Skills Review	Jan. 17	1.1 Angles and Degree Measure
2	Jan. 22	1.2 Radian Measure, Arc Length, Area	Jan. 24	1.4 Trigonometric Functions
3	Jan. 29	1.5 Right Triangle Trigonometry	Jan. 31	1.6 Fundamental Identity and Reference Angles
4	Feb. 5	1.3 Angular and Linear Velocity	Feb. 7	<b>TEST 1</b>
5	Feb. 12	3.1 Basic Identities	Feb. 14	3.2 Verifying Identities
6	Feb. 19	3.3 Sum/Difference Identities for Cosine	Feb. 21	3.4 Sum/Difference Identities for Sine and Tangent
7	Feb. 26	3.5 Double and Half Angle Identities	Feb. 28	3.6 Product and Sum Identities
8	Mar. 5	2.1 Unit Circle and Graphing	Mar. 7	<b>TEST 2</b>
<b>Spring Break</b>				
9	Mar. 19	2.2 General Sine Wave	Mar. 21	2.3, 2.4 Graphs of Secant, Cosecant, Tangent, and Cotangent
10	Mar. 26	4.2 Basic Sine, Cosine, Tangent Equations	Mar. 28	4.3 Equations Involving Compositions
11	Apr. 2	4.4 Trigonometric Equations of Quadratic Type	Apr. 4	5.1 Law of Sines
12	Apr. 9	<b>TEST 3</b>	Apr. 11	5.2 Law of Cosines
13	Apr. 16	5.3 Area of a Triangle	Apr. 18	5.4 Vectors
14	Apr. 23	5.5 Applications of Vectors	Apr. 25	6.4 Polar Equations <b>Last Day To Drop</b>
15	Apr. 30	<b>TEST 4</b>	May 2	<b>REVIEW</b>
16	May 7	<b>FINAL EXAM</b> <b>5:30pm – 7:30pm</b>	May 9	

**\*\*\*Last day to drop is Thursday, April 25, 2019\*\*\***