

South Plains College
 Department of Mathematics & Engineering
 Math1316 – Plane Trigonometry
 Course Syllabus – Spring 2019

Instructor: Jerod Clopton
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Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
2:00 – 4:00	10:00 – 11:00	2:00 – 4:00	10:00 – 11:00	10:00-12:00
Or by appointment				

Course Information

Course Description: MATH 1316 – Trigonometry: (3:3:0); Topics will include trigonometric functions, radian measure, logarithms, oblique triangles, functions of composite angles, trigonometric identities and equations, and inverse trigonometric functions. Semester Hours: 3 Lecture Hours: 3 Lab Hours: 0
Pre-requisite: MATH 1314 or two units of high school algebra.

Student Learning Outcomes:

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.

Course Supplies:

- **Required:** Scientific Calculator (with log and ln). **Graphing calculators are not allowed.**
- **Required:** Large 3-ring binder, dividers, notebook paper, graph paper, hole punch, pencils, and erasers.
- **Required:** (textbook) *Trigonometry*, by Dugopolski, ISBN-10: 0321923480. Your assignments, as well as additional explanation, will be in the book. You will need to bring it with you to class every day.
- **Warning:** Do not expect your instructor to have supplies for you to borrow.

Course Assessment

Homework/Quizzes/ Binder Checks:

- Homework will be assigned at each class. Work the problems early enough to seek help if needed.
- Homework is due at the beginning of the next class. **Late homework will not be accepted.**
- Quizzes will be given most days. **Make-up quizzes will not be given.**
- At the end of the semester the lowest 4 grades (homework/quiz/binder) will be dropped.
- All students will keep a binder which will be used as a reference and study guide.
- The binder will be checked randomly by the instructor during the semester.

Binder organization:

- Section 1: Syllabus
- Section 2: Notes for each section covered—Handouts to use to take notes are posted on Blackboard. It is your responsibility to print the handouts. If you are absent, it is your responsibility to get the notes from a classmate.
- Section 3: Homework
- Section 4: Quizzes (corrected on a separate sheet of paper behind the quiz).
- Section 5: Reviews/Unit Exams

These pages will be kept in chronological order. **Being absent does not excuse you from notes, homework or quizzes.**

Exams:

- 4 Unit Exams
- Final Exam is comprehensive.
- There are no exemptions for the final.
- If you are going to miss an exam contact your instructor immediately (preferably prior to the exam). Make up exams are very rare and only be provided under extreme, documented circumstances.
- Once you begin an exam, you will not be able to leave the classroom until the exam is submitted for grading.

Grading Formula:

Enrollment in this course does not guarantee advancement to the next course level. The final responsibility for learning lies with the student. The final letter grade for this course will be based on the following:

4 Tests 16% each	64%
Homework/Quizzes/Binder	20%
Final Exam.....	16%

Final Grade Determination: A(90-100%), B(80-89%), C(70-79%), D(60-69%), F(0-59%)

Additional Statements

Classroom Etiquette:

- **Class attendance is expected, not optional.** Class attendance may be taken at any time during the class period, so please do not be late or leave early. Leaving early and being tardy will be considered 1/2 of an absence. You may be dropped from this course with a grade of X or F if you are absent four consecutive classes or if you exceed five absences (**for any reason**).
- Preparation for class (including homework) is to be completed before – not during – the lecture.
- Chronic tardiness (entrance after lecture has begun) is unacceptable.
- NO tobacco use of any form is allowed in the classroom.
- Discussion of course material among students is encouraged during class, but habitually disruptive students will be asked to leave.
- All electronic communication devices are to be silenced and put away during class.

Resources:

- Blackboard! The course syllabus, handouts for notes, homework, quiz keys, and reviews will be available on Blackboard.
- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted by there.
- I am available to help you! Feel free to come by during my office hours or email me at jclopton@southplainscollege.edu

Use of Student Email: The College provides a free, official email account to all students to ensure efficient and secure communications between you and the College and your instructors. Students will be required to use their college-issued email address to communicate with their instructors and all other college personnel, so it is easy to distinguish a student's email from spam. The College expects that students will utilize their college email addresses to send and receive communications with college personnel and will read email on a frequent and consistent basis.

Withdrawal Policy: As required by Texas Education Code Section 51.907, all new students who enroll in a Texas public institution of higher education for the first time beginning with the 2007 fall semester and thereafter, are limited to six course drops throughout their entire undergraduate career. All course drops, including those initiated by students or faculty and any course a transfer student has dropped at another institution, automatically count toward the limit. After six grades of W are received, students must receive grades of A, B, C, D, or F in all courses. There are other exemptions from the six-drop limit and students should consult with a Counselor/Educational Planner before they drop courses to determine these exemptions. Students receiving financial aid must get in touch with the Financial Aid Office before withdrawing from a course. It is the student's responsibility to drop. Excessive absences (4 consecutive or 5 total) will result in an administrative withdrawal with a Grade of X or F. If you plan to withdraw, please consult with the instructor immediately.

Note: The last day to drop with a grade of W is Thursday, April 25, 2019.

Disclaimer: The instructor reserves the right to alter any class policies/dates as deemed necessary by the instructor, and will announce any changes in class.

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.

Title IX Pregnancy Accommodations Statement If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact Crystal Gilster, Director of Health and Wellness at 806-716-2362 or email cstraface@southplainscollege.edu for assistance.

Campus Concealed Carry Statement 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 and Frequently Asked Questions, please refer to the Campus Carry page at: <https://www.southplainscollege.edu/campuscarry.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.

Course Calendar – Spring 2018

Week	Date	Topic	Assignment
1	Mon, Jan 14	Prerequisite Skills Review	Worksheet
	Wed, Jan 16	1.1 Angles and Degree Measure	p. 51; 11-103 odd & 108
	Fri, Jan 18		
2	Mon, Jan 21	Martin Luther King Holiday	
	Wed, Jan 23	1.2 Radian Measure, Arc Length, Area	p. 60; 5-111 odd omit 103, 107
	Fri, Jan 25	1.4 The Trig Functions	p. 78; 5-57, 83-95 odd omit 89
3	Mon, Jan 28	1.5 Right Triangle Trigonometry	p. 78; 63-81, p. 89 7-37 odd
	Wed, Jan 30	1.6 Fundamental Identities and Reference Angles	p. 102; 3-53 odd
	Fri, Feb 01		
4	Mon, Feb 04	1.3 Angular and Linear Velocity	p. 68; 5-43 odd & 47
	Wed, Feb 06		
	Fri, Feb 08	Review	
5	Mon, Feb 11	Exam 1 (16%)	
	Wed, Feb 13	3.1 Basic Identities	p. 167; 1-73 odd
	Fri, Feb 15		
6	Mon, Feb 18	3.2 Verifying Identities	p. 175; 5-73 odd
	Wed, Feb 20	3.2 Verifying Identities	Worksheet
	Fri, Feb 22		
7	Mon, Feb 25	3.3 Sum/Difference Identities for Cosine	p. 182; 5-89 odd, worksheet
	Wed, Feb 27	3.4 Sum/Difference Identities for Sine and Tangent	p. 188; 1-55 odd, worksheet
	Fri, Mar 01	3.5 Double and Half Angle Identities	p. 196; 1-61 odd
8	Mon, Mar 04	3.6 Product and Sum Identities	Worksheet
	Wed, Mar 06	Review	
	Fri, Mar 08	Exam 2 (16%)	
	Mon, Mar 11	Spring Break	
	Wed, Mar 13	Spring Break	

	Fri, Mar 15	Spring Break	
9	Mon, Mar 18	2.1 The Unit Circle and Graphing	p. 119; 71-89 odd
	Wed, Mar 20	2.2 Basic Sine Wave	p. 129; 11-27 odd
	Fri, Mar 22	2.3 Graphs of Secant and Cosecant	p. 138; 33-53 odd
10	Mon, Mar 25	2.4 Graphs of Tangent and Cotangent	p. 146; 35-51 odd
	Wed, Mar 27	4.2 Sine, Cosine and Tangent Equations	p. 235; 3-61 odd
	Fri, Mar 29	4.3 Equations Involving Compositions	p. 242; 1-79 odd
11	Mon, Apr 01	4.4 Trig Equations of Quadratic Type	p. 250; 1-83 odd omit 63
	Wed, Apr 03		
	Fri, Apr 05	Review	
12	Mon, Apr 08	Exam 3 (16%)	
	Wed, Apr 10	5.1 Law of Sines	p. 265; 5-29 odd & 33
	Fri, Apr 12		
13	Mon, Apr 15	5.2 Law of Cosines	p. 274; 5-17 odd & 30
	Wed, Apr 17	5.3 Area of a Triangle	p. 281; 3-25 odd
	Fri, Apr 19	5.4 Vectors	p. 292; 9-85 odd
14	Mon, Apr 22	Easter Break	
	Wed, Apr 24	5.5 Vector Applications	p. 301; 1-19 odd
	Fri, Apr 26	Review	
15	Mon, Apr 29	Exam 4 (16%)	
	Wed, May 01	Comprehensive Review	
	Fri, May 03	Review	
16	Mon, May 06	Final Exam (16%)	

Note: This is a tentative calendar, meaning that topics and associated assignments may be edited as deemed necessary by the instructor. Announcements of changes and adjustments will be made during class and posted on Blackboard.