Trigonometry - MATH 1316.001 - Course Syllabus - Fall 2021

Instructor: Karol AlbusEmail: kalbus@southplainscollege.edu (preferred method of contact)Office: M110Telephone: (806)-716-2543Office hours:As listed or by appointment

Monday	Tuesday	Wednesday	Thursday	Friday
1:00-2:00	8:00-11:00 am	8:00-9:00 pm (Zoom)	No office hours	9:00-12:00
(Lev Office M110)	(Lev Office M110)			(Lev Office M110)

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.

Use of Student Email: The College provides a free, official email account to all students to ensure efficient and secure communications. Students will be required to use their college-issued email 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 to send and receive communications and will read email on a frequent and consistent basis.

Course Supplies:

- NOTE: There is NO book required for this course. All materials are available on Blackboard.
- **Required:** Reliable Internet Access
- **Required:** Ability to print documents
- **Required:** Scientific Calculator. **TI-30XIIS** is inexpensive and user friendly. **Graphing calculators are not** allowed.
- **Required:** Notebook Paper, Pencils, and Erasers.
- **Required:** No book is required, but notes will be posted on Blackboard and **you will be expected to print them and complete them in class**.
- **Optional:** The adopted textbook would only be used for a reference. We will not use it for coursework.
- **Suggested:** Large 3-ring binder, dividers, hole punch

Homework/Quizzes:

- There will be an assignment for each lesson. Work the problems early enough to seek help if needed.
- Homework will be due at the beginning of the next class period.
- Grades on the homework will be $\sqrt{1}$, $\sqrt{-1}$, or 0. All \sqrt{s} for a unit earns 5 Bonus points on an exam. Less = less Bonus points.
- Quizzes will be given daily. Make-up quizzes will not be given.
- At the end of the semester the lowest 2 quiz grades will be dropped.
- All students are encouraged to keep a binder which will be used as a reference and study guide.

Exams:

- 3 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 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:

3 Exams 20% each	.60%
Quizzes	.20%
Final Exam	.20%

Classroom Etiquette:

- Class attendance is expected, not optional. Leaving early and being late will be considered ½ absence. You may be dropped from this course with a grade of X or F if you exceed four absences (for any reason).
- Preparation for class including attempting the previous class assignment is essential to success.
- NO tobacco use of any form is allowed in the classroom.
- All electronic communication devices are to be silenced and put away during class.

Resources:

- Blackboard: The course syllabus, notes, videos of all lecture topics, assignments, answer keys, quiz solutions, and reviews will be available on Blackboard.
- **Tutoring** is available and free. We want you to succeed! See the various tutoring options below.
- I am available to help you! Feel free to come by during my office hours, request a meeting on zoom, or email me at <u>kalbus@southplainscollege.edu</u>.

SPC Tutors

Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, get to know the tutors, and view tutoring locations.

http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

Tutor.com

You also have 180 FREE minutes of tutoring with tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tutor.com link on the left-hand tool bar and grab a session with a tutor. You can access tutor.com tutors during the following times:

Monday - Thursday: 8pm-8am

6pm Friday – 8am Monday morning

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 (3 consecutive or 4 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, December 2, 2021

South Plains College Common Course Syllabus: MATH 1316 Revised August 2021

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1316

Course Title: Plane Trigonometry

Available Formats: conventional, hybrid, internet and ITV

Campuses: Levelland, Reese, and Dual Credit

Course Description: In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included.

Prerequisite: Minimum score of 350 on the TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 1314.

Credit: 3 Lecture: 3 Lab: 0

Textbook: Trigonometry, Dugopolski, 2019, 5th Edition, Prentice Hall/Pearson Education

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

Core Curriculum Objectives addressed:

- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

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

- 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.

Student Learning Outcomes Assessment: A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

Course Evaluation: There will be departmental final exam questions given by all instructors.

Attendance/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the total class meetings and submit at least eighty percent (80%) of the total class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor <u>may</u> remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student can not receive an X, the instructor will assign an F.

Plagiarism violations include, but are not limited to, the following:

- 1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
- 2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
- 3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
- 4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

- 1. Obtaining an examination by stealing or collusion;
- 2. Discovering the content of an examination before it is given;
- 3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
- 4. Entering an office or building to obtain an unfair advantage;
- 5. Taking an examination for another;
- 6. Altering grade records;
- 7. Copying another's work during an examination or on a homework assignment;
- 8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
- 9. Taking pictures of a test, test answers, or someone else's paper.

COVID Syllabus Statement: It is the policy of South Plains College that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the SPC community. There will be no requirement for face coverings at any location on any South Plains College campus or classroom. Faculty, staff, or students may continue to wear a mask voluntarily, but there will be no requirements for face coverings in any circumstance.

If you are experiencing any of the following symptoms please do not attend class and either seek medical attention or get tested for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Student Code of Conduct Policy: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from 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.

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.

Nondiscrimination Policy: 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 <u>activate</u> 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 the Director of Health and Wellness at 806-716-2362 or <u>email rcanon@southplainscollege.edu</u> for assistance.

Campus Concealed Carry: 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 Ouestions, please refer the Campus Carry to page at: http://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.

SPC Bookstore Price Match Guarantee Policy: If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by* Amazon, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

Trigonometry Tentative Course Outline - Math 1316.001 MW 8:00-9:15 Fall 2021

Week Day Date Topic		Date	Торіс	What is Due?	
1	М	M Aug 30 Syllabus, Assignment 1.1: Arithmetic and Algebra Refresher			
	W	Sept 1	Assignment 1.2: Angles in Degrees & Radians, Arc Length, and Area	Asgmt 1.1, Quiz 1.1	
2	М	Sept 6	Labor Day Holiday		
	W	Sept 8	Assignment 1.3: Trigonometric Functions	Asgmt 1.2, Quiz 1.2	
3	M Sept 13 Assignment 1.4: Cofunctions, DMS, and More Trigonometric Functions		Asgmt 1.3, Quiz 1.3		
W		Sept 15	Assignment 1.5: Solving Right Triangle	Asgmt 1.4, Quiz 1.4	
4	М	Sept 20	Assignment 1.6: Linear & Angular Velocity	Asgmt 1.5, Quiz 1.5	
	W	Sept 22	Unit 1 Review	Asgmt 1.6, Quiz 1.6	
5	М	Sept 27	Unit 1 Exam (20%)		
	W	Sept 29	Assignment 2.1: Identities & Verifications	Asgmt 1.7	
6	М	Oct 4	Assignment 2.2: More Verifications	Asgmt 2.1, Quiz 2.1	
	W	Oct 6	Assignment 2.3: Sum & Difference Identities for Cosine	Asgmt 2.2, Quiz 2.2	
	М	Oct 11	Assignment 2.4: Sum & Difference Identities for Sine & Tangent	Asgmt 2.3, Quiz 2.3	
	W	Oct 13	Assignment 2.5: Double Angle Identities	Asgmt 2.4, Quiz 2.4	
	F	Oct 15	Fall Break – no office hours		
8	М	Oct 18	Assignment 2.6: Half Angle Identities (possibly add power reducing)	Asgmt 2.5, Quiz 2.5	
	W	Oct 20	Assignment 2.7: Graphing Sine and Cosine	Asgmt 2.6, Quiz 2.6	
	М	Oct 25	Assignment 2.8: Graphing Secant, Cosecant, Tangent and Cotangent	Asgmt 2.7, Quiz 2.7	
	W	Oct 27	Unit 2 Exam Review	Asgmt 2.8, Quiz 2.8	
10 M N		Nov 1	Unit 2 Exam (20%)		
	W	Nov 3	Assignment 3.1: Inverse Trig Functions and Solving Basic Trig Equations		
11	М	Nov 8	Assignment 3.2: Solving Trig Equations Involving Compositions and Quadratic in Type	Asgmt 3.1, Quiz 3.1	
	W	Nov 10	Assignment 3.3: Solving Advanced Trig Equations	Asgmt 3.2, Quiz 3.2	
12	М	Nov 15	Assignment 3.4: Law of Sines	Asgmt 3.3, Quiz 3.3	
	W	Nov 17	Assignment 3.5: Law of Cosines	Asgmt 3.4, Quiz 3.4	
13	М	Nov 22	Unit 3 Exam Review	Asgmt 3.5, Quiz 3.5	
	W	Nov 24	Thanksgiving Holiday		
14	М	Nov 29	Unit 3 Exam (20%)		
	W	Dec 1	Assignment 4.1: An Introduction to Vectors Unit		
	Th	Dec 2	Last day to drop a course with a grade of W		
15	М	Dec 6	Assignment 4.2: Applications of Vectors	Asgmt 4.1, Quiz 4.1	
	W	Dec 8	Comprehensive Final Review	Asgmt 4.2, Quiz 4.2	
16	М	Dec 13	Comprehensive Final Exam 8:00-10:00		