# Trigonometry – MATH 1316.001 – Course Syllabus – Fall 2024

Instructor: Karol Albus

Office: M110

Telephone: (806)-716-2543

## Email (preferred method of contact): <a href="mailto:kalbus@southplainscollege.edu">kalbus@southplainscollege.edu</a>

**Email Policy:** All students at South Plains College are assigned a standardized SPC e-mail account. Although personal email addresses will continue to be collected, the assigned SPC e-mail account will be used as the official channel of communication for South Plains College. The Student Correspondence Policy can be found at www.southplainscollege.edu. To access the SPC student e-mail account, log in to portal.office.com. (Copied from SPC Student Guide) Since all students have an assigned SPC email, the instructor will only acknowledge, respond, and send emails to your assigned SPC email. This ensures all correspondence from the instructor is received by the intended recipient.

## Office hours: As listed or by appointment. Appointments are booked on Blackboard under Instructor Information

Monday Tu	uesday	Wednesday	Thursday	Friday
9:30-10:00 am 8: (Lev Office M110)	:00-11:00 am (M110)	9:30-10:00 am (M110)		8:00-12:00 (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.

**Blackboard Learn:** Blackboard is the online course management system that will be utilized for this course. All access to course information and your instructor is through the Internet. This course syllabus, as well as <u>all</u> course materials can be accessed through Blackboard. Login at <u>https://southplainscollege.blackboard.com/</u>. 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 CampusConnect Pin No. (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to <u>blackboard@southplainscollege.edu</u> or by telephone to 806-716-2180.

#### **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

#### Methods of Learning Assessment:

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. Late assignments will not be accepted
- Quizzes will be given daily. If you are not present for the quiz, you will be given a 0 for that grade.
- At the end of the semester the lowest 4 daily 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					-		
Assignment/Quizzes Final Exam							
Final Grade Determination:	A 90-100	B 80-89	С	70-79	D 60-69	F	0-59

## **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 five 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 is the online course management system that will be used for this course. The course syllabus, notes, assignments, reviews, as well as any other class handouts can be accessed through Blackboard. Your grades will also be posted there. You will want to check Blackboard regularly.
- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted by the door of M116.
- I am available to help you! Feel free to come by during my office hours or email me at kalbus@southplainscollege.edu.

#### SPC Tutors (before 8pm)

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, and view tutoring locations. http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

#### Brainfuse (after 8pm and weekends)

You also have 180 free minutes online tutoring with Brainfuse each week. Log into Blackboard, click on the "Assist" or "Tools" option from the left-hand menu bar. Click on the Brainfuse Live Tutoring link and you will automatically be logged in for free tutoring. You may access Brainfuse tutors during the following times:

Monday – Thursday: 8pm-8am

6pm Friday – 8am Monday morning

For questions regarding tutoring, please email <u>tutoring@southplainscollege.edu</u> or call 806-716-2538.

**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. Students will be required to use their college-issued email address to communicate with their instructor 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.

# \*\*\* I have turned off my Blackboard messages and will be unable to read a message sent to me through Blackboard messages. To communicate with me electronically, please use email.

Note: The last day to drop with a grade of W is Thursday, April 27, 2023.

#### South Plains College Common Course Syllabus: MATH 1316 Revised December 2022

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, Downtown Center, 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 meetings **and** submit at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class meetings **and** submit 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.

**Student Code of Conduct Policy**: Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior. 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.

South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: <u>https://www.southplainscollege.edu/syllabusstatements/</u>. South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: <u>https://www.southplainscollege.edu/emergency/covid19-faq.php</u>.

**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.

Week	Date	Lesson / Tentative Assignment	What is Due?
2	Mon Sept 4	Labor Day Holiday – No Class	
	Wed Sept 4	Course Introduction and Tips for Success Assignment 1.1: Arithmetic and Algebra Refresher	
3	Mon Sept 9	Assignment 1.2: Angles in Degrees & Radians, Arc Length, and Area	Asgmt 1.1, Quiz 1.1
	Wed Sept 11	Assignment 1.3: Trigonometric Functions	Asgmt 1.2, Quiz 1.2
4	Mon Sept 16	Assignment 1.4: Cofunctions, DMS, and More Trigonometric Functions	Asgmt 1.3, Quiz 1.3
	Wed Sept 18	Assignment 1.5: Solving Right Triangle	Asgmt 1.4, Quiz 1.4
5	Mon Sept 23	Unit 1 Review	Asgmt 1.5, Quiz 1.5
	Wed Sept 25	Unit 1 Exam (20%) Assignment 1.7	Unit 1 Review
6	Mon Sept 30	Assignment 2.1: Identities & Verifications	Asgmt 1.7
	Wed Oct 2	Assignment 2.2: More Verifications	Asgmt 2.1, Quiz 2.1
7	Mon Oct 7	Assignment 2.3: Sum & Difference Identities for Cosine	Asgmt 2.2, Quiz 2.2
	Wed Oct 9	Assignment 2.4: Sum & Difference Identities for Sine & Tangent	Asgmt 2.3, Quiz 2.3
8	Mon Oct 14	Assignment 2.5: Double Angle Identities	Asgmt 2.4, Quiz 2.4
	Wed Oct 16	Assignment 2.6: Half Angle Identities (possibly add power reducing)	Asgmt 2.5, Quiz 2.5
	Fri Oct 18	Fall Break – No Office Hours	
9	Mon Oct 21	Assignment 2.7: Graphing Sine and Cosine	Asgmt 2.6, Quiz 2.6
	Wed Oct 23	Assignment 2.8: Graphing Secant, Cosecant, Tangent and Cotangent	Asgmt 2.7, Quiz 2.7
10	Mon Oct 28	Unit 2 Exam Review	Asgmt 2.8, Quiz 2.8
	Wed Oct 30	Unit 2 Exam (20%) Assignment 2.9	Unit 2 Review
11	Mon Nov 4	Assignment 3.1: Inverse Trig Functions and Solving Basic Trig Equations	Asgmt 2.9
	Wed Nov 6	Assignment 3.2: Solving Trig Equations Involving Compositions and Quadratic in Type	Asgmt 3.1, Quiz 3.1
12	Mon Nov 11	Assignment 3.3: Solving Advanced Trig Equations	Asgmt 3.2, Quiz 3.2
	Wed Nov 13	Assignment 3.4: Law of Sines	Asgmt 3.3, Quiz 3.3
13	Mon Nov18	Assignment 3.5: Law of Cosines	Asgmt 3.4, Quiz 3.4
	Wed Nov 20	Unit 3 Exam Review	Asgmt 3.5, Quiz 3.5
14	Mon Nov 25	Unit 3 Exam (20%)	Unit 3 Review
	Wed Nov 22	Thanksgiving Holiday – No Class	
15	Mon Dec 2	Assignment 1.6: Linear & Angular Velocity	
	Wed Dec 4	TBD : Vectors or Review	Asgmt 1.6
16	Mon Dec 9	Comprehensive Final Exam 8:00-10:00	