South Plains College
Common Course Syllabus: MATH 1316
Revised December 2019

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1316

Course Title: Plane Trigonometry

Available Formats: conventional 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 TSIA, 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 Policy: Attendance and effort are the most important activities for success in this course. Records of your attendance are maintained throughout the semester. Five (5) absences, *for any reason*, are allotted to the student for the semester. Tardies count as one-half (1/2) of an absence. Tardies will be applied for consistently being late to class, as deemed by the instructor and leaving class early. If this number is exceeded, the instructor has the right to drop you with a grade of F or an X, depending on their discretion.

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 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 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 the Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu 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 Questions, please refer to the Campus Carry 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.

SOUTH PLAINS COLLEGE
MATHEMATICS, ENGINEERING & COMPUTER SCIENCE

Mathematics 1316 – Plane Trigonometry
Section 151: Online Monday-Thursday

Instructor Information

Contact   **Instructor:** Evan Vargas   **Phone:** (806) 716-4673   **Email:** evargas@southplainscollege.edu

Course Information

Textbook   *Trigonometry, Dugopolski, 2019, 5th Edition, Prentice Hall/Pearson Education* (Not required)

Materials   MyMathLab online code, pencils, erasers, paper, and scientific calculator

Grading Policy

Weights

			Grading Scale		
Homework	10%			90-100	**A**
Quiz	10%			80-89	**B**
Exams (4)	15% each			70-79	**C**
Final Exam	20%			60-69	**D**
Total	**100%**			0-59	**F**

MyMathLab Homework   Daily Homework assignments are assigned through MyMathLab. You MUST purchase a code for MyMathLab by June 4th, 2020. Each homework assignment will have a corresponding due date.

MyMathLab Quizzes   Quizzes are also assigned through MyMathLab. Unlike Homework assignments, quizzes are not assigned daily but expect at least two Quizzes before an Examination. Quizzes will be approximately 30 minutes.

Hand-Written Exams   Examinations will cover material from Homework, Quizzes, and Lectures as indicated by the course itinerary. Exams will be a combination of open answer, fill in the box, and/or multiple choice. Therefore, students must submit hand written work for each exam via BlackBoard through pictures or as a scanned document. You MUST show all work to receive full to partial credit. Each exam will be posted on the indicated date and students will have from 8:00 AM to 11:59 PM. Failure to submit an examination will award zero credit. No excuses for tardiness.

Final Exam   A **comprehensive** final exam will be given at the end of the semester. Failure to attempt the final exam will result in a failing grade for the course. Regular Examination submission rules apply here.

All grades are rounded from the tenths place, e.g. 80.5 = 81, 80.49 = 80. Upon the submission of grades at the end of the semester. **ALL GRADES ARE FINAL**

Class Policies

Attendance   Records of your attendance are maintained via MyMathLab. You must log on to MyMathLab each day of class (Monday-Thursday) to be counted present. Failure to log into MyMathLab, Blackboard, or submit a Quiz and Examinations will count towards an absence; excessive absences will drop the student from the course.

Email   The instructor will only acknowledge, respond, and send emails to your assigned South Plains College email. This ensures the intended recipient receives all correspondence from the instructor. It is the students' responsibility to have their email set up and ready to use by the end of the first week of class. Failure to do so will not exonerate the student from any penalties incurred through the semester.

MyMathLab   Students are required to purchase a MyMathLab online code (textbook is not required). You may purchase this code through the Pearson website or from the South Plains College Bookstore. Failure to obtain access to MyMathLab by the fourth class day will result in the student being dropped from the course. You may consider using a fourteen day trial access for MyMathLab until you are able to make a full purchase.

Online Videos While the textbook is not required for the class, instruction will be conveyed through video demonstrations. These videos will be posted daily to show students vital concepts and examples. Each video will be approximately 15-30 minutes long and will be posted on BlackBoard.

**Instructor
Contact**   I implore each of you to contact me if an issue arises. Email will be the best bet but you may leave a message on my office phone. Please do not hesitate, I am here to help each of you in the best possible way that I can.

Class Itinerary

Week 1	June 1st	0.0 Practice/Review 1.1 Angles and Degree Measure
	June 2nd	1.2 Radian Measure, Arc Length, and Area 1.4 The Trigonometric Functions
	June 3rd	1.5 Right Triangle Trigonometry
	June 4th	1.6 The Fundamental Identity and Reference Angles
Week 2	**June 8th**	**Examination 1**
	June 9th	2.1 Unit Circle and Graphing 2.2 The General Sine Wave
	June 10th	2.3 Graphs of the Secant and Cosecant Functions
	June 11th	2.4 Graphs of the Tangent and Cotangent Functions
Week 3	June 15th	3.1 Basic Identities 3.2 Verifying Identities
	June 16th	**Examination 2**
	June 17th	3.3 Sum and Difference Identities for Cosine 3.4 Sum and Difference Identities for Sine and Tangent
	June 18th	3.5 Double-Angle and Half-Angle Identities 3.6 Product and Sum Identities
Week 4	June 22nd	4.1 The Inverse Trigonometric Functions
	June 23rd	4.2 Basic Sine, Cosine, and Tangent Equations
	June 24th	**Examination 3**
	June 25th	4.3 Equations Involving Compositions 4.4 Trigonometric Equations of Quadratic Type
Week 5	June 29th	5.1 The Law of Sines 5.2 The Law of Cosines
	June 30th	5.4 Vectors
	July 1st	6.4 Polar Equations 6.5 Parametric Equations
	July 2nd	**Examination 4**
Week 6	**July 6th**	**Review**
	July 7th	**Final Examination**