Common Course Syllabus: Plane Trigonometry (MATH 1316)
Spring 2026

Department: Mathematics, Engineering, and Computer Science **Discipline:** Mathematics

Course Number: MATH 1316 **Section:** 441 **Course Title:** Plane Trigonometry

Available Formats: conventional, hybrid, internet, and ITV. The format of this section of College Algebra will be ITV (Interactive Two-Way Video).

Campuses: Levelland, Downtown Center, Plainview Center, and Dual Credit. This dual credit section of College Algebra will meet each week on Mondays, Wednesdays, and Fridays from 9:00-9:50am through the ITV system.

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:**

Instructor: Jerod Clopton
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Telephone: (806) 716-2738
Email: jclopton@southplainscollege.edu

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.

- My expected response time to received emails is as follows:
  - For emails sent on Monday-Thursday, I will attempt to respond within 24 hours.
  - For emails sent on Friday-Sunday, I may not respond until the following Monday.

Virtual/Face-to-Face Office Hours:

- Mondays and Wednesdays: N/A
- Tuesdays and Thursdays: 8:00-11:00am
- Fridays: 10:00am-12:00pm
- Students are welcome to come by my office anytime during my scheduled office hours.
- Appointments may be scheduled by contacting me by email or in person, or by scheduling through Blackboard.
- Virtual appointments may also be scheduled through Blackboard.

Textbook: A textbook is not required for this section of this course. However, there are a couple of references that are available to the student.

- Freely available online: Algebra and Trigonometry 2e from OpenStax, Print ISBN 978-1-711494-03-6, Digital ISBN 978-1-951693-40-4, https://openstax.org/details/books/algebra-and-trigonometry-2e
    - This textbook is also embedded in your Blackboard course for easier referencing. However, if you prefer a print copy as a reference tool, the ISBN is located at the web link above.
- The course material in this course is built from the content of the following textbook: *Trigonometry*, Dugopolski, 2019, 5th Edition, Prentice Hall/Pearson Education, ISBN0-135-20733-9

Supplies:

- Calculator: You may use a scientific calculator on most homework, quizzes, and exams. Graphing calculators, calculators on cell phones, TI-89, TI-92, or TI-Inspire calculators, or any other electronic devices will not be allowed during testing without permission from the instructor. If you have any questions about your calculator, check with the instructor immediately.
- Paper, maybe a small amount of graph paper, pencils, and erasers.
- Access to a printer to print documents. Make certain you have access to a scanner or scanning app. Gradescope is the recommended app.
- You may want a 3-ring binder (about 2 inches) and dividers to keep track of all the course materials

Blackboard: Blackboard is the online course management system that will be utilized for this course. This course is supplemented online, so all access to course information and your instructor is through the Internet. This course syllabus, as well as all course materials can be accessed through Blackboard. Login at https://southplainscollege.blackboard.com/. The username and password should be the same as the MySPC and SPC email.

Username: first initial, last name, and last 4 digits of the Student ID
Password: Original Campus Connect Pin No. (found on SPC acceptance letter)

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

Core Curriculum Objectives addressed:

- **Communication 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. Your final average in the course will determine the letter grade posted on your transcript. This grade is determined by the following scale: A (90-100%), B (80-89%), C (70-79%), D (60-69%), F (0-59%).

- Assignments = 10%
- Quizzes = 10%
- Unit Exams (5 total) = 60% (12% each)
- Final Exam = 20%

Assignment Format and Policy: Assignments are given after each lesson and are collected according to the Tentative Course Calendar.

For each question on each assignment:

- Write your name at the top of each page of your work.
- Write the assignment title on the first page of your work.
- For each assigned problem write the problem number.
- In solving the problem, show all the necessary work.
- Clearly mark your answer.
- Check your answers in Blackboard to make certain you are practicing the exercises correctly.
- Submit your work for the assignment and corresponding section notes in Gradescope as a single PDF file, preferably using the Gradescope app.
    - You can also submit your work on the web at Gradescope.com. You will need to scan your work either with a scanner or your phone to a PDF file and upload the file from your computer or phone. (PDF files can also be generated easily using a scanner or many freely available phone apps, like CamScanner, Scannable, or OneDrive.)
- All homework assignments will be due by 9:50am of the assigned due date. (See the Tentative Course Calendar for due dates)

Make certain to complete and submit assignments on time (or early). Early submissions are welcomed! Late assignments will be accepted with a 15% deduction up to the time of the unit exam. Assignments may not be submitted after the unit exam.

Grading Rubric for Weekly Assignments:

Percentage of Assignment Grade	**Criteria**
70%	All practice exercises are attempted, and all required work is shown. • A subset of problems from the assignment may be graded, which will account for no more than 30% of the assignment grade.
30%	Notes from the Blackboard lesson are completed.
–15%	The assignment was submitted past the due date.

Quiz Format and Policy: Expect a face-to-face quiz to be given on the assigned dates according to the Tentative Course Calendar. No late quizzes will be accepted, as quizzes are to be taken during the class time. Quizzes will be collected by, scanned, and emailed to me by the facilitator for the class.

Exam Format and Policy: There will be five unit exams in this course. Exams will be given on the day listed on the Tentative Course Calendar. All exams must be taken in pencil. Students may not leave the examination room for any reason without turning in their exam for grading. Exams will be collected by, scanned, and emailed to me by the facilitator for the class.

Final Exam: The comprehensive final will be given on Monday, May 5th from 8:00 to 10:00am. No make-up final will be given.

Make-Up Quizzes/Exams: No make-up quizzes or exams will be given without prior notification AND proper documentation. If you are absent from a quiz or exam, you must give prior notification and proper documentation of your absence. Students who do not take exams at the normal time, early or late, forfeit the right to attempt any potential extra credit on that quiz or exam.

To maximize your potential for successfully completing this course:

- Login to Blackboard daily.
- Watch the lecture videos and take notes on them.
- Thoroughly complete and submit the assignments on time.
- Practice the exercises repeatedly until you have full mastery of them.
- Ask questions as needed.

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 may 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.

Before arriving for the class meeting, make certain you have:

- worked through the notes and videos for that day's lessons;
- completed some of the assigned exercises.

Upon arriving at the class meeting, we will:

- answer questions over exercises;
- work through lab exercises;
- submit assignments and quizzes.

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, and view tutoring locations.
http://www.southplainscollege.edu/explореprograms/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: 8:00pm-8:00am
- 6:00pm Friday-8:00am Monday

For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-2538. A

Academic Integrity (Plagiarism and Cheating Policy): "Complete honesty is required of the student in the presentation of any and all phases of course work. This idea applies to quizzes of whatever length as well to final examinations, to daily reports, and to term papers" (SPC General Catalog).

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.

Plagiarism and Cheating Statement: It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. (SPC General Catalog)

Plagiarism and cheating are not tolerated in this course. Under the policies of South Plains College, punishment for cheating may include no credit (failing) on the assignment, quiz, exam, or the course.

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.

COVID Response: South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: COVID Response (southplainscollege.edu).

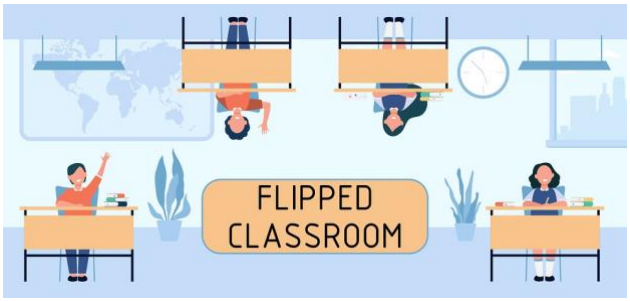
Diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, Campus Concealed Carry: South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: Syllabus Statements (southplainscollege.edu).

Texas HB 1481 – Personal Communication Devices

In accordance with Texas House Bill 1481, public school districts are required to adopt policies regulating student use of personal communication devices during the school day while on school property. Dual credit students should be aware of and comply with the cell phone and device policy of their local school district.

Because this is a college-level course, students are responsible for ensuring they can complete all required coursework, assessments, and submissions in a manner that complies with both college expectations and their school district's device policy. Students should be prepared to work with or around these restrictions, which may include using district-issued devices, submitting work after school hours, or coordinating with a campus facilitator when necessary.

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.



Tips for Learning in a Flipped Classroom

This class is a flipped classroom and will operate differently than the face-to-face classroom that you have previously experienced. In a flipped classroom you will spend time outside of class watching and taking notes from lecture videos and during class you will work on your homework assignments. This flipped classroom setting will open more opportunities for me, the instructor, to work with you by addressing homework questions, facilitating class discussions, and having collaborative assignments. Here are some suggestions that will help you operate within this flipped classroom environment and help you successfully complete this course.

Lecture Videos

- Watch the lecture videos in a quiet and distraction-free setting
- Silence your cellphone
- Close all other tabs and windows on your computer
- Disconnect from any social media while watching the lecture videos
- Have class notes or notebook and writing device for taking notes
- Use a set of headphones to watch to videos, in order to cancel all ambient noise

Note-Taking Tips

- Take careful notes from the videos
- Draw appropriate diagrams and charts in your notes
- Frequently pause the video to take notes
- "Rewind" the video when you don't understand things
- When the instructor tells you to solve a problem or write something down, do it
- Write down questions in your notes from the lecture video when you don't understand something

How to Prepare for Assessments

- Contact the instructor with your questions and ask the instructor for help and clarification
- Work with your classmates
- Offer to help your classmates with things you understand
- Ask for help from your classmates when they understand more than you
- Take any opportunity to review current and previous material
- Review graded assessments and seek to understand any errors made in your wor

Tentative Course Calendar: Plane Trigonometry Spring 2025 (MWF 9:00)		
Date	Topic	Assignment and Quiz Due Dates • Assignments are due by 11:59 pm on corresponding Saturdays, unless stated otherwise. • Quizzes are due by the end of class of the day the quiz is administered.
Week 1: Jan 12-16	Course Introduction 1.1: Angles and Degree Measure 1.2: Radian Measure, Arc Length, Area	 1.1 and 1.2
Week 2: Jan 19-23	**MLK Holiday (Mon, Jan 19)** 1.3: Angular and Linear Velocity Quiz 1 (Friday)	 1.3 Quiz 1 (due Friday)
Week 3: Jan 26-30	1.4: The Trig Functions 1.5: Right Triangle Trigonometry Quiz 2 (Friday)	 1.4 and 1.5 Quiz 2 (due Friday)
Week 4: Feb 2-6	1.6: Fundamental Identities and Reference Angles Review for Exam 1 **Exam 1** (Friday)	 1.6 (due before Exam 1)
Week 5: Feb 9-13	2.1: The Unit Circle and Graphing 2.2: The General Sine Wave Quiz 3 (Friday)	 2.1 and 2.1 Quiz 3 (due Friday)
Week 6: Feb 16-20	2.3: Graphs of Secant and Cosecant Functions 2.4: Graphs of Tangent and Cotangent Functions Review for Exam 2	 2.3 and 2.4,
Week 7: Feb 23-27	**Exam 2** (Monday) 3.1: Basic Identities 3.2: Verifying Identities	 3.1 and 3.2
Week 8: Mar 2-6	3.3: Sum and Difference Identities for Cosine 3.4: Sum and Difference Identities for Sine and Tangent Quiz 4 (Friday)	 3.3 and 3.4 Quiz 4 (due Friday)
Week 9: Mar 9-13	3.5: Double and Half Angle Identities 3.6: Product and Sum Identities Quiz 5 (Friday)	 3.5 and 3.6, Quiz 5 (due Friday)
March 16-20	**Spring Break**	
Week 10: Mar 23-27	Review for Exam 3 **Exam 3 (Wednesday)** 4.2: Basic Sine, Cosine, and Tangent Equations	 4.2
Week 11: Mar 30-Apr 3	4.3: Equations Involving Compositions 4.4: Trig Equations of Quadratic Type **Easter Break (Friday)**	 4.3 and 4.4
Week 12: Apr 6-10	Review for Exam 3 **Exam 4 (Wednesday)** 5.1: The Law of Sines	 5.1
Week 13: Apr 13-17	5.2: The Law of Cosines 5.3: Area of a Triangle Quiz 6	 5.2 and 5.3 Quiz 6 (due Friday)
Week 14: Apr 20-24	5.4: Vectors 5.5: Application of Vectors Review for Exam 4	 5.4 and 5.5
Week 15: Apr 27-May 1 (Apr 30 Last day to drop Spring courses)	**Exam 5 (Monday)** Review for Final Exam	 Final Exam Review
Week 16: May 4-7	**Final Exam: Wednesday, May 6th, 8:00-10:00am**	