

**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, 5<sup>th</sup> 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 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.

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

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at [dedens@southplainscollege.edu](mailto:dedens@southplainscollege.edu) or 806-716-2376.

**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 rcanon@southplainscollege.edu](mailto:rcanon@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.

**Fall 2021 Math 1316.002 Trigonometry**  
**TR 1:00 – 2:15 Math 123**

**Instructor:** Jennifer Bartlett  
**Office:** Levelland Campus, Math Building Room 113  
**Telephone:** (806) 716-2664  
**Email:** [jkbartlett@southplainscollege.edu](mailto:jkbartlett@southplainscollege.edu)

**Office Hours:**  
 Mon & Wed 8:30-11:30 in Levelland Math 113,  
 Friday 8:30-10:30 virtual on Zoom,  
 or by appointment face-to-face or zoom  
**Virtual Office Hours Zoom Link:**  
<https://southplainscollege.zoom.us/j/97739016686>

**Course Materials:**

- Calculator: You may use a plain scientific calculator on some homework, quizzes, and exams. You may NOT use a graphing calculator or a calculator on a cell phone on any of the quizzes, exams, or the final exam. You are required to bring your calculator to EVERY class.
- 3-ring binder (1.5 inch), dividers, notebook paper, graph paper, hole punch, stapler, pencils, and erasers.
- Access to a reliable internet service, a way to print and scan documents, a device with the capability to participate in Zoom meetings with video and audio

**Homework:** Homework will be assigned at each class meeting and will be submitted through Blackboard as a SINGLE PDF document. No late assignments will be accepted. You should show all work when doing homework. Simply writing the problem and the answer is not “doing homework.” Using a solution manual or an app that shows you the steps, and copying them down is NOT “doing homework.” Remember your effort is key to your success. You have to focus your effort on being able to complete the problems on a quiz/exam without any outside resources. You are responsible for the following homework requirements. Any homework that does not follow the homework requirements will be recorded as a grade of a zero.

Homework Requirements:

- 1) Assignments must be submitted through Blackboard by the beginning of the next class period (before 8:00am). Late homework will not be accepted.
- 2) Multiple pages must be scanned, saved, and submitted as a SINGLE PDF document.
- 3) Assignments must be written in pencil on white 8.5 x 11 inch paper. It must be neat and legible. I will be the judge as to what is neat. Just because you can read it doesn't mean that I can interpret it.
- 4) Assignments must be presented in an orderly manner with the problem running in a single or double column down the page. No more than double column work will be graded.
- 5) All final answers must be circled to receive credit. Any algebraic answer not circled or “boxed” in will not be graded. Pictures/graphs do not need to be circled or boxed.

**Notebook:** You will keep all class materials (notes, handouts, homework, quizzes, exams, etc.) organized in a notebook (3-ring binder) . These materials should be neat, brought to every class period, and will be used as a reference and study guide.

**Quizzes:** Short, in-class quizzes that will be given regularly will have problems selected from, or closely related to, your homework. Most, if not all, quizzes will be pop-quizzes so you will need to be prepared every class period. Students arriving late may be denied the chance to take a quiz, if there is one that day. Quizzes must be taken in pencil.

**Exams:** Exams must be taken in pencil. Student may not leave the examination room for any reason without turning in their exam for grading. The tentative exam dates are as follows on the course schedule below. If classes are moved to an online format, exams will be recorded.

**Final:** The comprehensive final will be given on Thursday, December 16<sup>th</sup> from 10:15am – 12:15pm. No make-up final will be given. The final will cover all material covered in-class.

**Make-up:** Make-up work is given at the discretion of the instructor. NO make-up quizzes or tests are given without prior notification AND proper documentation. If are absent from class, have given prior notification and proper documentation of your absence, you MUST make arrangements to take the quiz or test BEFORE the next class period. Students who do not take quizzes or exams in-class, early or late, forfeit the right to attempt any extra credit on that quiz or exam.

**Grading Policy:**

Daily Work (notes, HW, quizzes, labs, etc.)	16%
Exams (4 total)	16% each (total of 64%)
Comprehensive Final	20%

**Grading Scale:**

90-100%	A
80-89%	B
70-79%	C
60-69%	D
Below 60%	F

Grades will be updated on Blackboard during the semester. All students should check this often and notify the instructor immediately if there are any questions or discrepancies.

**Student Responsibilities and Expectations:**

1. Come to class on time and prepared to learn. (Pencils, homework, notebook, calculator)
2. Watch the course videos on the days that we have virtual/online class, take notes, and complete your assignment
3. Take notes, participate in class, and complete course assignments early enough to seek help if needed.
4. Food and drink are not allowed in class, with the exception of bottled water.
5. Cell phones and any other electronic devices must be silenced and put away before entering the classroom. Use of these devices during class will result in a zero for that day's quiz, homework, or exam.
6. Be courteous and respectful to your instructor and classmates at all times.

**Resources:**

- I am your first and BEST resource for this class! Feel free to come by during my office hours or email me.
- Our Academic Coach is also a great resource. They have taken my class before and know exactly what you are going through.
- Blackboard is the online course management system that will be used for this course. The course syllabus as well as any other class handouts can be accessed through Blackboard. Login at <http://southplainscollege.blackboard.com> . 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 Campus Connect Pin No. (found on SPC acceptance letter)
- Free tutoring is available on the Levelland campus, Reese Campus, and Lubbock campus. Hours for the tutors will be posted by the door of Math 116 on the Levelland campus and on Blackboard.
- Form study groups: Networking is an essential tool both in the classroom and in the workforce!
- Websites that contain helpful videos: [patrickjmt.com](http://patrickjmt.com), [khanacademy.com](http://khanacademy.com)

## Math 1316.002 Tentative Schedule Fall 2021 TR 1:00-2:15 Math 128

Week	Date	Topic	Assignment Due
1	Aug 31 – T	Syllabus <i>Assignment 1.1: Arithmetic and Algebra Refresher</i>	
	Sept 2 – R	<i>Assignment 1.2: Angles in Degrees &amp; Radians</i>	1.1
	Sept 3 – F	Last Day to Add a Course	
2	Sept 6 – M	No Classes – SPC Labor Day Holiday	
	Sept 7 – T	<i>Assignment 1.3: Trigonometric Functions</i>	1.2
	Sept 9 – R	<i>Assignment 1.4: Cofunctions, DMS, and More Trigonometric Functions</i>	1.3
3	Sept 14 – T	<i>Assignment 1.5: Arc Length, Area of a Sector, Linear &amp; Angular Velocity</i>	1.4
	Sept 16 – R	<i>Assignment 1.6: Solving Right Triangles</i>	1.5
4	Sept 21 – T	Unit 1 Exam Review	1.6
	Sept 23 – R	<b>Unit 1 Exam (16%)</b>	Review
5	Sept 28 – T	<i>Assignment 2.1: Pythagorean Identities &amp; Verifications</i>	2.0
	Sept 30 – R	Identities Lab	2.1
6	Oct 5 – T	<i>Assignment 2.2: Even/Odd Identities &amp; More Verifications</i>	
	Oct 7 – R	<i>Assignment 2.3: Sum &amp; Difference Identities</i>	2.2
7	Oct 12 – T	<i>Assignment 2.4: Double Angle Identities</i>	2.3
	Oct 14 – R	<i>Assignment 2.5: Half Angle Identities</i>	2.4
	Oct 15 – F	Campus Closed – SPC Fall Break	
8	Oct 19 – T	Unit 2 Exam Review	2.5
	Oct 21 – R	<b>Unit 2 Exam (16%)</b>	Review
9	Oct 26 – T	<i>Assignment 3.1: Graphing Sine and Cosine</i>	
	Oct 28 – R	<i>Assignment 3.2: Graphing Secant, Cosecant, Tangent and Cotangent</i>	3.1
10	Nov 2 – T	<i>Assignment 3.3: Inverse Trig Functions and Solving Basic Trig Equations</i>	3.2
	Nov 4 – R	<i>Assignment 3.4: Solving Trig Equations Involving Compositions and Quadratic in Type</i>	3.3
11	Nov 9 – T	<i>Assignment 3.5: Solving Advanced Trig Equations</i>	3.4
	Nov 11 – R	Unit 3 Exam Review	3.5
12	Nov 16 – T	<b>Unit 3 Exam (16%)</b>	Review
	Nov 18 – R	<i>Assignment 4.1: Law of Sines</i>	
13	Nov 23 – T	<i>Assignment 4.2: Law of Cosines</i>	4.1
	Nov 24-26	No Classes – SPC Thanksgiving Break	
14	Nov 30 – T	<i>Assignment 4.3: An Introduction to Vectors</i>	4.2
	Dec 2 – R	Last Day to Drop a Class at SPC <i>Assignment 4.4: Vector Applications</i>	4.3
15	Dec 7 – T	<b>Unit 4 Exam (16%)</b>	4.4, Review
	Dec 9 – R	Final Exam Review	Final Review
16	Dec 16 – R	<b>Final Exam (20%) 10:15am-12:15pm</b>	