Sul Ross State University
Course Syllabus
MATH 1316-001, ALP: Trigonometry
Spring 2024

Instructor: Dr. Angela M. Brown
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Office Hours: 11-12:30 MW, 2-5 W, 3:30-5 TR, any others by appointment. If you are on campus you can come to the office for these, if not you can set up a virtual meeting.

Time and Place of Class Meetings: 11 am-12:15 pm ACR 205

Prerequisites: Math 1314 or equivalent

Required Textbooks: *Trigonometry* by Ted Sundstrom and Steven Schlicker. Textbook is free and posted on Blackboard.

Other Equipment Needed: paper, pencils, scientific calculator

Course Content: The following topics shall be covered in the course and are subject to change.

- Graphs and Functions
- Trigonometric Functions
- Analytic Trigonometry
- Applications of Trigonometric Functions
- Trigonometric Identities
- Polar Coordinates and Vectors parts
- Analytic Geometry parts
- Complex Numbers

Mathematics Program Learning Objectives: The graduating student should be able to

- Apply knowledge of basic mathematics principles.
- Identify and provide valid proofs or solutions for theorems or problems.

- Recognize and dispute invalid mathematical statements by using counter-examples.

Student Learning Outcomes for Core Courses:

- Students will develop critical thinking skills to include creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information.
- Students will develop communication skills to include effective development, interpretation, and expression of ideas through written, oral, and visual communication.

Marketable Skills-Mathematics BS:

- Students Demonstrate Logical and Analytical Skills.
- Students Demonstrate Problem-Solving Using Analytic and Algebraic Methods.
- Students Use Technology in Problem-Solving and Presentation.
- Students Use Communication and Pedagogical Skills.

Grading Scale: 90-100 A, 80-89 B, 70-79 C, 60-69 D, 59-Below F

Grading Policy: The grade weighting will be as follows:
Homework/Quizzes/In Class Work: 40%
Exams : 30%
Final Exam: 30%

For each class period, you will be expected to read your textbook before the material we will be covering that day. After a lesson in gone through for the day, which can include in class assignments, quizzes over the actual material will be given.

Homework will be assigned periodically throughout the semester. Homework assignments must be complete and will be turned in on Tuesdays during class. Not all problems will be graded for content, but the assignment grade is contingent on completeness. If you use outside references, make sure to properly source the material. Just writing solutions will not give you credit. You must show your work. Copying answers out of the textbook is plagiarism and will be prosecuted as such.

There will be three exams in addition to the final exam. All exams will be closed notes, closed book, and no calculators allowed unless stated otherwise. No make-up exams will be given unless due to a school function. If you miss an exam with a valid excuse, the grade you make on the final exam can replace this grade.

The final exam is on Monday May 6 at 10:15 am.

General Policies: Class will start at the designated time and run for 1 hour and 15 minutes with no breaks. You are expected to be on time, attend every class meeting, stay for the duration of class time and come to learn. Do

not schedule any appointments that will conflict with class time; if you have done so then I need documentation of the appointments.

You are expected to bring all necessary materials, take notes, and participate. You are expected to turn-off and not access any electronic, non-task oriented device such as cell/smart phones/pads and i-pods. The exception to this is if your textbook is an electronic copy, but clear this with me first. A cell phone cannot be used as a calculator. Devices for recording the lecture are permitted; either audio or video.

If you are causing others around you to miss lecture material then you will be asked to leave.

Any personal business must be conducted during office hours or by appointment. I will only discuss grades and attendance issues in my office. Classroom time is for the entire class.

Attendance Policy: Students are expected to attend every class. If class must be missed, the student is expected to get the notes from a classmate, and to check with me or on Blackboard for announcements and updated assignments.

Students are expected to arrive to class on time. If a student is perpetually late, they will be asked to not attend class unless they arrive on time. If tardiness becomes a problem for the class as a whole, people who arrive late will not be permitted to enter the class. If this stricter policy becomes necessary, there will be an announcement made in class.

It is policy of the university to drop a student with a grade of "F" if 9 hours or more of class are missed. For this course that would be 6 or more class sessions missed.

Cell Phone Policy: Cell phones are not allowed in class. They can not be used as calculators on any assignment. Any phone ringing during class will be taken up until the end of class. If a phone rings during a test or quiz, the student will forfeit their right to finish said test or quiz.

Americans With Disabilities Act: SRSU Disability Services. Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Alpine students seeking accessibility/accommodations services must contact Mary Schwartze Grisham, M.Ed., LPC, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email mschwartze@sulross.edu Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, SUI Ross State University, Alpine. Texas, 79832.

Library Services: The Sul Ross Library offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires your LoboID and password. Check out materials using your photo ID. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

Distance Education Statement: Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should

correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login information to verify students' identities and to protect students' information. The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web- based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website.

Academic Integrity:. Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden.

Classroom Climate of Respect: Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Supportive Statement: I am to create a learning environment for my students that supports various perspectives and experiences. I understand that the recent pandemic, economic disparity, and health concerns, or even unexpected life events may impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create a supportive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.

Important Dates:

January 17	First Day of Classes
January 22	Last Day for Late Registration and Schedule Changes
February 1	12th Class Day, Last day to drop a course without creating an academic record
March 11-15	Spring Break
April 12	Last Day to Withdrawal from University or Drop Classes with a Grade of "W" (by 4 pm)
May 1	Last Day of Classes
May 2	Dead Day
May 3, 6-8	Final Exams

Tentative Schedule-Subject to Change

	Tuesday		Thursday
		Jan 18	Intro; Unit Circle
Jan 23	The Cosine and Sine Function	Jan 25	Arcs, Angles, and Calculators
Jan 30	Velocity and Angular Velocity	Feb 1	Common Arcs and Reference Arcs
Feb 6	Other Trigonometric Functions	Feb 8	Graphs of the Cosine and Sine Functions
Feb 13	Graphs of Sinusoidal Functions	Feb 15	Applications and Modeling with Sinusoidal Functions
Feb 20	Graphs of the Other Trigonometric Functions	Feb 22	Exam 1
Feb 27	Inverse Trigonometric Functions	Feb 29	Solving Trigonmetric Equations
Mar 5	Trigonometric Functions of Angles	Mar 7	Right Triangles
Mar 19	Triangles that Are Not Right Triangles	Mar 21	Applications of Triangle Trigonometry
Mar 26	Vectors from a Geometric Point of View	Mar 28	Vectors from an Algebraic Point of View
Apr 2	Exam 2	Apr 4	Trigonometric Identities
Apr 9	Trigonometric Equations	Apr 11	Sum and Difference Identities
Apr 16	Double and Half Angle Identities	Apr 18	Sum and Product Identities
Apr 23	Complex Numbers	Apr 25	Polar Coordinates
Apr 30	Exam 3	May 2	Dead Day