

Trigonometry

MATH 1321-D01

Spring 2015

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Text: Trigonometry, 10th edition by Lial, Hornsby, and Schneider, published by Pearson

Prerequisites: 4 on MPE, 610 on SATM, or 26 on ACTM, or C in MATH 1320 or 1420

Learning Outcomes: Math 1321 satisfies part of the university Core Curriculum requirement in Mathematics. It meets the TTU general education student learning outcomes for mathematics that students will:

- Apply arithmetic, algebraic, geometric, statistical and/or logical reasoning to solve problems.
- Represent and evaluate basic mathematical and/or logical information numerically, graphically, and symbolically.
- Use mathematical and logical reasoning to evaluate the validity of an argument.
- Interpret mathematical and/or logical models such as formulas, graphs, tables, and schematics, and draw inference from them.

Students obtain those trigonometry skills needed for subsequent studies in pre-calculus and calculus. In particular students will:

- Understand the measurement of angles measured in both degrees and radians.
- Understand the definitions of trigonometric functions using triangles and the unit circle.
- Understand and verify trigonometric identities.
- Understand the relationship between trigonometric functions and vectors, operations, and the dot product.
- Graph trigonometric functions with understanding of translation, polar equations.
- Interpret information given by graphs including intercepts, domain, and range.
- Solve trigonometric equations and parametric equations.
- Model real world situations using right angle trigonometry, law of sines and cosines.

Assessment of Learning Outcomes: Learning outcomes will be assessed through homework exercises, and examinations. You are expected to keep track of your progress on homework assignments and tests. We will have weekly homework assignments, two online exams, one proctored exam and a proctored comprehensive final exam. The weights given to individual assessment types are as follows: Homework: 10 %; Exams: 20 % each; Final Exam: 30 %.

Exam I (Online): Wednesday February 4, 8:00 am - 10:00 pm CST

Exam II: Monday March 2, 8:00 am - 10:00 pm CST

Exam III (Online): Friday April 3, 8:00 am - 10:00 pm CST

Final Exam: Monday May 11, 10:30 am - 1:00 pm CST; Room TBA

Schedule (subject to change)

<i>Dates</i>	<i>Sections</i>	<i>Dates</i>	<i>Sections</i>	<i>Dates</i>	<i>Sections</i>
1 – 14	1.1	2 – 20	4.1	3 – 30	5.5
1 – 16	1.2	2 – 23	4.2	4 – 1	<i>Review</i>
1 – 19	<i>No class</i>	2 – 25	4.3	4 – 3	<i>Exam III</i>
1 – 21	1.3	2 – 27	<i>Review</i>	4 – 6	<i>No class</i>
1 – 23	1.4	3 – 2	<i>Exam II</i>	4 – 8	5.6
1 – 26	2.1	3 – 4	4.4	4 – 10	6.1
1 – 28	2.2	3 – 6	5.1	4 – 13	6.2
1 – 30	2.3	3 – 9	5.2	4 – 15	6.2
2 – 2	<i>Review</i>	3 – 11	5.2	4 – 17	6.3
2 – 4	<i>Exam I</i>	3 – 13	5.3	4 – 20	6.3
2 – 6	2.4	3 – 16	<i>Spring break</i>	4 – 22	6.4
2 – 9	2.5	3 – 18	<i>Spring break</i>	4 – 24	7.1
2 – 11	3.1	3 – 20	<i>Spring break</i>	4 – 27	7.2
2 – 13	3.2	3 – 23	5.4	4 – 29	7.3
2 – 16	3.3	3 – 25	5.4	5 – 1	7.4
2 – 18	3.4	3 – 27	5.5	5 – 4	<i>Review</i>

Class Pace and Homework: It is expected that students will have to cover roughly a text-book section every weekday. A set of Homework problems will be assigned every week. Students complete their homework via WeBWorK. The URL for this course is <http://webwork.math.ttu.edu/webwork2/spr15rjangm1321sD01/>

Exams: Three online exams will be given over the course of the semester, according to the schedule above. Exceptions allowed only in case of time conflicts, with official documentation.

Final exam is scheduled for May 11th, 10:30 am - 1:00 pm. In case you work, please notify your supervisor that you will be absent from work during the final on May 11, 2015. Students will be expected to take the final as scheduled. Students who live close enough to Lubbock (150 miles around Lubbock) will be required to take the Final Examination at Texas Tech University in Lubbock, at the Mathematics Department, Academic Testing Services or one of the associated facilities. If students have a conflict in schedule or are far away from Lubbock, they need to provide necessary documentation and arrange a different examination date and time. All students will be required to take the final examination in an Official University or College Testing Center. Depending on their geographic location, each student and instructor should make arrangements with a certified testing service. The student is responsible for the testing fee (most US-based universities charge \$15 to \$30 fees for

any distance exam administered in their testing center). In case no agreeable solution can be found, the University Testing Services in Lubbock Texas will be designated to administer the examination and the student is responsible for the fee and travel expenses. Each individual instructor is responsible for providing the tests to the proctors. Students are required to present their photo IDs during the final exam.

Other Important Dates: January 30 is the last day to drop a course without academic penalty. March 25 is the last day to drop a course with penalty. April 30 is the last day to withdraw from the university.

Make-ups: No make-ups will be given and no late work accepted for any reason except those noted below.

Absence Due to Religious Observance: A student who is absent from classes due to observance of a religious holy day will be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. Notification must be made in writing and delivered in person no later than the 15th class day of the semester.

Absence Due to Officially Approved Trips: The person responsible for a student missing class due to a trip should notify the instructor of the departure and return schedule in advance of the trip.

Academic Integrity: It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and a high standard of integrity. The attempt of students to present as their own any work that they have not honestly performed is regarded by the faculty and administration as a serious offense and renders liable to serious consequences, possibly suspension.

Students with Disabilities: Any student, who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from AccessTECH. No requirement exists that accommodations be made prior to completion of this university procedure.