# UTA Course Syllabus Fall 2015

# **Trigonometry**

# Math 1303-005, MW 5:30-6:50

Disclaimer: This syllabus is provided for student convenience and is based on the most recent information available. If you have special concerns about course information, you are advised to contact the instructor.

| 1. Instructor:  | S. Godeken  |
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| 2. Office Location:   | 460 Pickard Hall  |
| 3. Office Hours:  | MW 3:00-5:00  |
| 4. Phone:   | 817-272-2934  |
| 5. Fax:   | 817-272-5802  |
| 6. Mailbox:   | Math Office   |
| 7. Email:   | sgodeken@uta.edu  |
| 8. Instructor WWW<br>Site:  | https://www.uta.edu/profiles/sonja-godeken  |
|   | Course materials will be posted on Blackboard   |
| 9. Additional Links:  | Math sites as needed for extra (individual) instruction   |
| 10. Course Prerequisites  | : C or better in MATH 1301, MATH 1302, MATH 1308, MATH 1315, or a qualifying score on Math Placement Test (A good grasp of algebra is necessary.) |
| 11. Text/Materials: Trigonometry (3rd Edition), 2012, Young, Wiley, |   |

ISBN # 978-0-470-64802-5 Also required: Scientific calculator

**12.** Course Description: Angles, radian measure, trigonometric functions for right triangles, trigonometric functions for any angles, inverse trigonometric functions, basic identities and introduction to periodic functions, Law of Sines and Cosines, oblique triangles, graphs of trigonometric functions, formulas for functions of more than one angle (sum, difference, double and half-angle) trigonometric equations, polar coordinates and graphs, complex numbers.

13. Course Learning Goals/Objectives: An introduction to the traditional study of the properties and applications of trigonometry; used by many as a core requirement, as follows:

- Identify and use degree measure.
- Identity and use the conditions that make two triangles similar.
- Define the six trigonometric functions as ratios of lengths of the sides of right triangles.
- Evaluate trigonometric functions exactly and with calculators.
- Solve right triangles.
  - Sketch angles in the Cartesian plane.
  - Define trigonometric functions as ratios of x- and y-coordinates and distances in the Cartesian plane.
  - Evaluate trigonometric functions for nonacute angles.
  - Apply basic trigonometric identities
    - Convert between degrees and radians.
    - Calculate arc length and the area of a circular sector.
  - Draw the unit circle and label the sine and cosine values for special angles (in both degree and radians.)
  - Graph basic sine and cosine functions using amplitude and period.
  - Graph general sine and cosine functions using translations.
  - Graph tangent, cotangent, secant, and cosecant functions.
  - Verify a trigonometric identity.
  - Apply the sum and difference identities.
  - Apply the double-angle identities.
  - Apply the half-angle identities.
  - Find the domain and range of inverse trigonometric functions.
  - Solve trigonometric equations using algebraic techniques and inverse functions.
  - Solve trigonometric equations using trigonometric identities
- Solve oblique triangles using the Law of Sines.
  Solve oblique triangles using the Law of Cosines.
  Find areas of oblique triangles.

#### 14. Attendance and Drop Policy:

At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I have adopted the following attendance policy. Attendance will be taken daily and students are expected to attend class, be attentive, and participate in discussions/activities.

If you withdraw from the course for any reason, you must follow University procedures. It is your responsibility to execute these procedures correctly and within the deadlines. **Instructors are unable to drop students**. The Math Department Office can help with the withdrawal process. We strongly recommend that you drop the course if you are significantly behind in completing the required assignments. Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao).

## 15. Tentative Lecture/Topic Schedule: TBA in class

Specific Course Requirements with descriptions

**1. Quizzes:** Students should expect at least one weekly quiz (estimated 8 quizzes) or test. The two lowest quiz grades will be dropped at the end of the semester.

2. Examinations: There will be three tests. Estimated dates for exams are: September 28, October 26, November 30 as shown on the course calendar. Students may replace one lowest test grade with their final exam grade at the end of the semester—if an exam is missed (grade of zero) it may be replaced <u>only</u> if it was missed with an excused absence. (See below.)

**3. Final Examination:** Final Exam Comprehensive TBA—please note that it may be on a Saturday; will announce in class.

4. Other Graded Assignments: Daily "entry and exit quizzes," on basic concepts covered in class, will be given at the beginning and end of each class and may <u>not be made up</u> if class is missed. Daily homework assignments will be discussed in class and may be used during quizzes. Students should <u>expect to work outside</u> <u>of class at least twice the time spent in class</u>.

5. Missed Exams, Quizzes and Makeup Work: If a quiz or test is missed the student receives a zero (0). There are NO make-up exams, quizzes. Special circumstances, such as serious illness or a death in the family, will be considered only if student notifies instructor on or before the day of an EXAM and student brings an authorized note upon return to class. Students should use email for communication with instructor—see email address above.

#### 6. Grading Format Weighting / Point Value of Assignments and Examinations:

- 25% of your grade will be based upon weekly quizzes.
- 50% of your grade depends upon unit exams.
- 25% of your grade depends upon the final exam.
- Entry/Exit quizzes may count up to 5% of your grade in bonus points.
- Grades will be assigned as follows: 90-100% =A, 80-89% =B, 70-79% =C, 60-69% =D, below 60% =F.
- <u>All</u> students are expected to take the final exam (<u>no</u> "opting out" of the final).

As the instructor for this course, I reserve the right to adjust the schedule in any way that serves the educational needs of the students enrolled in this course. S. Godeken

#### **Final Review Week:**

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

# Accommodations and Americans with Disabilities Act:

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA).* All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at <u>www.uta.edu/disability</u> or by calling the Office for Students with Disabilities at (817) 272-3364.

#### **Title IX:**

The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit <u>uta.edu/eos</u>. For information regarding Title IX, visit <u>www.uta.edu/titleIX</u>.

#### **Academic Integrity:**

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. This course includes a zero tolerance policy for academic dishonesty and students are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. **Students found guilty of cheating will receive a grade of "F" for the course.** 

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

#### **Student Support Services:**

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

For assistance with your library needs in this course, please consult the appropriate subject librarian.

#### **Electronic Communication:**

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating

## **Student Feedback Survey:**

At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

#### **Emergency Exit Procedures:**

Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

#### **Emergency Phone Numbers:**

In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. We further recommend that you enter the UTA Police Department's emergency phone number into your own mobile phone. For non-emergencies, contact the UTA PD at 817-272-3381.

#### **Student Intellectual Property Rights Statement:**

A student shall retain all rights to work created as part of instruction or using university technology resources.