



Math 1303 – Trigonometry – Section 003

Course Instructor

Shanna Banda

sbanda@uta.edu

The instructor will respond to email inquiries within 24-48 hours.

Mentis Faculty Profile: <https://mentis.uta.edu/explore/profile/shanna-banda>

Office: PKH 463

Office Phone: 817-272-5183 (prefer email)

Office Hours: Tuesdays and Thursdays from 2:00pm to 3:00pm or by appointment.

Textbook and Materials

This course is part of the UTA Mathematics Department Affordability Campaign, making state-of-the-art online mathematics resources available to our students at the lowest possible price when compared to purchasing elsewhere. To receive the discounted price, purchase course materials through the UTA Bookstore. Search by course or use this site: <http://bit.ly/2tQ090S>

1. **E-text and Direct Access (Required):** Your course materials include the e-version of the course text as well as MyLab course access which is designed to enrich student success by providing instant feedback on your assignments plus on-demand access to personalized study plans, a multimedia library, practice tests, and more. The e-texts may be downloaded on multiple devices with long-term access for each student. Every student has trial access to MyLab course materials as soon as the course is available in Blackboard, so you can start working on your course even before you purchase the course materials! That said, students will need a verified purchase within the first two weeks of classes, otherwise, the access to your digital materials will freeze and your account will stay deactivated until the purchase is confirmed. During the purchasing process, please ensure you enter your name as shown on your UTA records along with your MAVS email address for proper processing.
2. **Loose-leaf Textbook (Optional):** You may choose to enhance your digital purchase and select a loose-leaf textbook for only \$25 from the [bookstore](#). Full details are available in Blackboard. *Trigonometry*, 11th ed. by Lial, Hornsby, Schneider, and Daniels, Pearson Ed. Inc., 2017.
3. **Web-Enabled Device:** Use your smartphone, tablet, laptop or other device to check-in at lectures for required attendance and to take in-class quizzes and earn extra credit.
4. **3"x5" Index Cards:** In the event of a UTA Network disconnection during lecture, index cards may be used as a back-up for the web-enabled device.
5. **Scientific Calculator:** You may use a scientific calculator. See the Calculator Policy section for allowable models.

Calculator Policy

Students may choose to use a scientific, non-graphing calculator on all assignments including unit exams and the final exam. If so, it MUST be one of the following models explicitly:

Texas Instruments 30X series: TI-30Xa, TI-30XIIS, TI-30XIIB, TI-30XS(Multiview)

Casio FX series: FX-300MS, FX-82MS, FX-85MS, FX-260SOLAR, FX-260SOLAR II

Sharp EL series: EL-501X, EL-531X

Canon F series: F-605, F-604, F-730SX, F-710

No variation of model will be accepted. This includes but is not limited to plus and pro models.

Software and System Requirements

Mozilla Firefox and Google Chrome are the recommended and supported browsers for this course. The course also has the following options for system requirements:

- Windows 7.0 or higher
- Mac OS x 10.9 or higher

If working outside the lab, students are encouraged to use the Browser Check on the initial page within the MML system in order to check and/or update (free download) the following software requirements:

- Pearson LockDown Browser for Windows version 2.0.3.01 or for a Mac version 2.0.3.02

Course Elements

Scheduled Meeting Times and Locations

Tuesdays and Thursdays from 12:30pm to 1:50pm in PKH 113

Attendance Policy

At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator in student success. 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 is mandatory and will be assessed at each lecture meeting. The lecture session meets twice a week for 1 hour and 20 minutes. Students are expected to attend class, be attentive, and participate in discussions/activities. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients "begin attendance in a course." UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Blackboard. This date is reported to the Department of Education for federal financial aid recipients.

Lecture Attendance	Worth 5% Attendance Grade
At least 26 lectures	100%
At least 24 lectures	75%
At least 22 lectures	50%
At least 20 lectures	25%
19 or fewer lectures	0%

- The attendance requirement is 5% of your overall course grade.
- You are solely responsible for your own attendance. Since we will use Learning Catalytics, an embedded tool within MyLabs, to answer lecture quizzes and take attendance, you will be able to track your attendance counts throughout the semester.

Schedule of Lessons and Exams

You must complete all assignments and exams by the due dates. Due dates are listed in the Course Calendar and in the Course Schedule located in Blackboard. **All deadline times are in Central Time.**

Grade Calculation

Assignments and Course Requirements	Percent of Grade
Attendance	5%
Homework	10%
Quizzes	10%
Chapter Exams (Average of 3 Exams)	50%
Comprehensive Final Exam	25%
Total:	100%

Grading Scale

Grades will be computed based on the following distribution. Grades are rounded up accordingly.

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

Homework and Quizzes

All homework and quizzes will be assigned using MyLabs. All homework assignments are available to you on the first class day and quizzes will be added to the system as the semester progresses. The automated system will provide feedback on assignments immediately upon submission.

- **NO late homework or quizzes will be accepted**, so watch the due dates on the calendar. You will receive a zero for any assignments not submitted.
- There is a homework assignment covering each section of material and several content quizzes. Homework assignments are set for unlimited access up until the due date. You may complete homework assignments a question at a time and you have 3 attempts per question. However, you only have two attempts at each quiz which have a 60 minute time limit and must be completed in their entirety once opened. Quizzes cannot be saved and resumed later.
- All homework assignments contain some learning aids to help you through the material. Be careful not to become overly dependent on these aids or you may not perform well on the exams. You have multiple chances at a question per attempt. To gain access to the next attempt once a question is marked wrong, simply select the “similar exercise” button at the bottom of the homework screen. Quizzes are designed to check your knowledge retention and therefore do not contain the learning aids except in review mode once the quiz has been submitted.
- If you have trouble completing the assignments, please seek some form of tutoring and/or see your instructor for assistance.
- Extra Credit: At the end of the semester, TWO of your lowest homework grades will be automatically dropped. Once the low grades are removed, you may be eligible for extra credit:

- If your homework average is an 85 or above, your 2 lowest quiz grades will be replaced with a “100”.
- If your homework average is a 70 up to an 84.99, your lowest quiz grade will be replaced with a “100”.

Chapter Exams

There will be three regular exams during class times throughout the semester. The exams will be in a pencil/paper format and require a scantron. (Form No. 882-e)

(Please reference the course schedule for exact dates.)

- You may use an approved calculator (see list of approved calculators in Materials section), approved formula page, and blank scratch paper which will be provided. No additional materials are allowed.
- You must have your MavID with you on exam day.
- You may not leave the room during an exam.
- Use of any unauthorized electronic devices or notes during an exam will result in a grade of ZERO.

Final Exam

The final exam is a comprehensive exam containing material from all sections covered over the course of the semester. The final exam is on **Saturday, December 8th from 9:00am to 11:30am**. Room TBA.

- You may use an approved calculator (see list of approved calculators in Materials section), approved formula page, and blank scratch paper which will be provided. No additional materials are allowed.
- You must have your MavID with you on exam day.
- You may not leave the room during an exam.
- Use of any unauthorized electronic devices or notes during an exam will result in a grade of ZERO.

Lecture Quizzes

Extra Credit may be earned by correctly answering lecture quizzes given during lecture meetings. Lecture quizzes will be based on topics over which students are expected to prepare beforehand and on topics addressed in class. Students will answer lecture quizzes via web-enabled device or on rare occasions the 3"x5" index cards. Correctly answering lecture quiz questions will earn up to 5 percentage points on each chapter exam. **You must be present for the entire lecture to be eligible for that day's lecture quiz extra credit.**

Makeup Policy

In addition to the policy that NO late homework or quizzes will be accepted (see Homework and Quizzes), **there are no make-up exams**. If you know ahead of time that you are going to miss class for a legitimate reason, it is your responsibility to inform me and make the necessary arrangements. If you have a conflict with a scheduled exam due to a school sponsored or excused event, you **MUST** have documentation and you **MUST** arrange to take the exam **BEFORE** you leave. To request an alternate exam date because of an approved conflict, please fill out the Alternate Exam Date Request Form which can be found in Blackboard. You must either submit the forms directly to me during class or office hours or email the form along with the necessary documentation **at least ONE week prior to the first exam**. A request for a rescheduled exam will only be considered in rare, documentable, and verifiable instances. The decision to grant an alternate exam date will be at the sole discretion of the instructor and/or course coordinator.

Success Strategies

The primary methods for course content delivery will be lecture and occasionally group work.

- You should bring paper with you to class for taking notes. You will be guided through course material and may work together on various questions to ensure understanding.
- Additional content material and notes can be found in the multimedia/eBook tabs in MyLabs.
- Students will be required to work through their homework and quiz assignments outside of class time since MyLabs is accessible from any source with an internet connection. Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

Announcements: Found in *Blackboard*.

- Students are responsible for all information found in these announcements.
- Students should check for new announcements at least twice a week.

Help for Students

- Face to Face Tutoring through the UTA Math Learning Resource Center. Free daily tutoring is offered in the Math Computer Lab – Pickard Hall (PKH) room 308 <http://www.uta.edu/math/LRC/> and the Math Clinic – Pickard Hall (PKH) room 325 <http://www.uta.edu/math/clinic/>
- IDEAS Center offers on-campus and online tutoring for transfer students, veterans, sophomores, and students re-entering school after a break <http://www.uta.edu/ideas/>
- University Tutoring Service <http://www.uta.edu/universitycollege/current/academic-support/learning-center/tutoring/index.php> Ransom Hall Suite 205.
- Maverick Resource Hotline (817-272-6107).
<https://www.uta.edu/universitycollege/resources/resource-hotline.php>
- Counseling and Psychological Services (CAPS) <https://www.uta.edu/caps/>
- Additional Online Course Help: <https://www.khanacademy.org/>

Course Objectives

Course Catalog Description

This course is designed as preparation for higher level mathematics courses. Topics include the study of trigonometric functions, radian measure, solution of triangles, graphs of trigonometric functions, trigonometric identities and equations, and complex numbers.

Learning Objectives and Outcomes

After completing the course, students should be able to demonstrate the following competencies:

- Understand and convert degree and radian measure.
- Learn 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.

- 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 non-acute angles.
- Apply basic trigonometric identities.
- Know and use the unit circle.
- Graph basic sine and cosine functions and then translate.
- Graph tangent, cotangent, secant, and cosecant functions.
- Verify a trigonometric identity.
- Apply the sum and difference identities.
- Apply the double-angle and half-angle identities.
- Find the domain and range of inverse trigonometric functions.
- Solve trigonometric equations using algebraic techniques, inverse functions, and trig identities.
- Solve oblique triangles using the Law of Sines and the Law of Cosines.
- Find areas of oblique triangles.
- Perform vector operations and solve applications involving vectors.

Course Policies

Drop Policy

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**, but we strongly recommend that visit with your instructor before you decide to drop the course. 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>).

Disabilities Accommodations

UT 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)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. 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 disability. Students are responsible for providing the instructor with official notification in the form of a **letter certified** by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished

academic performance or other barriers to learning may seek services and/or accommodations by contacting: **The Office for Students with Disabilities, (OSD)** www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

Counseling and Psychological Services (CAPS)

CAPS (www.uta.edu/caps/ or calling 817-272-3671) is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Grade Grievances

Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog. For undergraduate courses including this one, see <http://catalog.uta.edu/academicregulations/grades/#undergraduatetext>.

Non-Discrimination Policy

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 uta.edu/eos.

Title IX

The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Michelle Willbanks, Title IX Coordinator at (817) 272-4585 or titleix@uta.edu.*

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.

UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents' Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or

expulsion from the University. Additional information is available at <https://www.uta.edu/conduct/>.

Students found guilty of cheating may 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)

Faculty are encouraged to discuss plagiarism and share the following library tutorials

<http://libguides.uta.edu/copyright/plagiarism> and <http://library.uta.edu/plagiarism/>

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 <http://www.uta.edu/universitycollege/resources/index.php>.

University Tutorial & Supplemental Instruction (Ransom Hall 205): UTSI offers a variety of academic support services for undergraduate students, including: 60 minute one-on-one tutoring sessions, Start Strong Freshman tutoring program, and Supplemental Instruction. Office hours are Monday-Friday 8:00am-5:00pm. For more information visit www.uta.edu/utsi or call 817-272-2617.

The Library's 2nd floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation. <http://library.uta.edu/academic-plaza>.

The IDEAS Center (2nd Floor of Central Library) offers free tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

The English Writing Center (411LIBR): The Writing Center offers FREE tutoring in 15-, 30-, 45-, and 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Register and make appointments online at <https://uta.mywconline.com>. Classroom visits, workshops, and specialized services for graduate students and faculty are also available. Please see www.uta.edu/owl for detailed information on all our programs and services.

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 and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Campus Carry

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>

Student Feedback Survey

At the end of each term, students enrolled in face-to-face and online classes categorized as “lecture,” “seminar,” or “laboratory” are 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 via the SFS database is aggregated with that of other students enrolled in the course. Students’ anonymity will be protected to the extent that the law allows. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week

For semester-long courses, 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.

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. If we experience an emergency event that requires us to vacate the Math Computer Lab in PKH 308, proceed to one of the three corners of the PKH building and use the stairwell. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

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.