University of North Texas at Dallas
SYLLABUS: MATH 1600 - 001 – Trigonometry (3 Hours) – Fall 2016
Department of Mathematics and Informational Sciences – School of Liberal Arts and Sciences

Instructor Name:	Dr. Richard Gene Chandler	**Email Address:**	richard.chandler@untdallas.edu
Office Location:	_____	**Office Hours:**	MTWR 11:30a – 12:30p
Office Phone:	_____		MW 4:30p – 5:30p
		Class Time & Location:	TR 10a – 11:20a, Founders Hall 212

Catalog Description   Trigonometry based on both right triangles and the unit circle: graphs of trigonometric functions; inverse trigonometric functions; trigonometric identities and equations; laws of sines and cosines; polar coordinates; DeMoivre's theorem; vectors.

Prerequisites   MATH 1100 or equivalent with a grade of C or better

Required Text   WebAssign (www.webassign.net) **Class Key: unt 0030 4292** (includes an e-book)

Recommended Text   Stewart, Redlin and Watson. Precalculus, 7th Edition. Cenage Learning, 2015. IBSN: 978-1305071759

Learning Resources   UNTD Library – Phone: (972) 780 – 3625, Web: www.unt/edu/unt-dallas/library.htm
UNTD Bookstore – Phone: (972) 780 – 3625, Email: 1012mgr@fheg.follett.com

Math Lab   The Math Lab is staffed by student tutors and is available to assist in any 1000-level math course. It is located on the 3rd Floor of DAL1. The hours for the Fall semester are:

Monday and Wednesday ……. 9a – 7p
Tuesday and Thursday …….. 10a – 7p
Friday …… 5p – 7p
Saturday ……….. 10a – 3p

Course Goals   This course addresses the core objectives of critical thinking skills, communication skills, and empirical and quantitative skills.

1. Critical Thinking Skills – to include thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
2. Communication Skills – to include effective development, interpretation and expression of ideas through written, oral and visual communication.
3. Empirical and Quantitative Skills – to include the manipulation and analysis of numerical data or observable facts in informed conclusions

Objectives   Upon successful completion of this course, the students will

1. Gain awareness of fundamental concepts of functions and other concepts necessary for learning calculus, and be able to demonstrate knowledge by solving various precalculus problems.
2. Be able to solve applied mathematics problems with require both analytical and numerical resoning.
3. Be able to locate, evaluate and organize information and express the conclusion in mathematical topics in precalculus level.
4. Be able to think critically and creatively so as to apply different systems of analysis, algebraic and numerical, and then to compare the results from the two systems.
5. Acquire problem solving skills that incorporate multiple viewpoints and different contexts in their analysis.
6. Acquire intellectual curiosity and self-responsibility, building a foundation for life-long learning.

7. Be able to read, write and manipulate mathematical phrases according to mathematical grammar.
8. Be able to read and write mathematical sentences according to mathematical grammar.

Course Outline   Priority will be given to understanding the material in depth rather than covering more topics. The schedule is subject to change by the instructor.

Date	Section	Topic
8/23	6.1	Angle Measure
8/25	6.2	Trigonometric of Right Angles
8/30	6.3	Trigonometric Functions of Angles
9/1	6.4	Inverse Trigonometric Functions and Right Angles
9/6	6.5	The Law of Sines
9/8	6.6	The Law of Cosines
9/13	Review	Review
9/15	**Exam 1**	**Exam 1**
9/20	5.1	The Unit Circle
9/22	5.2	Trigonometric Functions of Real Numbers
9/27	5.3	Trigonometric Graphs
9/29	5.4	More Trigonometric Graphs
10/4	Review	Review
10/6	**Exam 2**	**Exam 2**
10/11	7.1	Trigonometric Identities
10/13	7.2	Addition and Subtraction Formulas
10/18	7.3	Double-Angle, Half-Angle and Product-Sum Formulas
10/20	7.4	Basic Trigonometric Equations
10/25	7.5	More Trigonometric Equations
10/27	Review	Review
11/1	**Exam 3**	**Exam 3**
11/3	8.1	Polar Coordinates
11/8	8.2	Graphs of Polar Equations
11/10	8.3	Polar Forms of Complex Numbers; DeMoivre's Theorem
11/15	8.4	Plane Curves and Parametric Equations
11/17	9.1, 9.3, 9.4	Vectors
11/22	9.2, 9.5	Dot and Cross Product
11/24	Break	Thanksgiving Break
11/29	Review	Review
12/1	Review	Review
###	**Final**	**Final Exam**

Grading Matrix   The following grading scale will be used to determine your final grade:

$$0 \leq F \leq 60\% \leq D \leq 70\% \leq C \leq 80\% \leq B \leq 90\% \leq A$$

Homework ……….. 10%
Worksheets/Problem-Solving Activities ……………………………………………………………………………………………. 10%
Midterm Test Average ……… 50%
Final Exam ……. 30%

Technology Use   Using technology, when appropriate is encouraged. Any graphing calculator that does not have a Computer Algebra System is approved. We will also be making use of the free online software Geogebra (www.geogebra.org). The use of laptops is permitted pending appropriate use. The use of cell phones is prohibited except in exceptional circumstances.

Online Homework Homework will be completed online through WebAssign. Each student should purchase an access code to get access to the assignments. Students must purchase and register in WebAssign by the 3rd class meeting. The online homework may be accessed from any computer, including the general access lab on campus. More information on due dates may be found one the homework site.

You will have one assignment for every section covered in class, with possible additional assignments. You will have unlimited number of attempts to complete the assignment until the due date.

Worksheets In addition to online homework, you will periodically be given worksheets in class to complete. The worksheets will contain problems not found in the textbook that will require some level of problem-solving You are encouraged to complete these in groups of 2 – 4 students; one assignment may be turned in per group. Each assignment will be due one week after it is given unless otherwise stated.

Midterm Exams You will be given 3 midterm exams throughout the semester, during the regular class time. These exams will be semi-comprehensive in nature; that is, there may be some material from older exams on the midterm, but the focus will be on the new material. You will be permitted a graphing calculator but you may not use any notes on the exams.

Final Exam The final exam is comprehensive. Students must take the final exam at the designated time; no exceptions. It is your responsibility to make the necessary arrangements to attend the final exam.

Make-Up Exams All exams should be taken during the designated time. No make-up exams will be allowed except for in the case of documented emergencies (see Student Handbook). All requests for make-up exams must be submitted to the instructor in writing, with the supporting documents. It is imperative that you contact your instruct as soon as possible (do not wait until you return to class)!

Email Policy Use your Blackboard email account to contact me. You should check your email every day as you are responsible for all information I send out. Due to privacy rights, I will not discuss grades over the phone and I will only answer emails from your Blackboard account.

General Policies Everyone in the class is to respect each other at all times. This includes listening to others opinions and ideas, putting forth the best of your effort for the good of the class and working only on topics related to the course (this includes the prohibiting of cell phone use, texting, reading, sleeping, etc…).

It is the students' responsibility to be aware of all announcements made for the class and changed made to the syllabus.

Leaving class early is generally prohibited. You may leave class if you are not returning in the case of an emergency. Leaving class should be by the permission of the instructor.

All questions regarding the grading of assignments would be asked within seven days of the return of the assignment.

You will NOT get a grade better than a C is you miss more than 5 classes. Missing more than 5 classes may result in being dropped from the course with a WF.

To do well in this course, you will needed to stay on top of all homework and assigned readings. Reading the textbook before class is highly encouraged and homework should be worked on every day, not just the day before it is due.

Do not be afraid to make mistakes or ask questions in this class. I am in my office frequently and I am always happy to help if you would like to drop by.

Students with Disabilities (ADA Compliance): The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit Rosemary Meredith, Disabilities Services and Compliance Officer, Suite 204, Building 2 or call 972-338-1777.

Student Evaluation of Teaching Effectiveness Policy: The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Academic Integrity: Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of academic integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Code of Academic Integrity at http://www.untdallas.edu/sites/default/files/page_level2/pdf/policy/7.002%20Code%20of%20Academic_Integrity.pdf In addition, all academic work turned in for this class, including exams, papers, and written assignments as follows: On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy: On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.untdallas.edu. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy: The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent. If students miss more than one class for other than a documented emergency (e.g. hospitalization, death in the family), then they may receive a 5% reduction in their overall grade.

Diversity/Tolerance Policy: Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Center for Student Rights and Responsibilities as the instructor deems appropriate.

Important Dates

First Day of Class ……………………………………………………………………………………………. August 22, 2016
Census Date …………………………………………………………………………………………….. September 7, 2016
Midterm 1 ……………………………………………………………………………………………….. September 15, 2016
Midterm 2 …………………………………………………………………………………………………. October 6, 2016
Midterm 3 ……………………………………………………………………………………………….. November 1, 2016
Drop Date ……………………………………………………………………………………………….. November 4, 2016
Thanksgiving Holiday ………………………………………………………… November 24, 2016 – November 25, 2016
Last Day of Classes …………………………………………………………………………………………. December 5, 2016
Final Exams ………………………………………………………………………….. December 7, 2016 – December 13, 2016