# Syllabus of MATH 1600.001 (Trig), summer 5W1, 2013

INSTRUCTOR: KOSHAL DAHAL	COURSE: MATH 1600.001, Trigonometry	
E-Mail: koshaldahal@my.unt.edu	OFFICE: GAB 441	
Personal site: <u>www.math.unt.edu/~koshal</u>		
OFFICE HOURS: MTWR, 12:00-1:00pm	CLASS MEETS: MTWR, 10:00am – 11:50am,	
Students unable to see me during these times	@ MATT 311	
may request an appointment.	FINAL EXAM: Friday, July 5, @ 10am - 12pm	
MATH LAB: GAB 440	WebAssign: http://webassign.com	
Website: www.math.unt.edu/mathlab	Students should purchase access codes to WebAssign,	
Go to site for location and hours.	either at the bookstore or online, and register for the	
(Closed Sundays and holidays)	appropriate course using the course ID that I provide.	
	The course ID for this course is:	
	unt 9552 7520	
COURSE DESCRIPTION: 3 hours. Trigonometry ha		
<b>COURSE DESCRIPTION:</b> 3 hours. 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. Prerequisite: MATH1100 with a grade		
of C or better.		
Students who already have credit for both MATH 1600 and MATH 1610 may not receive credit for MATH		
1650. Satisfies the Mathematics requirement of the University Core Curriculum.		
	available only in SUMMER and you need both in order to	
go on to Math 1710.		
	etter or appropriate placement. Enrollment in the class	
does not guarantee that the student has met the prerequisite. If a student is enrolled in the class without		
having met the prerequisite, the student could receive a grade of <b>F or WF</b> .		
TEXTBOOK REQUIRED: Precalculus, 6th edition, by J. Stewart, L. Redlin and S. Watson		
CALCULATOR: TI 83, TI 83Plus, TI 84 or equivalent is recommended, no calculators with CAS capabilities		
(e.g., TI-89, TI-92). You should at least have a scientific calculator capable of evaluating exponents, logarithms,		
and trigonometric functions.		
ATTENDANCE POLICY:		
Class attendance is <i>mandatory</i> ! Missing any portion of class may be counted as an absence. My email may NOT		
be used in lieu of attendance. Students are responsible for all information given in class, regardless of his/her		
attendance. This includes knowing exam dates and homework assignments. If you miss a class, it is your		
responsibility to learn of all the important stuff you missed. Exchange contact information with several		
members of your class; so that you will have multiple sources contact in case of a personal emergency.		
Starting Friday, June 14, students may be administratively dropped from the course for nonattendance with a		
grade of WF. The last day a student may be dropped for nonattendance is Wednesday, June 26. Four (4) or		
more absences constitute nonattendance. Missin	• • • • • • • • • • • • • • • • • • • •	
	e taken in class as scheduled. NO MAKE-UP EXAMS WILL BE	
GIVEN! An exam may be taken prior to the scheduled date under genuine reason (needs Instructor's		
Permission!). You must request for this accommodation via email at least one week prior to day you wish to		
take the early exam. In the event of a schedule conflict with a university function, dental/physician's		
appointment, wedding, formal, or whatever, the <b>student must take the test early</b> . If a student does not take a		
scheduled exam, a zero (O) will be recorded for that exam and a notice may be sent through the registrar's		
office. The Final will replace one of the lowest in class test score. Late homework will not be accepted, and there		
are no make-up quizzes. The final exam grade may count as the make-up grade should you miss a test in a very		
exceptional circumstances, verified by the Instructor. Four homework grades will be dropped.		
	ns, on in-class tests, or on quizzes is a serious breach of	
academic standards and will be punished severely and generally result in a student failing the course. All work		
done on in-class exams and quizzes must represent only the student's own work, unless otherwise stated in the		

directions. See <u>http://vpaa.unt.edu/academic-integrity.htm</u> for details on academic integrity at UNT.

EVALUATION:		GRADE ASSIGNMENT:
Average of in-class exams	60%	A: [90%, 100%]; B: [80%, 90%); C: [70%, 80%);
Homeworks	10%	D: [60%, 70%); F: [0%, 60%), 59% is an F
Quizzes	5%	The student's grade is determined by his/her
Final Exam	25%	performance on the evaluation criteria and the grade
		assignments listed above.

**POLICY REGARDING INCOMPLETES:** Beginning Thursday, June 27, a student that qualifies may request a grade of "I", incomplete. An "I" is a non-punitive grade given only if ALL three of the following criteria are satisfied. They are:

1) The student is passing the course;

2) The student has a justifiable (and verifiable) reason why the work cannot be completed as scheduled; and3) The student arranges with the instructor to complete the work within one academic year.

FINAL GRADE: Final grades online access at <u>http://www.unt.edu/grades</u>

The student course grade is assigned according to the evaluation criteria and grading assignment stated on this syllabus. The grade is completely objective and is determined solely by student performance on each of the evaluation criteria (in-class exam grades, on-line homework and quizzes, and the final exam). **Do not expect extra credit work or bonus grade assignments**.

## DISABILITY ACCOMMODATIONS:

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at http://www.unt.edu/oda. You may also contact them by phone at 940.565.4323.

#### NOTES: - (I reserve the right to change this syllabus as necessary throughout the semester)

This syllabus is subject to change as the instructor deems necessary! Any/all changes will be announced during regular class time and you are responsible for being aware of any changes I announce in class. It is the responsibility of the student to attend each scheduled class to be informed of these changes. **Students** are responsible for meeting all university deadlines (registration, fee payment, prerequisite verification, drop deadlines, etc.). See the printed Schedule of Classes and/or University Catalog for policies and dates. Please, visit <u>http://essc.unt.edu/registrar/schedule/summer/schedule.html</u> for details.

#### **UNT Mathematics Core Component**

After completing MATH1600 students will have learned:

- 1. to apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations;
- 2. to represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically;
- 3. to use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results; and
- 4. to interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.

While taking MATH1600, students will participate in the following over-arching objectives of UNT's core curriculum. MATH1600 students will:

- explore math
- make connections between different areas of knowledge and different ways of knowing
- be able to locate, evaluate and organize information including the use of information technologies
- think critically and creatively, learning to apply different systems of analysis
- develop problem solving skills
- cultivate self-responsibility, building a foundation for life-long learning

#### **Student Behavior:**

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at <u>www.unt.edu/csrr</u>

#### Academic Dishonesty:

Cheating on final exams, on in-class tests, or on quizzes is a serious breach of academic standards and will be punished severely and generally result in a student failing the course. All work done on in-class exams and quizzes must represent only the student's own work, unless otherwise stated in the directions. See <a href="http://vpaa.unt.edu/academic-integrity.htm">http://vpaa.unt.edu/academic-integrity.htm</a> for details on academic integrity at UNT.

#### **Classroom Etiquette:**

Appropriate behavior is expected of all students taking this course. Arrive to class promptly and do not leave until the scheduled ending time of the class. If you must arrive late or leave early, please do so as discreetly as possible and take a seat near an exit. I know you have a cool phone but no one likes to see or hear your cool phone in class! So please silence your phones (iPhones/cell phones)! Absolutely NO Texting! <u>Turn off all non-medical electronic devices such as laptops, kindles</u> etc... & <u>take-off</u> the headphones. Do not read newspaper or work on any unrelated assignments during class. I prefer that you NOT eat during class.

#### **Drop Policy:**

If the student is unable to complete this course, it is his/her responsibility to formally withdraw from the course. The student may do so through the Registrar's Office after obtaining the necessary signatures of the Instructor. Consents for withdrawal and all necessary signatures may be obtained in the Math Department Office, GAB 435. Beginning June 7, a student who wishes to drop a course must receive written consent of the instructor. The last day to drop a class with an automatic "W" is Thursday, June 13. The last day to drop a class with "W" or "WF" is Wednesday, June 26. "WF" is averaged into your GPA as an "F." If the student does not properly withdraw from the course but stops attending, s/he will receive a performance grade, usually an F.

#### Final Exam:

The final exam is mandatory and is on Friday, July 5, @ 10-12pm, in our regular class room. The final exam is comprehensive and is 25% of the course grade. If you receive a zero for <u>cheating</u> on an exam, the final exam score will NOT replace that zero.

#### Exam:

There are <u>three</u> in-class exams in addition to the final exam. Each exam is evaluated at 20% of the course grade. If your final exam score is higher than one of your in-class exam scores, then that in-class exam grade will be replaced with final exam grade. If you miss an in-class exam, a zero will be recorded for that exam grade and your final exam score will replace that one zero. If you receive a zero for cheating on an exam, the final exam score will NOT replace that zero. The final exam score can count as 25% of the course grade or 45% of the course grade. Again, **NO MAKE-UP EXAMS WILL BE GIVEN FOR ANY REASON EVER**!

### Content and dates are tentatively scheduled as follows, date may changes:

 Test 1: (Chapter 5)
 – (Monday, June 10)

 Test 2: (Chap 6 & \$7.1-\$7.2) – (week of Mon, June 17)

 Test 3: (\$7.3-\$7.5 & Chap 8) – (week of Mon, June 24)

#### Exam Etiquette:

- Place all papers, textbook, notes, etc. in a backpack or a book bag and close it securely.
- Turn off all electronic devices (unless medically necessary), this includes cell phones, pagers, etc.

- Handling of ANY such electronic devices during an exam will be construed as cheating (receiving unauthorized aid) and may result in a zero for that exam.
- Do not wear HATS or CAPS during exams.
- Do not share any materials during an exam. This includes, but is not limited to pencils, erasers, calculators, etc.
- Have only the exam, pencil, eraser and calculator out during an exam. Plenty of work–space is provided on the actual exam. You will not be permitted to have any scratch paper during an exam.

## **Progress Reports:**

Students needing progress reports completed/signed for athletics, scholarships and/or any other organization must attend office hours to get them completed. I will not fill out progress reports before or after class.

## CHAPs/SECTIONs TO BE COVERED (MATH 1600, Trigonometry)

The following chapters and sections of the textbook will be covered according to the projected schedule below. Dates may change as events warrant.

## • Chapter 5: Trigonometric Functions: Unit Circle Approach

- o 5.1: The Unit Circle
- o 5.2: Trigonometric Functions of Real numbers
- o 5.3: Trigonometric Graphs
- o 5.4: More Trigonometric Graphs
- 5.5: Inverse trigonometric Functions & their Graphs
- 5.6: Modeling Harmonic Motion\*

## • Chapter 6: Trigonometric Functions: Right Triangle Approach

- o 6.1: Angle Measure
- 6.2: Trigonometry of Right Triangles
- o 6.3: Trigonometric Functions of Angles
- o 6.4: Inverse trigonometric Functions & Right Triangles
- o 6.5: The Law of Sines
- o 6.6: The Law of Cosines

## • Chapter 7: Analytic Trigonometry

- o 7.1: Trigonometric identities
- o 7.2: Addition and Subtraction Formula
- o 7.3: Double-Angle, Half-Angle & Product-Sum Formulas
- o 7.4: Basic Trigonometric Equations
- o 7.5: More Trigonometric Equations

## • Chapter 8: Polar Coordinates & Parametric equations

- o 8.1: Polar Coordinates
- o 8.2: Graphs of Polar Equations
- o 8.3: Polar forms of Complex Numbers; De-Moivre's Theorem
- o 8.4: Plane Curves and Parametric Equations

## **Course Requirements:**

As a general rule, average college students are expected to spend a minimum of two (2) hours per week for each one (1) hour of class working on the course to be able to successfully learn the content. If you are an "average" college-level learner, you should spend at least six (6) hours per week if you expect to successfully complete this course. Adjust for more (or less) hours to accommodate your learning level

## **Recommended Keys to Success/Expectations:**

Students who are successful in math spend a great deal of time and honest effort outside of class along with punctual attendance. Students who are successful come to each class on time and stay

the entire class. You are responsible for everything that happens in class. You should come to each lecture and come prepared. Students who are successful spend an hour (or two) after each lecture with a classmate reviewing the lesson and working on homework problems. They meet with a study group several times per week, attend SI sessions and use the Math Lab.

Successful students work on the assignments consistently every day, instead of waiting until the last minute. They read their textbooks regularly and make learning notes.

Math is not a spectator sport. You will not learn mathematics from watching the instructor or friends display ideas and solve problems. You must try the problems, finish problems, ask questions, correct your mistakes, and put concepts in your own words, and **practice, practice**, **practice**!! An increase in effort usually results in increases in success.

#### Student Evaluation of Teaching Effectiveness (SETE):

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.

• Keep a positive attitude about your ability to succeed and work diligently towards that goal!

## MATHEMATICS IS NOT A SPECTATOR SPORT -- YOU MUST PRACTICE TO LEARN!!

## • Wishing You a Great Semester Ahead!!!