

Course Syllabus
MTH 1316.05
Plane Trigonometry (3 credit hours)
Fall Semester 2017

Instructor: Sriyan Wickramasuriya

Class Meeting Time: TTh 2:00 pm-3:20 pm

Class Meeting Place: LDB 401

Office: LDB 149

E-mail: spw015@shsu.edu

Office Hours: Monday 9:30 am-10:30 am, 2:45 pm-3:45 pm,

Wednesday 12:00 noon-2:00 pm, **or by appointment**

(The minute you feel you are having trouble understanding any of the material please come to office hours and I am more than happy to help you)

Objective: In this course the student is expected to obtain an understanding of trigonometric functions and their applications.

Description: Topics include coordinate systems, circular functions, solutions of triangles, trigonometric equations and inequalities, and the inverse trigonometric functions. Two years of high school algebra and high school geometry are prerequisites.

Textbook: *Trigonometry*, Seventh edition, C. McKeague and M. Turner

Exams and Final Exam: There will be **3 midterm exams** and a **comprehensive final**. You cannot make-up an exam except in cases of **documented emergencies**.

Quizzes: There will be three quizzes. You cannot make-up a quiz except in cases of documented emergencies.

Homework: Homework is due at the **beginning of class in class on the due day**.

Please **staple your homework** before turning it in.

The homework will be will be graded as follows: for completeness and grading a few selected problems. **Late homework submitted within 2 days of the due date will be given 6 points**. After that late homework will not be accepted.

The following are the homework problems from each section you need to submit.

Homework List (From the book: *Trigonometry, Seventh Edition by McKeague and Turner*)

SECTION	PROBLEMS
1.1 Angles, Degrees, and Special Triangles	9,14,22,31,34,39,42,43,45,49,52,59,62
1.2 The Rectangular Coordinate System	9,12,15,18,34,35,71,74,77,80,86
1.3 Definition I: Trigonometric Functions	6,9,12,17,23,26,27,45,48,49,54,57,61,64,71
1.4 Introduction to Identities	6,9,16,19,22,25,28,31,34,37,40,43,47,51,55
2.1 Definition II: Right Triangle Trigonometry	6,9,12,15,18,26,27,36,39,45,51,54,57,60
2.2 Calculators and Trigonometric Functions of an Acute Angle	9,12,15,18,21,27,30,33,39,42,45,51,57,60,63,67,72
2.3 Solving Right Triangles	7,9,12,17,21,23,26,33,39,43,49,53
7.1 The Law of Sines	8,11,14,17,20,29,34
7.2 The Law of Cosines	11,14,17,19,22,31,37
3.1: Reference Angle	5,14,18,21,24,27,39,42,45,53,57,61,65,69,73,77,81,83
3.2: Radians and Degrees	5,7,9,15,18,25,26,27,31,35,40,45,50,55,57,60,63,88,93
3.3 Definition III: Circular Functions	7,15,21,26,28,31,58,63,66,71,76,83,88,89,93
3.5 Velocities	9,15,21,25,29,33,39,41,47,49
4.7 Inverse Trigonometric Functions	17,19,23,27,31,55,65,73,75,87,91
5.2 Sum and Difference Formulas	9,13,23,31,

Grades:

Quizzes: **60** points (**20** points each)

Homework: **140** points (**10** points each)

Midterm Exams: **600** points (**200** points each)

Bonus: **60** Points (not using phone) and **30** Points (responsible signing of the attendance)

Final Exam (Comprehensive and Scantron): **200** points

Final Grade=Quiz points + Homework points + Three Midterm Exam points + Final Exam points + Bonus points

Letter Grades: THERE WILL BE NO NEGOTIATION ON GRADES

A=900 points and above

B=800-899 points

C=700-799 points

D=600-699 points

F=below 600

Blackboard: I will upload **my Lecture notes, model exams and their solutions, midterm exam solutions and your grades on Blackboard**. If you see that a grade is entered incorrectly you need to inform me **within 7 days** of the grade being entered. After that I will not change any grade.

Calculator: You must have a calculator that can evaluate trigonometric functions. During an exam, you **cannot** use a cell phone or borrow a calculator. Calculators with a *computer algebra system* (e.g. TI-89) are not allowed during a quiz or exam at any time.

Cell Phone Use: Use of cell phones, smartphones, iphones (text messaging etc.) are prohibited during class time except in cases of emergency. **Using your cell phone in class will result in you losing all 60 bonus points given for not using your phone in class**. During an exam, your cell phone should be stored securely in such a way that it cannot be seen or used. The visible presence of such a device during an exam may result in a zero on the exam and is considered de facto evidence of cheating.

Class Schedule:

Date	Tentative Topic	Homework
08/24	1.1 Angles and Degrees	
08/29	Finish 1.1, 1.2 Rectangular Coordinates	
08/31	Finish 1.2, 1.3 Trigonometric Functions	HW 1.1
09/05	Quiz 1 , Finish 1.3	HW 1.2
09/07	1.4 Identities	HW 1.3
09/12	2.1 Right Triangle Trigonometry	HW 1.4
09/14	2.2 Calculators and Right Triangles	HW 2.1
09/19	2.3 Solving Right Triangles	HW 2.2
09/21	MIDTERM 1	
09/26	7.1 Law of Sines	HW 2.3
09/28	7.2 Law of Cosines	
10/03	3.2 Radians and Degrees	HW 7.1,7.2
10/05	3.3 Circular Functions	HW 3.2
10/10	Finish 3.3	
10/12	Quiz 2 , 4.1 Basic Graphs	HW 3.3
10/17	4.7 Inverse Trigonometric Functions	
10/19	Finish 4.7, Review	HW 4.7
10/24	MIDTERM 2	
10/26	4.2 Amplitude, Reflection and Period	
10/31	3.1 Reference Angle	
11/02	Quiz 3 , Finish 3.1	
11/07	3.4 Arc Length and Area of a Sector, 3.5 Velocities	HW 3.1
11/09	5.2 Sum and Difference Formulae	
11/14	Finish 5.2	
11/16	5.3 Double-Angle Formulae, Review	HW 5.2
11/21	MIDTERM 3	
11/22- 11/26	THANKSGIVING BREAK	
11/28	5.4 Half-Angle Formulae (very briefly), 6.1 Solving Trigonometric Equations (very briefly)	
11/30	Review	
	FINAL	

Further Notes:

- *Attendance* – You are strongly encouraged to attend all classes and are responsible for all announcements, assignments, quizzes, and exams given in class.
- *Academic Honesty* – The University expects all students to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. http://www.shsu.edu/~vaf_www/aps/documents/810213.pdf
- *Religious Holy Days* – Students are excused from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. As a courtesy, it is appreciated if you notify me in advance and in writing of the dates and times that are to be missed so that appropriate arrangements can be made regarding homework and/or exams. http://www.shsu.edu/~vaf_www/aps/documents/861001.pdf
- *Students With Disabilities Policy* – It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see: <http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf>

- *Classroom Etiquette* - Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy. <http://www.shsu.edu/students/guide/StudentGuidelines2010-2012.pdf#page=29>
- *Visitors in the Classroom* – Only registered students may attend class. Exceptions can be made on a case-by-case basis. In all cases, visitors must not present a disruption to the class by their attendance. <http://www.shsu.edu/syllabus/>