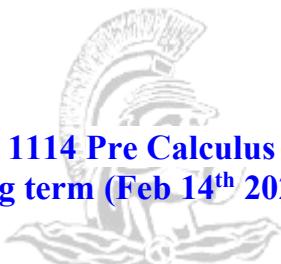


**MTH 1114 Pre Calculus Trigonometry**  
**2022 Spring term (Feb 14<sup>th</sup> 2022 - May 28<sup>th</sup> 2022)**



**CLASS** Monday (8:30AM - 11:15 AM)

**WORTH** 3 credits

**PREREQUISITE** No

**CLASS PAGE**

<https://classroom.google.com/c/NDY4OTY5NDEwMjM4?cjc=j4uhfm3>

**INSTRUCTOR** Assoc. Prof. Dr. Pho Duc Tai,  
E-mail: phoductai@hus.edu.vn

**COURSE DESCRIPTION**

This course covers trigonometric functions including definitions, identities, and trigonometric equations, applications as well as properties and graphs of trigonometric functions and their inverses. Also included the law of sines, cosines, polar coordinates, vectors, and conic sections.

**COURSE OBJECTIVES**

At the conclusion of the course the students will be able to:

1. Understand the fundamental notions of trigonometric functions, such as: domain and range, graph, and their inverse functions.
2. Apply trigonometric functions, including: The law of sins, the law of cosines, motions and waves.
3. Understand the polar coordinates and vector computation, including the dot product.
4. Using algebra and geometry (or, analytic geometry) to study conics, such as find the normal form of a conic, find polar equation and parametric equation of a conic.

**TEXT BOOK**

*MTH 1114 Pre-Calculus Trigonometry (Custom Edition for Troy University), taken from Algebra and Trigonometry (10<sup>th</sup> Edition) by Michael Sullivan), 2016.*

**STUDENT EVALUATION**

Home works + Attendance: 10%, Quizzes: 20%, Midterm: 30%, Final exam: 40%

1. **Home works:** *These are weekly assignments. If you don't show your work, you get a zero. You will be asked (randomly) to present your solutions.*
2. **Quizzes:** *There will be 2 quizzes given during the semester. There is no such thing as a make up quiz. If you miss a quiz, you get a zero.*

**EXAMINATION FORMAT**

Quizzes: 30 minutes; Midterm Exam: 90 minutes; Final: 120 minutes.

**GRADING SCALE**

A (90-100), B (80-89), C (70-79), D (60-69), F (<60)

### Tentative class schedule

No	Date	Chapter	Topics	Remarks
1	14-Feb	7	7.1-7.4 Definition & Properties	
2	21-Feb		7.4-7.8 Graphs	
3	28-Feb	8	8.1-8.3 Inverse function	Quiz 1
4	7-Mar		8.4-8.5 Properties	
5	14-Mar		8.6-8.7 Properties (cont.)	Quiz 2
6	21-Mar	9	9.1-9.3 Law of sins & cosines	
7	28-Mar		9.4-9.5 Motions & Waves <b>Review for Midterm Exam:</b>	
8	4-Apr		<b>Question &amp; Answer</b>	Midterm Exam
9	11-Apr	10	10.1-10.2 Polar coordinates	
10	18-Apr		10.3 Complex plane	Quiz 3
11	25-Apr		10.4-10.5 Vectors	
12	2-May	11	11.1-11.4 Conics	Quiz 4
13	9-May		11.5-11.6 Normal form & Parametrization	
14	16-May		Review for the final exam	
15	23-May		<b>Question &amp; Answer</b>	Final Exam

**CLASS REGULATION:** Students are expected to:

1. Punctually attend all scheduled classes.
2. Be responsible for all instructions and assignments given in class as well as for the supporting textbook content.
3. Read the textbook material **before** the lecture covering that material and attempt the suggested problems before the material is covered in class.
4. Be an active participant in this class while being respectful of everyone else in the class.
5. **Turn off cell phones when you enter the classroom. If your cell phone rings during class, you will be asked to leave the class.**

**ABSENCES:**

**IF YOU MISS MORE THAN TWO CLASSES--EXCUSED OR UNEXCUSED--YOU WILL RECEIVE A FAILING GRADE (grade of "F") FOR THE COURSE.**

***THIS SYLLABUS IS TENTATIVE AND SUBJECT TO CHANGE.*** The instructor may make changes if deemed necessary. Changes will be announced in class.