COURSE STRUCTURE

COURSE NAME	**PRE CALCULUS TRIGONOMETRY**
CODE	**MTH 1114**
CLASS MEETING TIME	**Wednesday, 8:30-11:15 a.m**
LOCATION	**HUST**
WORTH	**3 credits**
PREREQUISITE	**None**
INSTRUCTOR	**Dr. Vu The Khoi, Ph.D. in Mathematics** vtkhoi@gmail.com

COURSE DESCRIPTION

This course helps to prepare students for Calculus with the emphasis on trigonometry. The contents include: a brief review functions, basic properties of algebraic, exponential, and logarithmic functions. The main content covers trigonometric functions including definitions, identities, and trigonometric equations, applications as well as properties and graphs of trigonometric functions and their inverses.

COURSE OBJECTIVES

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

- Manipulate and evaluate algebraic, exponential, logarithmic functions.
- Graph trigonometric function, Inverse Trigonometric Functions
- Using Fundamental Trigonometric Identities
- Solving basic Trigonometric equations
- Using Law of Sines, Law of Cosines and sum-difference formulas

COURSE FORMAT

Lecture: 3 hrs per week

STUDENT EVALUATION

Attendance: 10% (if you miss more than one class you will not receive this 10%)

Midterm: 30%, Assignment/Quizzes: 20%, Final exam 40%

EXAMINATION FORMAT

Midterm: 2 hours, Final: 2 hours 30 minutes.

GRADING SCALE

A (90% - 100%)
B (80% - 89%)
C (70% - 79%)
D (60% - 69%)
0 – 59% : Fail

BASIC TEXT

Larson, **Precalculus**, 12th Edition, Pearson Addison Wesley.

CLASS SYLLABUS

The course will cover the following topics from the text book:

Week(s)	Topics
1	**Polynomials and rational functions** Real numbers system, coordinate system, polynomials, rational expressions, radicals.
2	**Exponential and Logarithmic Functions** Equation of lines, introduction to function, graphs of linear functions and quadratic functions, linear inequalities.
3-5	**Trigonometry** Basic trig functions and their graphs. Inverse trig functions.
6	Applications and model
7	**Midterm Exam**
8 - 9	**Fundamental trig identities** Using and verifying trig identities.
10-11	**Solving trig equations** Solution equations involving trig functions, sum-difference formulas, multiple angle formulas.
12	**Law of sines and cosine** Using the law of sines and cosines in real life problems
13	**Vectors in the plane, dot product**
14	**Final Review**.
15	**Final Examination.**

CLASS REGULATION: The students are expected to attend all scheduled classes. *Mobile phone* is not allowed to use in class. **Mobile phone, laptop, tablet and other communication devices are prohibited during exams.**

ABSENCES: The following is the official policy of Troy University as written in the Undergraduate *Bulletin*.

"In registering for classes at the University, undergraduate students accept responsibility for attending scheduled class meetings, completing assignments on time, and contributing to class discussions and the exploration of ideas.

"A student will be excused if he/she has been absent from a class by reason of circumstances beyond his/her control or if the student has been required to attend an activity sponsored by the University. Faculty members who sponsor activities that require class absences must send a list of student names to each faculty member concerned at least three days before the scheduled absence.

"Faculty members may levy academic penalties upon unexcused absences; however, such penalties for unexcused absences will be a part of each course syllabus and will be distributed to each class at the beginning of each term, a copy filed in the departmental office."

For all sections, each student is to be in class and prepared for class each scheduled class day. A student whose absence is not warranted by an official excuse or by a doctor's written statement will receive a grade of zero for work due in class and for all work done in class on the day of the absence.

Your attendance and participation in class are essential for a complete learning experience. The type of learning that takes place between you, your instructor, and your classmates cannot be acquired on an individual basis. This class meets only one day per week, and much information must be covered to help you maximize your potential for success at TROY and in life after the University. **THEREFORE, IF YOU MISS MORE THAN TWO CLASSES--EXCUSED OR UNEXCUSED—YOU WILL RECEIVE A FAILING GRADE FOR THE COURSE.**

INCOMPLETE WORK: A student who has not prepared the entire class assignment for a given day will receive a grade of zero for class work on that day.

LATE WORK: Only those students who have been excused from class may hand in work late, and they must hand in all assigned work within on week from the last day of the excused absence.

ACADEMIC DISHONESTY:

Academic dishonesty is not accepted in this course. Cheating on a map quiz will result in a deduction of 10 points from your overall assessment. Cheating on an exam or handing in plagiarized materials will result in an automatic failing grade for the course.

AMERICANS WITH DISABILITIES ACT: Any student whose disabilities fall within ADA must inform the instructor at the beginning of the term of any special needs or equipment necessary to accomplish the requirements for this course.

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