

# LEBANESE INTERNATIONAL UNIVERSITY

Course Syllabus of Pre-Calculus (Math 110)

# Time:

Sunday - Tuesday - Thursday 8:00 am - 9:00 am

## Instructor:

Eng. Moayed Yagout

Fall Semester 2016

## Text books: PreCalculus Blitzer 5<sup>th</sup> edition

#### **Course Description**

This is a pre-calculus course for those who don't have the proper background in calculus. This course will cover the following materials: Graphs, lines and slopes, distance and midpoint formulas, functions and their graphs, quadratic functions, hyperbolic functions, polynomial functions and their graphs, zeros of polynomial functions, exponentials, logarithms and their properties, angles, trigonometric functions, graphs of sine and cosine functions, analytic trigonometry, system of linear equations in two and three variables, partial fractions.

### **Course Objective**

After completing this course, the student should be able to understand the basic concepts of limits and continuity. The student will also be able to do all forms of differentiation, applications of derivatives, and integration.

### **Course Policy**

#### **Expectations:**

Students are expected to learn both the mathematics covered in class and the mathematics in the textbook and other assigned reading. Completing homework is part of the learning experience. Students should review topics and prepare before entering the class.

#### Attendance:

Regular Attendance. Students are not to miss more than four classes.

#### **Assignments:**

Homework Assignments are checked at the beginning of every new chapter and will be randomly collected then.

## **Quizzes:**

Quizzes could be given at any time. Students are responsible for all material presented in class, including announcements about course procedures. Exams, quizzes, and homework often include questions on material presented only in class.

#### Midterms:

Midterms will be announced before their due date one week earlier.

## Make-up policy

No make-up will be given without an excuse from the administration of the university.

## **Grading policy**

Assignments	10%
Attendance & Participation	10%
Quizzes	10%
Midterm 1	15%
Midterm 2	15%
Final Exam	40%

#### **Course Outline**

P: Prerequisites: Fundamental Concepts of Algebra 1 (P.1 – P.7)
Ch 1: Graphs, functions and models (1.1 – 1.10)
Ch 2: Polynomials and Rational Functions (2.1 – 2.7)
MIDTERM 1

Ch 3: Exponential and Logarithmic Functions (3.1 - 3.5)

Ch 4: Trigonometric Functions (4.1 – 4.6)

#### MIDTERM 2

Ch 5: Analytic Trigonometry (5.1 – 5.5)

Ch 7: Systems of Equations and Inequalities (7.1 - 7.3)