## INSTITUTE OF MATHEMATICS College of Science University of the Philippines Diliman

## Math 2 Course Syllabus

## A. Course Catalogue Description

Course Number	Math 2
Course Title	Mathematics in Everyday Life
Course Description	This course covers basic mathematical concepts and skills applied to every-
	day life.
Prerequisite	None
Course Credit	3 units
Number of Hours	3 hours/week

## **B.** Course Content

- I. Basic Numeracy Skills
  - 1. Review based on Diagnostic Test (Algebraic Expressions, Functions)
  - 2. Conversion of ratios, decimals, percentages and fractions
  - 3. The meaningful numerator and denominator
  - 4. Applications
    - a. Rates (passing rate, sports percentages, restaurant bills etc.)
    - b. Percentage increase or decrease
    - c. Purchasing power
    - d. Inflation
- II. Exponential and Logarithmic Functions
  - 1. Linear growth versus exponential growth
  - 2. Logarithmic function applications
  - 3. Solving linear equations and exponential equations
- III. Mathematics and Society
  - 1. Benefits and importance of mathematics
  - 2. How mathematics may contribute to social disparities
  - 3. Mathematics behind bills
- IV. Interest Rates and Time Value of Money
  - 1. Simple and compound interest
  - 2. Future value of money
  - 3. Present value of money
  - 4. Applications
    - a. Savings and Loans
    - b. Amortization
    - c. Credit cards
- V. Special Topics
  - (Suggested Topics)
  - 1. Allocation
  - 2. Taxi fares
  - 3. Socialized pricing
  - 4. Fair division
  - 5. Mathematics of counting
  - 6. Mathematics of chance

For a more detailed syllabus, send an email request to ddapr@math.upd.edu.ph.