Florida Department of Education

COURSE DESCRIPTION - GRADES 9-12, ADULT

Subject Area: Mathematics
Course Number: 1205540
Course Title: Business Mathematics
Credit: 1.0
Will meet graduation requirement for Mathematics

Basic Assumptions for Mathematics Education:

- All students have access to calculators and computers.
- Classroom activities are student-centered, emphasizing concrete experiences and active/experiential learning.
- All courses have increased emphasis on problem solving, estimation, and real-world applications.
- Evaluation includes alternative methods of assessment.
- All strands addressed in the Sunshine State Standards are developed across the PreK-12 curriculum.

A. Major Concepts/Content. The purpose of this course is to enable students to develop mathematical competence in problem solving, communication, and reasoning, as related to the business world.

The content should include, but not be limited to, the following:

- wholesale and retail pricing
- banking services
- payroll
- marketing
- investments
- taxes
- accounting and bookkeeping
- statistics
- business records and financial reports
- insurance

This course shall integrate the Goal 3 Student Performance Standards of the Florida System of School Improvement and Accountability as appropriate to the content and processes of the subject matter.

B. Special Note. None

C. Course Requirements. These requirements include the benchmarks from the Sunshine State Standards that are most relevant to this course. The benchmarks printed in regular type are required for this course. **The portions printed in *italic type* are <u>not</u> required for this course.**

After successfully completing this course, the student will:

1. Apply mathematical strategies to solutions for business-related problems.

MA.A.3.4.2	select and justify alternative strategies, such as using properties of numbers, including inverse, identity, distributive, associative, and transitive, that allow operational shortcuts for computational procedures in real-world or mathematical problems.
MA.A.3.4.3	add, subtract, multiply, and divide real numbers, including square roots and exponents, using appropriate methods of computing, such as mental mathematics, paper and pencil, and calculator.
MA.A.4.4.1	use estimation strategies in complex situations to predict results and to check the reasonableness of results.
MA.B.1.4.3	relate the concepts of measurement to similarity and proportionality in real-world situations.
MA.B.3.4.1	solve real-world and mathematical problems involving estimates of measurements, including length, time, weight/mass, temperature, money, perimeter, area, and volume and estimate the effects of measurement errors on calculations.

2. Use a variety of formats to communicate mathematical aspects of business situations.

MA.D.1.4.1	describe, analyze, and generalize relationships, patterns, and functions using words, symbols, variables, tables, and graphs.

3. Use mathematical reasoning and problem solving to collect and analyze data for decision making.

MA.B.4.4.1	determine the level of accuracy and precision, including absolute and relative errors or tolerance, required in real-world measurement situations.
MA.E.1.4.1	interpret data that has been collected, organized, and displayed in charts, tables, and plots.
MA.E.1.4.2	calculate measures of central tendency (mean, median, and mode) and dispersion (range, standard deviation, and variance) for complex sets of data and determine the most meaningful measure to describe the data.
MA.E.1.4.3	analyze real-world data and make predictions of larger populations *by applying formulas to calculate measures of central tendency and dispersion* using the sample population data and using appropriate technology, including calculators and computers.