

# North Hennepin Community College

## BUS 1400: Business Mathematics

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course provides the students with essential mathematical concepts and practical business applications of pricing, discounts, commission, simple and compound interest, installment buying, consumer credit, depreciation, taxes, simple business statistics, and other business finance situations. Problem-solving skills are developed. Computational math skills are needed.

### B. COURSE EFFECTIVE DATES: 08/26/1997 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. A Rapid review of basic mathematics, addition, subtraction, multiplication, division, fractions, percents and algebraic equations.
2. A comprehensive knowledge of the ways to solve various business problems using the formula and algebraic approaches including:
  - \*The Portion Formula
  - \*Trade and cash discounts
  - \*Credit and transportation terms
  - \*Interest problems including simple and compound interest, maturity value, interest credits, interest and non-interest bearing notes, and compound interest and effective rates
  - \*Present value and annuity tables
  - \*Installment and revolving credit charge accounts
  - \*Rule of 78
  - \*Home mortgage problems
  - \*Mutual fund calculations

### D. LEARNING OUTCOMES (General)

1. Solve application problems involving percents including percent change problems, problems using the Portion Formula, and problems involving dollar markups and markdowns (NHCC ELO 1, 2)
2. Explain trade and cash discounts (NHCC ELO 1, 2)
3. Define various credit and transportation terms (NHCC ELO 1, 2)
4. Solve application problems involving interest including problems using simple and compound interest formulas, maturity value, the U.S. Rule for calculating interest credits, interest and non-interest bearing notes, and compound interest and effective rates (NHCC ELO 1, 2)
5. Solve applications involving present values and annuities including using tables to calculate present values and calculating future and present values of annuities and lump sums (NHCC ELO 1, 2)
6. Compute finance charges in installment buying and revolving charge accounts (NHCC ELO 1, 2)
7. Explain the "rule of 78" and utilize to compute rebates and payoffs (NHCC ELO 1, 2)
8. Solve application problems involving home mortgages including being able to identify various types of home mortgages and calculating monthly payments for housing costs (NHCC ELO 1, 2)
9. Define a mutual fund and calculate net asset value (NHCC ELO 1, 2)

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

1. Knowledge of Human Cultures and the Physical and Natural World--Through study in the sciences, mathematics, social sciences, humanities, histories, languages, the arts, technology and professions.
2. Intellectual and Practical Skills--Including: Inquiry and analysis; Critical and creative thinking; Written and oral communication; Quantitative literacy; Information literacy; Teamwork and problem solving.