College of San Mateo
Official Course Outline

1. **COURSE ID:** BUS. 115 **TITLE:** Business Mathematics
   Units: 3.0 units **Hours/Semester:** 48.0-54.0 Lecture hours; and 96.0-108.0 Homework hours
   Method of Grading: Letter Grade Only
   Recommended Preparation:
   Eligibility for ENGL 100, or Eligibility for ENGL 105

2. **COURSE DESIGNATION:**
   Degree Credit
   Transfer credit: CSU
   AA/AS Degree Requirements:
   CSM - GENERAL EDUCATION REQUIREMENTS: E2b. Communication and Analytical Thinking

3. **COURSE DESCRIPTIONS:**
   Catalog Description:
   A study of mathematics as applied to business, with emphasis on word problems involving interest, discount, negotiable instruments, financial statements and ratios, inventory pricing, depreciation, payroll, income tax, annuities, and amortization.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
   Upon successful completion of this course, a student will meet the following outcomes:
   1. Develop speed and accuracy in the fundamental processes
   2. Demonstrate ability in business problem solving
   3. Demonstrate ability in estimation
   4. Apply learning of business math to the areas of accounting, investments, business operations, and other life situations

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
   Upon successful completion of this course, a student will be able to:
   1. Understand the function of fractions
   2. Solve mathematical problems with decimals
   3. Solve simple numerical equations
   4. Apply formulas to solve rate, time, and distance problems
   5. Recognize and apply the basic elements of the metric system
   6. Use percentage to measure increase and decrease
   7. Compute sales commissions and gross pay
   8. Compute sales and trade discounts
   9. Understand and compute the variables in basic markup formula using percent markup
   10. Maintain a checking account by reconciling bank statements
   11. Understand and compute insurance risk and cost
   12. Compute simple interest rate within given time period
   13. Compute finance charges
   14. Define promissory notes and its calculations
   15. Compute compound interest rates
   16. Compute depreciation using straight-line and declining-balance method
   17. Analyze balance sheets and income statements
   18. Compute currency exchange rates
   19. Examine stock performance
   20. Compute comparative earning potential of a major class of stocks
   21. Compute gains and losses of corporate bonds
   22. Understand statistical terminology
   23. Compute mean, median, mode
   24. Construct bar and line graphs, and pie charts

6. **COURSE CONTENT:**
   Lecture Content:
   1. Simple interest

2. Negotiable instruments
3. Business Application Problems
    A. Cash and trade discounts
    B. Simple and compound interest
    C. Present value
    D. Retail markup and markdown
    E. Annuities and amortization
    F. Accounting ratios
    G. Discounts
    H. Financial statements
    I. Introduction to statistics
    J. Consumer credit
    K. Retail pricing
    L. Investments
    M. Depreciation

7. **REPRESENTATIVE METHODS OF INSTRUCTION:**
   Typical methods of instruction may include:
   A. Lecture
   B. Other (Specify): Typical daily out-of-class assignments include reading of chapter sections, working non-word and word problems. Word problems require critical thinking skills.

8. **REPRESENTATIVE ASSIGNMENTS**
   Representative assignments in this course may include, but are not limited to the following:
   Writing Assignments:
   Students will read and write critical thinking analysis to word problems.
   Reading Assignments:
   Students will be required to read corresponding chapter before class.

9. **REPRESENTATIVE METHODS OF EVALUATION**
   Representative methods of evaluation may include:
   A. Class Participation
   B. Class Performance
   C. Class Work
   D. Exams/Tests
   E. Homework
   F. Oral Presentation
   G. Papers
   H. Projects
   I. Quizzes
   J. Simulation

10. **REPRESENTATIVE TEXT(S):**
    Possible textbooks include:
    A. Brechner, Robert. *Contemporary Mathematics for Business and Consumers*, 9th ed. Cengage Learning, Inc., 2020

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Course Originator: Philip Tran