



I. Course ID (department and course number) MAT 103

II. Course Name: Business Mathematics

III. Number of Credits Awarded for Course: 3 credits

IV. Prerequisite or Co-requisite Courses

Pre-requisite = Exit Basic Mathematics and Algebra

V. Indicate if New or Modified Course (if modified course, list old course ID)

Revised course

VI. Semester and Year Course Will First Be Offered (or, if a modified course, semester and year when revised course will be offered):

Fall 2009

VII. Name and Telephone Number and/or e-mail Address of Department Chair or Other Appropriate Contact Person

Catherine Sirangelo-Elbadawy, Associate Dean Health, Science and Technology
Email: CSirangelo@hccc.edu, (201) 360-4261

Laurie Riccadonna, Fine/Computer Art Coordinator
Email: lrccadonna@hccc.edu, (2010) 360-4678

VII. Detailed Course Description

Fundamental principles of mathematics are applied to business situations. Topics which will be covered include Bank Reconciliation, proportions, statistical measurement, trade and cash discounts. In addition, the mathematics of buying, pricing and selling, computation of payroll, interest and Consumer credit are discussed. Financial transactions involving, compound interest, future value, present value annuities and mortgages will be explained.

IX. Outline of Course Objectives

Upon successful completion of this course, students will be able to:

- Enhance student's basic mathematical ability
- Provide students with a thorough understanding of the mathematics involved in business
- Students will gain personal knowledge of the mathematics which affects them as consumers and wage earners
- Recognition of the planning which must go into business decisions and how they are monitored

- Collect and organize numerical data; identify and apply appropriate mathematical techniques; interpret and present data in a variety of formats

X. Texts, Journals, and Other Materials Used In Course

1. Background readings and other materials for faculty teaching the course

Suggest Faculty review other current available textbooks to familiarize themselves with various methods of presenting material to students.

2. Proposed student texts:

Cleaves, Cheryl and Hobbs, Margie Business Math. Seventh Edition. 2005
Pearson/Prentice Hall

3. Supplementary readings for students

Daily Newspapers
Fortune
Newsweek
Forbes

Useful Web sites for students and faculty:

- <http://www.loanvalue.com/loanvalue/fincalc.htm> - Several business math calculators at this site
- <http://www.toolkit.cch.com/tools/tools.asp> - Business Owner's Tool Kit for small business information
- <http://www.aaamath.com/dec.html> - All about decimals
- <http://www.aaamath.com/pct/html> – help with solving percent problems
- www.aba.com - American Bankers Association explores banks and banking activities
- www.federalreserve.gov - The Federal Reserve System
- <http://icarus.stanford.edu/101416> - Basic payroll calculations
- www.aspm.org/ - American Society for Payroll Management deals with payroll and tax issues
- <http://www.irs.gov> - Internal Revenue Site <http://www.dol.gov> - Department of Labor site
- www.irs.treas.gov/bus-info/index.html - IRS page specifically devoted to corporate taxes
- <http://www.isp-planet.com/business/isp-sales-commissions.html> - Discussions on sales commissions, base salaries and quotas
- www.sba.gov/library/pubs/fm-13.txt - Small Business Administration with information on calculating markups
- <http://www.anjoch-investors.com/new98/indexn.html?../fm13> - pricing information

4. Audiovisual materials and computer software

A DVD player and monitor is used for a case problem which presents a business scenario utilizing calculations practiced in each Chapter of the text.

XI. Grade Determinants

Homework Problems	15%
Case Studies & class participation	15%
Two Quizzes	30%
Midterm	20%
Final Exam	20%

XII. Number of Papers and Examinations

Case study, 2 quizzes, midterm and final exams

XIII Schedule of Topics to Be Covered

Session	Topic
1	Review: Place Value and Our Number System Operations with Whole Numbers Fractions Adding, Subtracting, Multiplying and Dividing Fractions Decimals and the Place-Value System Operations with Decimals Decimal and Fraction Conversions
2	Checking Account Forms Bank Statements Bank Reconciliation
3	Equations Using Equations to solve Problems Percent Equivalents Solving Percent Problems
4	Statistics Measures of Central Tendency Frequency Distribution and Graphs Measures of Dispersion
5	Trade and Cash Discounts Net Price and the Trade Discount Net Price and the Trade Discount Series Net Amount and the Cash Discount
6	Markup Based on Cost Markup based on Selling Price and Markup Comparisons
7	Markdown, Series of Markdowns, and Perishables Midterm

8	Payroll Gross Pay Payroll Deduction The Employer's Payroll Taxes
9	The Simple Interest Formula Ordinary and Exact Time and Interest Promissory Notes
10	Consumer Credit Installment Loans and Closed-End Credit Paying a Loan Before it is Due: The Rule of 78 Open-End Credit
11	Compound Interest and Future Value Present Value Future Value of an Annuity Sinking Funds and the Present Value of an Annuity
12	Mortgages Mortgage Payments Amortization Schedules
13	Depreciation Depreciation Methods for Financial Statement Reporting Depreciation Methods for IRS Reporting
14	Inventory Specific Identification Method First in First out (FIFO) Last in First out (LIFO) Retail Inventory Method Gross Profit Method Turnover and Overhead
15	Final Exam