

CATALOG INFORMATION

Dept and Nbr: BGN 81

Title: PRACTICAL BUSINESS MATH

Full Title: Practical Business Math Skills

Last Reviewed: 2/28/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**  
This course is intended for the general user seeking computational math skills for the modern workforce. Beginning with a review of math fundamentals, the course progresses to more advanced topics such as percents, payroll, selling and buying, and borrowing and lending. The course also integrates workplace competencies and basic business foundation skills.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: This course is intended for the general user seeking computational math skills for the modern workforce. Beginning with a review of mathematic fundamentals, the course progresses to more advanced topics such as percents, payroll, selling and buying, and borrowing and lending. The course also integrates workplace competencies and basic business foundation skills. (Grade Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 1998	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

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

1. Review and apply math fundamentals: addition, subtraction, multiplication, and division to whole numbers, decimals, and fractions.
2. Convert percentages to decimals and fractions, and fractions and decimals to percentages.
3. Identify and solve for base, rate, and percentage.
4. Examine and analyze various money management tools such as checking accounts, credit cards, and savings accounts, and reconcile bank records with personal and/or business records.
5. Calculate payroll determining gross earnings, deductions, and net earnings.
6. Determine trade discounts and cash discounts to make purchasing of merchandise as cost effective as possible by distinguishing between invoice options and payment terms.
7. Calculate markup and markdown of inventory in order to make a profit on sales, and manage inventory to ensure adequate available merchandise.
8. Calculate simple interest using principal times rate times time with special consideration of simple interest notes and simple discount notes.
9. Determine property taxes, income taxes, and sales tax.
10. Calculate the cost of home ownership.
11. (Optional) Calculate ratios and other important values for stocks and bonds by acquiring a thorough understanding of the terminology.
12. (Optional) Analyze and interpret financial reports.
13. (Optional) Calculate business statistics: mean, median, mode.

### **Topics and Scope:**

1. Review of math fundamentals (addition, subtraction, multiplication and division) applied to:
  - A. Whole numbers
  - B. Decimals

- C. Fractions
- 2. Conversion of percentages to decimals and decimals to percentages
- 3. Identify and solve for base, rate, and part
- 4. Money management tools
  - A. Checking accounts
  - B. Credit cards
  - C. Savings accounts
  - D. Bank statement reconciliation
- 5. Calculation of payroll
  - A. Gross earnings
  - B. Deductions
  - C. Net earnings
  - D. Payroll reporting
- 6. Mathematics of buying
  - A. Invoicing
  - B. Discounts
- 7. Mathematics of selling
  - A. Markup
  - B. Markdown
  - C. Inventory management
- 8. Calculation of simple interest
  - A. Finding principal, rate, and time
  - B. Interest bearing and non-interest bearing notes
  - C. Simple discount notes and discounting before maturity
- 9. Taxes
  - A. Property
  - B. Income
  - C. Sales
- 10. Cost of home ownership
  - A. Types of mortgages
  - B. Calculating the monthly payment
  - C. Amortization schedule - principal and interest
- 11. (Optional) Stocks and bonds
  - A. Reading the financial section of the newspaper
  - B. Stock yield, earnings per share, price/earnings ratio, dividends
  - C. Bond yield and net asset value
- 12. (Optional) Financial reports
  - A. Income statement
  - B. Balance sheet
  - C. Vertical and horizontal analysis
  - D. Trend and ratio analysis
- 13. (Optional) Business statistics
  - A. Mean
  - B. Median
  - C. Mode

**Assignment:**

- 1. Chapter and unit tests
- 2. Complete chapter problems and exercises
- 3. Complete math related activities and projects
- 4. Approximately 30 pages of reading per week

## 5. Final Exam

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Math problems and exercises

Problem solving  
20 - 50%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Chapter and Unit Tests, Final Exam

Exams  
40 - 75%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation

Other Category  
5 - 15%

### Representative Textbooks and Materials:

Slater, Practical Business Math Procedures, 9th ed., McGraw-Hill/Irwin, 2008, or Miller, Salzman, Clenden, Business Mathematics, Addison - Wesley, 2009.