

Course Outline of Record

1. Course Code: BUMA-031
2. a. Long Course Title: Business Calculations  
 b. Short Course Title: BUS CALC
3. a. Catalog Course Description:  
 This course focuses on the math skills that business professionals need to be able to solve real-world problems. Content includes financial calculations such as business-related conversions between fractions, decimals, percentages and ratios, the impact of financial transactions on profitability, on return on investment, on accounting statements, markups, depreciation, interest, as well as decision making, budgeting, and goal setting.  
  
 b. Class Schedule Course Description:  
 This course focuses on the math skills that business professionals need to be able to solve real-world problems.  
 c. Semester Cycle (*if applicable*): N/A  
 d. Name of Approved Program(s):
  - COMPUTER INFORMATION SYSTEMS Certificate of Achievement
  - COMPUTER INFORMATION SYSTEMS AS Degree for Employment Preparation
  - ACCOUNTING Certificate of Achievement
  - GENERAL BUSINESS AA Degree for Employment Preparation
  - GOLF MANAGEMENT AA Degree for Employment Preparation
  - GOLF MANAGEMENT Certificate of Achievement
  - HUMAN RESOURCE GENERALIST Certificate of Achievement
  - RETAIL MANAGEMENT Certificate of Achievement
4. Total Units: 3.00      Total Semester Hrs: 54.00  
 Lecture Units: 3      Semester Lecture Hrs: 54.00  
 Lab Units: 0      Semester Lab Hrs: 0  
 Class Size Maximum: 40      Allow Audit: No  
 Repeatability No Repeats Allowed  
 Justification 0
5. Prerequisite or Corequisite Courses or Advisories:  
*Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm I-A)*  
N/A
6. Textbooks, Required Reading or Software: (*List in APA or MLA format.*)  
 a. Slater, J. (2017). *Practical Business Math Procedures* (12th/e). New York McGraw-Hill. ISBN: 125966533  
 College Level: Yes  
 Flesch-Kincaid reading level: 12
7. Entrance Skills: *Before entering the course students must be able:*

8. Course Content and Scope:

Lecture:

1. Whole Numbers
  1. adding, subtracting, multiplying, dividing
2. Fractions
  1. adding, subtracting, multiplying, dividing
3. Decimals
  1. adding, subtracting, multiplying, dividing
4. Simple interest
  1. ordinary interest

2. reverse operations
3. maturity value-present value
5. Simple discount
  1. discount and proceeds of interest bearing notes
  2. other discount formulas
6. Compound interest
  1. reverse operations
  2. present value
  3. daily and continuous compound mg
7. Purchase discounts and markup
  1. trade discounts
  2. cash discounts
8. markup based on cost or selling price
9. Financial statements
  1. Income statement
  2. balance sheet
10. Payroll and payroll taxes
11. Preparing and revising budgets

Lab: (if the "Lab Hours" is greater than zero this is required)

9. Course Student Learning Outcomes:

1.  
Apply mathematical functions to arrive at calculations to be used in business decisions.
2.  
Interpret how calculations are used in making business decisions.
3.  
Employ an understanding of business cycles, international trade, budgets, the nature of interest, and investments to various business situations.
4.  
Identify the interrelationships among standard financial report.
5.  
5. Understand and Interpret the meaning of financial ratios

10. Course Objectives: *Upon completion of this course, students will be able to:*

- a. Calculate trade end cash discounts;
- b. Calculate the net cost of an invoice;
- c. Calculate the monthly payment required on a loan;
- d. Calculate the average daily balance and service charge on an open-end account;
- e. Calculate components of an Income statement and balance sheet;
- f. Calculate the amount and rate of depreciation of an asset;
- g. Calculate cost and return on Investments in stocks and bonds;
- h. Calculate the unearned interest when a contract is paid off before maturity;
- i. Calculate the amount and percent of markup on merchandise;
- j. Calculate gross payroll, employer and employee taxes;
- k. Identify the impact of financial transactions on financial reports and decision making.
- l. Produce and revise budgets.

# BUMA 031-Business Calculations

11. Methods of Instruction: (*Integration: Elements should validate parallel course outline elements*)

- a. Discussion
- b. Distance Education
- c. Lecture

Other Methods:

Homework Problems In class problem solving

12. Assignments: (*List samples of specific activities/assignments students are expected to complete both in and outside of class.*)

In Class Hours: 54.00

Outside Class Hours: 108.00

a. In-class Assignments

In class problem Solving Examples:

Divide your team into two groups- one will play the part of the managers of the Electric Motor Division and the other will play the part of the managers of the Small Appliance Division in the same company. Small Appliances wants to purchase an electric motor to be used in a state-of-the-art sorbet maker which is expected to sell for \$89. It is estimated that 50,000 sorbet makers could be sold per year, each requiring one electric motor. The motors must be purchased from the in-house Electric Motor Division (they hold the patent). The variable cost of the sorbet maker (not including the motor) would be \$54. The sorbet maker project would require additional fixed costs of \$180,000 per year and additional operating assets of \$3,000,000.

Discussion questions Example:

Company A's costs are mostly variable, whereas Company B's costs are mostly fixed. When sales increase, which company will tend to realize the greatest increase in profits? Explain.

b. Out-of-class Assignments

Readings and homework as assigned.

13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*

- Written homework
- Reading reports
- Computational/problem solving evaluations
- Group activity participation/observation
- True/false/multiple choice examinations
- Mid-term and final evaluations
- Student participation/contribution
- Student preparation

14. Methods of Evaluating: Additional Assessment Information:

Written tests that assess learning of concepts 1. Typical Test problem: a. Kyle Hoyt purchased on old Mickey Mouse poster for \$700. He plans to resell it for \$1,200. What are the dollar mark-up and percent markup on cost? b. Selling price per unit is \$75. Variable expenses per unit are \$45. Fixed expenses are \$75,000 per month. The marketing manager argues that an \$8,000 increase in monthly advertising would increase monthly sales by \$15,000. Should the advertising budget be increased?

15. Need/Purpose/Rationale -- *All courses must meet one or more CCC missions.*

PO - Career and Technical Education

Fulfill the requirements for an entry- level position in their field.

Apply critical thinking skills to execute daily duties in their area of employment.

Apply critical thinking skills to research, evaluate, analyze, and synthesize information.

IO - Personal and Professional Development

Demonstrate an understanding of ethical issues to make sound judgments and decisions.

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IO - Critical Thinking and Communication

Apply principles of logic to problem solve and reason with a fair and open mind.

16. Comparable Transfer Course

| University System | Campus | Course Number | Course Title | Catalog Year |
|-------------------|--------|---------------|--------------|--------------|
|-------------------|--------|---------------|--------------|--------------|

17. Special Materials and/or Equipment Required of Students:

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18. Materials Fees:  Required Material?

| Material or Item | Cost Per Unit | Total Cost |
|------------------|---------------|------------|
|------------------|---------------|------------|

19. Provide Reasons for the Substantial Modifications or New Course:

Periodic review.

20. a. Cross-Listed Course (*Enter Course Code*): *N/A*  
b. Replacement Course (*Enter original Course Code*): *N/A*

21. Grading Method (*choose one*): Letter Grade Only

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000583280  
b. T.O.P. Code [CB03]: 50100.00 - Business and Commerce, Ge  
c. Credit Status [CB04]: D - Credit - Degree Applicable  
d. Course Transfer Status [CB05]: C = Non-Transferable  
e. Basic Skills Status [CB08]: 2N = Not basic skills course  
f. Vocational Status [CB09]: Possibly Occupational  
g. Course Classification [CB11]: Y - Credit Course  
h. Special Class Status [CB13]: N - Not Special  
i. Course CAN Code [CB14]: *N/A*  
j. Course Prior to College Level [CB21]: Y = Not Applicable  
k. Course Noncredit Category [CB22]: Y - Not Applicable  
l. Funding Agency Category [CB23]: Y = Not Applicable  
m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (*if program-applicable*): ACCOUNTING,COMPUTER INFORMATION SYSTEMS,COMPUTER INFORMATION SYSTEMS,GENERAL BUSINESS,GOLF MANAGEMENT,GOLF MANAGEMENT,HUMAN RESOURCE GENERALIST,RETAIL MANAGEMENT

*Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)*

23. Enrollment - Estimate Enrollment

First Year: 30  
Third Year: 30

24. Resources - Faculty - Discipline and Other Qualifications:

- a. Sufficient Faculty Resources: Yes  
b. If No, list number of FTE needed to offer this course: *N/A*

25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (*Explain:*)

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

## BUMA 031-Business Calculations

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

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28. Originator David George      Origination Date 03/13/17