



# ILLINOIS VALLEY COMMUNITY COLLEGE

## COURSE OUTLINE

**DIVISION: Natural Sciences and Business**

**COURSE: BUS 1230 Math for Business and Finance**

Date: Spring 2022

Credit Hours: 3

*Complete all that apply or mark "None" where appropriate:*

Prerequisite(s): None

Enrollment by assessment or other measure?  Yes  No

If yes, please describe:

Corequisite(s): None

Pre- or Corequisite(s): None

Consent of Instructor:  Yes  No

Delivery Method:  **Lecture**                      **3 Contact Hours** (1 contact = 1 credit hour)  
 **Seminar**                              **0 Contact Hours** (1 contact = 1 credit hour)  
 **Lab**    **0 Contact Hours** (2-3 contact = 1 credit hour)  
 **Clinical**                                      **0 Contact Hours** (3 contact = 1 credit hour)  
 **Online**  
 **Blended**  
 **Virtual Class Meeting (VCM)**

Offered:  **Fall**     **Spring**     **Summer**

**CATALOG DESCRIPTION and IAI NUMBER (if applicable):**

A review of the fundamental mathematical processes, fractions, and percentage. A study of discounts, commissions, depreciation, overhead, interest, bank discount, amortized mortgage loans, balance sheet ratios, statistical measures, financial statements, graphs, stocks and bonds, solving for the unknown, and time value of money.

**ACCREDITATION STATEMENTS AND COURSE NOTES:**

None

**COURSE TOPICS AND CONTENT REQUIREMENTS:**

(Not necessarily in this order.)

Solving for the Unknown

Future Value, Present Value

Ordinary Annuities and Annuity Due

PV of Annuity

Amortization Schedules

Insurance

Reconciling Bank Statement

Payroll

Business Statistics

Compound Interest

Percents

Sales, Excise and Property Taxes

Stocks, Bonds, and Mutual Funds

**INSTRUCTIONAL METHODS:**

Lecture

Discussion

Hands-On Activities

Demonstrations

Group Projects

Simulation

Case Projects: both individual and team approach.

Presentations: both student presentations and outside professionals.

PowerPoint

**EVALUATION OF STUDENT ACHIEVEMENT:**

Tests

Final Exam

Homework

Quizzes

Attendance

Participation

Simulation checks

**INSTRUCTIONAL MATERIALS:**

Textbooks

Instructor's Manual

Textbook Web Page

Listserv for Instructors

Simulation Exercises

Internet

**Resources**

Wall Street Journal

Kiplinger's Magazine  
Business Week  
Forbes  
Barron's  
Textbook Web Page  
Home Library (Magazines/Books)

## **LEARNING OUTCOMES AND GOALS:**

### **Institutional Learning Outcomes**

- 1) Communication – to communicate effectively;
- 2) Inquiry – to apply critical, logical, creative, aesthetic, or quantitative analytical reasoning to formulate a judgement or conclusion;
- 3) Social Consciousness – to understand what it means to be a socially conscious person, locally and globally;
- 4) Responsibility – to recognize how personal choices affect self and society.

### **Upon completion of the course, the student will be able to:**

1. Be able to use whole numbers to dissect and solve word problems.
  - 1.1 Read, Write, and Round whole numbers
  - 1.2 Add and subtract whole numbers
  - 1.3 Multiply and divide whole numbers
2. Be able to use Fractions.
  - 2.1 Conversion of all fractions
  - 2.2 Add and subtract fractions
  - 2.3 Multiply and divide fractions
3. Be able to use Decimals.
  - 3.1 Add, subtract, multiply, and divide decimals
  - 3.2 Convert decimals into fractions and fractions into decimals
4. Understand the Banking Process.
  - 4.1 Read and understand a bank statement
  - 4.2 Reconcile a checkbook
5. Be able to solve for the unknown in algebraic form.
  - 5.1 Solve algebraic equations
  - 5.2 Solve word problems using algebra
6. Be able to use Percents and their applications.
  - 6.1 Convert fractions and decimals to percents
  - 6.2 Solve word problems using the Portion formula
7. Be able to use Trade and Cash Discounts
  - 7.1 Be able to calculate a single and chain trade discount
  - 7.2 Be able to calculate cash discounts, credit terms, and partial payments

8. Be able to calculate Markups and Markdowns.
  - 8.1 Be able to calculate markups based on cost
  - 8.2 Be able to calculate markups based on price
  - 8.3 Be able to calculate markups using perishable items
9. Be able to calculate Payroll.
  - 9.1 The student will be able to calculate payroll deductions
10. Be able to calculate Simple Interest, Compound Interest, and Simple Discount Notes.
11. Be able to calculate Cost of Home Ownership.
  - 11.1 Create an amortization schedule
  - 11.2 Understand different types of mortgages and monthly payments
12. Be able to calculate Inventory and Overhead
  - 12.1 Be able to calculate inventory costs using FIFO, LIFO, Weighted Average, and Specific Identification
13. Be able to calculate Sales, Excise, and Property Tax.
14. Be able to calculate Insurance
  - 14.1 Calculate Life Insurance
  - 14.2 Calculate Fire Insurance
  - 14.3 Calculate Auto Insurance
15. Be able to calculate Stocks, Bonds, and Mutual Funds
  - 15.1 Know how to buy and sell stock with commission
  - 15.2 Know the difference between limit order and market order
16. Be able to calculate Business Statistics
  - 16.1 Know how to calculate and use mean, median, and mode
  - 16.2 Know how to create a frequency distributions