

Salem Community College Course Syllabus

Section I

Course Title: Business Mathematics

Course Code: BUS106

Lecture Hours: 3

Lab Hours: 0

Credits: 3

Course Description:

The Business Mathematics course is designed to provide a comprehensive introduction to the concepts and applications of mathematics to personal and commercial applications found in a typical business environment. Topics including application of: Whole Numbers, Fractions, Decimals, Banking, Discounts, Markup/Markdown, Payroll Calculation, Simple/Compound Interest and Promissory Notes.

Prerequisite:

None

Co-requisite:

None

Place in College Curriculum:

This course is required for all Business Administration majors matriculated into the AAS degree and/or Administrative Assistant certificate and can be used as a Business or Open elective.

Date of Last Revisions:

9/2011

Section II

Course Content Outline:

I. Whole Numbers: How to Dissect and Solve Word Problems

- a. Reading, Writing, and Rounding Whole Numbers
- b. Adding and Subtracting Whole Numbers
- c. Multiplying and Dividing Whole Number

II. Fractions: Types and Conversions

- a. Types of Fractions and Conversion Procedures
- b. Adding and Subtracting Fractions
- c. Multiplying and Dividing Fractions

III. Decimals: Rounding and Conversions

- a. Rounding Decimals, Fraction and Decimal Conversions
- b. Adding, Subtracting, Multiplying, and Dividing Decimals

IV. Banking: Account Reconciliation

- a. The Checking Account
- b. Bank Statement and Reconciliation Process

V. Solving Equations for the UnKnown

- a. Solving Equations for the Unknown in Business Word Problems

VI. Applications of Percent

- a. Conversions

VII. Discounts: Trade and Cash

- a. Trade Discounts
- b. Cash Discounts

VIII. Markups and Markdowns: Perishables and Breakeven Analysis

- a. Markups Based on Cost
- b. Markups Based on Selling Price
- c. Markdowns and Perishables
- d. Breakeven Analysis

IX. Payroll

- a. Calculating Various Types of Employees' Gross Pay
- b. Computing Payroll Deductions for Employees' Pay

X. Simple Interest

- a. Calculation of Simple Interest and Maturity Value
- b. U.S. Rule- Making Partial Note Payments before Due Date

XI. Promissory Notes, Simple Discount Notes, and the Discount Process

- a. Structure of Promissory Notes

- b. Discounting an Interest-Bearing Note before Maturity

XII. Compound Interest and Present Value

- a. Compound Interest (Future Value)
- b. Present Value

XIII. Annuities and Sinking Funds

- a. Annuities: Ordinary and Annuity Due
- b. Present Value of an Ordinary Annuity
- c. Sinking Funds

XIV. Installment Buying, Rule of 78, and Revolving Charge Credit Cards

- a. Cost of Installment Buying
- b. Paying Off Installment Loans before Due Date
- c. Revolving Charge Credit Cards

Section III

Course Performance Objectives #1:

The student will demonstrate how to dissect and solve word problems.

Learning Outcomes

The student will:

- Use place values to read and write numeric and verbal whole numbers.
- Round whole numbers to the indicated position.
- Use blueprint aid for dissecting and solving a word problem.
- Add and subtract whole numbers; check and estimate addition computations.
- Multiply and divide whole numbers; check and estimate multiplication computations.

Course Performance Objectives #2:

The student will demonstrate the characteristics of the banking industry.

Learning Outcomes:

The student will:

- Define and state the purpose of signature cards, checks, deposit slips, check stubs, check registers and endorsements.
- Define and state the purpose of the bank statement.
- Complete a check register and bank reconciliation.
- Explain the trends in online banking.

Course Performance Objectives #3:

The student will demonstrate knowledge of stocks, bonds and mutual funds.

Learning Outcomes:

The student will:

- Read and explain stock quotations.
- Calculate dividends of preferred and common stocks; calculate return on investment.
- Read and explain bond quotations.
- Compare bond yields to bond premiums and discounts.
- Explain the calculated net asset value and mutual fund.

Course Performance Objectives #4:

The student will demonstrate a comprehension of retail trade.

Learning Outcomes:

The student will:

- Calculate single trade discounts with formulas and complements.
- Explain the freight terms FOB shipping point and FOB destination.

- Calculate chain discounts with the net price equivalent rate and single equivalent discount rate.
- Find list price when the net price and trade discount rates are known.
- List and explain typical discount periods and credit periods that a business may offer.

Course Performance Objectives #5:

The student will demonstrate knowledge of retail pricing strategies.

Learning Outcomes:

The student will:

- Calculate dollar markup and percent markup on cost.
- Calculate selling price when you know the cost and percent markup on cost.
- Calculate cost when you know the selling price and percent markup on cost.
- Calculate dollar markup and percent markup on selling price.
- Calculate markdowns; compare markdowns.
- Calculate contribution margins and breakeven points.

Course Performance Objectives #6:

The student will demonstrate knowledge of payroll and related taxes.

Learning Outcomes:

The student will:

- Define, compare and contrast weekly, biweekly, semimonthly, and monthly pay periods.
- Calculate gross pay with overtime on the basis of time.
- Prepare and explain the parts of a payroll register.
- Explain and calculate federal and state unemployment taxes.

Course Performance Objectives #7:

The student will demonstrate how to calculate and make investments decisions.

Learning Outcomes:

The student will:

- Calculate simple interest and maturity value for months and years.
- Calculate simple interest and maturity value by (a) exact interest and (b) ordinary interest.
- Complete the proper interest credits under the U.S. Rule.
- Compare present value (PV) with compound interest (FV).
- Calculate the compound amount and interest manually and by table lookup.
Compute present value by table

Course Performance Objectives #8:

The student will demonstrate knowledge of annuities and sinking funds.

Learning Outcomes:

The student will:

- Differentiate between contingent annuities and annuities certain.
- Calculate the future value of an ordinary annuity and an annuity due manually and by table lookup.
- Calculate the present value of an ordinary annuity by table lookup and manually check the calculation.
- Calculate the payment made at the end of each period by table lookup.

Course Performance Objectives #9:

The student will demonstrate knowledge of Financial Literacy.

Learning Outcomes:

The student will:

- Demonstrate how to save and why it is such a valuable life skill.
- Demonstrate a clear understanding of the process for creating and maintaining a budget and why budgeting is important.
- Demonstrate how to use credit, debit and prepaid cards to their advantage, master the meaning of various credit card terms, and understand the factors to consider when choosing credit and debit cards.
- Demonstrate an understanding of what credit is, how personal creditworthiness is built and maintained, and how credit is protected.
- Identify and examine current spending habits
- Identify the various expenses associated with living independently
- Demonstrate the difference between a “need” and a “want”
- Create and maintain a personal budget that supports your personal financial goals
- Demonstrate an understand the relationship between a budget and savings goals

Section IV

General Education Requirements covered in BUS106:

- Competency 2 Quantitative Knowledge and Skills: Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
 - Students will translate quantifiable problems into mathematical terms and solve these problems using mathematical or statistical operations.
 - Students will construct graphs and charts, interpret them, and draw appropriate conclusions.
- Competency 4 Technological Competency: Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
 - Students will use computer systems and/or other appropriate forms of technology to present information.
 - Students will use appropriate forms of technology to identify, collect, and process information

Section V

Outcomes Assessment:

A college-wide outcomes assessment program has been put into place to enhance the quality and effectiveness of the curriculum and programs at Salem Community College. As part of this assessment program, the learning outcomes for this course will be assessed. Assessment methods may include tests, quizzes, papers, reports, projects and other instruments. Copies of all outcomes assessments are available in an electronic assessment bank maintained by the Institutional Research and Planning Office.

Section VI

Course Activities:

The course will consist of lecture, discussion, research as needed to produce written assignments, the viewing of a variety of videos, and group case evaluations.

Course Requirements and Means of Evaluation:

Please refer to the instructor's syllabus addendum (to be distributed in class) for specific information regarding the course requirements and means of evaluation.

Attendance Policy:

Regular and prompt attendance in all classes is expected of students. Students absent from class for any reason are responsible for making up any missed work. Faculty members establish an attendance policy for each course and it is the student's responsibility to honor and comply with that policy.

Academic Honesty Policy:

Students found to have committed an act of academic dishonesty may be subject to failure in the course, academic probation, and/or suspension from the college. See the Student Handbook for additional details.

ADA Statement:

If you have a 504 Accommodation Plan, please discuss it with your instructor. If you have any disability but have not documented it with the Disability Support coordinator at Salem Community college, you must do so to be eligible for accommodations. To contact the Disability Support Coordinator, call 856-351-2773, visit DON108, or email disabilitysupport@salemcc.edu to set up an appointment. To find out more information about disability support services at Salem Community College, visit www.salemcc.edu/students/student-success-programs/disability-support.

Section VII

Required Texts:

For textbook information, please see the Salem Community College Bookstore website.

Additional Costs:

None