BUSN133 - BUSINESS MATH
Course Syllabus

COURSE NUMBER:	BUSN-133-OL
COURSE TITLE:	**BUSINESS MATH**
CREDIT HOURS:	Three
INSTRUCTOR:	Mrs. Darla Thornburg
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PREREQUISITE(S):	None
REQUIRED TEXT:	Practical Business Math Procedures, Brief Edition, with Business Math Handbook, Student DVD, WSJ insert + ConnectPlus) 2011, Jeffrey Slater, McGraw-Hill 2010.

COURSE DESCRIPTION: This course is designed for all business students. The course will assist students in reaching a level of increased competence in mathematics and expanded understanding of the applications of mathematical concepts in business activities. Emphasis is placed upon learning mathematical concepts through practical application to common business problems.

EXPECTED LEARNER OUTCOMES: Upon successful completion of Business Math, the student will be able to:

1. Read, write and round whole numbers.
2. Add, subtract, multiply, and divide whole numbers.
3. Identify types of fractions and conversion procedures.
4. Add, subtract, multiply, and divide fractions.
5. Round decimals and compute decimal and fraction conversions.
6. Add, subtract, multiply, and divide decimals.
7. Examine a checking account, a bank statement and the reconciliation process.
8. Solve equations and word problems for the unknown.
9. Compute conversions.
10. Calculate percents.
11. Compute trade discounts.
12. Compute cash discounts, credit terms and partial payments.
13. Computer markup based on cost and selling price.
14. Computer markdowns and perishables.
15. Calculate various types of employees gross pay.
16. Compute payroll deductions for employee's pay and examine employer's responsibilities.
17. Calculate simple interest and maturity value.

LEARNING TASKS AND ACTIVITIES: Students are to work through chapter assignments and practice tests, complete online assignments and take online chapter exams.

ASSESSMENT OF OUTCOMES:

Evaluation:
The student's final grade will be based on the following:

Assignments	40%
Tests	60%

The grading scale for this course will be:

A	100-90
B	89-80
C	79-70
D	69-60
F	59 and Below

Academic Honesty:

Absolutely no tolerance!

Each student is expected to do his or her own work. Appropriate action will be taken on any student who is found borrowing another students work; this may include receiving a failing grade, being dropped from the class or being placed on academic probation.

Business Math Competencies

READ, WRITE AND ROUND WHOLE NUMBERS

1. Use place values to read and write numeric and verbal whole numbers.
2. Round whole numbers to the indicated position.

ADD, SUBTRACT, MULTIPLY, AND DIVIDE WHOLE NUMBERS

3. Add whole numbers; check and estimate addition computations.
4. Subtract whole numbers; check and estimate subtraction computations.
5. Multiply whole numbers; check and estimate multiplication computations.
6. Divide whole numbers; check and estimate division computations.

IDENTIFY TYPES OF FRACTIONS AND CONVERSION PROCEDURES

7. Recognize the three types of fractions.
8. Convert improper fractions to whole or mixed numbers and mixed numbers to improper fractions.
9. Convert fractions to lowest and highest terms.

ADD, SUBTRACT, MULTIPLY, AND DIVIDE FRACTIONS

10. Add like and unlike fractions.
11. Find the least common denominator by inspection and prime numbers.
12. Subtract like and unlike fractions.
13. Add and subtract mixed numbers with the same or different denominators.
14. Multiply and divide proper fractions and mixed numbers.
15. Use the cancellation method in the multiplication and division of fractions.

ROUND DECIMALS AND COMPUTE FRACTION AND DECIMAL CONVERSIONS

16. Explain the place values of whole numbers and decimals; round decimals.
17. Convert decimal fractions to decimals, proper fractions to decimals, mixed numbers to decimals, and pure and mixed decimals to decimal fractions.

ADD, SUBTRACT, MULTIPLY, AND DIVIDE DECIMALS

18. Add, subtract, multiply, and divide decimals.
19. Complete decimal applications in foreign currency.
20. Multiply and divide decimals by shortcut methods.

EXAMINE A CHECKING ACCOUNT, A BANK STATEMENT AND THE RECONCILIATION PROCESS

21. Define and state the purpose of signature cards, checks, deposit slips, check stubs, check registers and endorsements.
22. Correctly prepare deposit slips and write checks.
23. Define and state the purpose of the bank statement.
24. Complete a check register and a bank reconciliation.

SOLVE EQUATIONS AND WORD PROBLEMS FOR THE UNKNOWN

25. Explain the basic procedures used to solve equations for the unknown.
26. List the five rules and the mechanical steps used to solve for the unknown in seven situations; know how to check the answers.
27. List the steps for solving word problems.

COMPUTE CONVERSIONS

28. Convert decimals to percents (including rounding percents), percents to decimals, and fractions to percents.
29. Convert percents to fractions.

CALCULATE PERCENTS

30. List and define the key elements of the portion formula.
31. Solve for one unknown of the portion formula when the other two key elements are given.
32. Calculate the rate of percent increases and decreases.

COMPUTE TRADE DISCOUNTS

33. Calculate single trade discounts with formulas and complements.
34. Explain the freight terms FOB shipping point and FOB destination.
35. Find list price when the net price and trade discount rate are known.
36. Calculate chain discounts with the net price equivalent rate and single equivalent discount rate.

COMPUTE CASH DISCOUNTS, CREDIT TERMS, AND PARTIAL PAYMENTS

37. List and explain typical discount periods and credit periods that a business may offer.
38. Calculate outstanding balance for partial payments.

COMPUTE MARKUP BASED ON COST AND SELLING PRICE

39. Calculate dollar markup and percent markup on cost.
40. Calculate selling price when you know the cost and percent markup on cost.
41. Calculate cost when dollar markup and percent markup on cost are known.
42. Calculate cost when you know the selling price and percent markup on cost.
43. Calculate dollar markup and percent markup on selling price.
44. Calculate selling price when dollar markup and percent markup on selling price are known.
45. Calculate selling price when cost and percent markup on selling price are known.

46. Calculate cost when selling price and percent markup on selling price are known.
47. Convert from percent markup on cost to percent markup on selling price and vice versa.

COMPUTE MARKDOWNS AND PERISHABLES

48. Calculate markdowns; compare markdowns and markups.
49. Price perishable items to cover spoilage loss.
50. Calculate contribution margin.
51. Calculate breakeven point.

CALCULATE VARIOUS TYPES OF EMPLOYEES GROSS PAY

52. Define, compare, and contrast weekly, biweekly, semimonthly, and monthly pay periods.
53. Calculate gross pay with overtime on the basis of time.
54. Calculate gross pay for piecework, differential pay schedule, straight commission with draw, variable commission scale, and salary plus commission.

COMPUTE PAYROLL DEDUCTIONS FOR EMPLOYEES PAY; EMPLOYERS RESPONSIBILITIES

55. Prepare and explain the parts of a payroll register.
56. Explain and calculate federal and state unemployment taxes.

CALCULATE OF SIMPLE INTEREST AND MATURITY VALUE

57. Calculate simple interest and maturity value for months and years.
58. Calculate simple interest and maturity value by (a) exact interest and (b) ordinary interest.
59. Using the interest formula, calculate the unknown when the other two (principal, rate, or time) are given.