Tompkins Cortland Community College
Course Syllabus
BUAD 104 – Business Math – (3) Credits

McGraw Central High School - Math & Financial Applications

Business Education Department: Mrs. Pam Coombs
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Room 31, Office Hours: 8:10 – 9:00 a.m.

Student Audience: High School Juniors and Seniors

Duration: Full Year with Spring Registration

Credit: College Credit: (3 credits)
       High School: 1 Unit Business OR 1 Unit of Math

Course Description: Math & Financial Applications is a 1-unit specialized interdisciplinary business course related to the mathematics learning standards.   This course is designed to prepare students for both college level business programs and to understand the complex financial world they will encounter during their lives. As outlined in Commissioner's regulations 100.5(a)(7)(iv), for students who have successfully passed the required Math A Regents examination and upon local educational agency approval, a specialized course may be used to fulfill one of the three units of mathematics required for the Regents diploma.

Prerequisite: Eleventh grade status and successful completion of Math A, and English 9.

Required Text:
- Text/Workbook: Practical Business Math Procedures, 9th Edition, McGraw-Hill, 2009.
- 2" – 3" Ring Binder, Hand Held Calculator, Pencil, and Pen (blue or black)

COURSE OUTLINE: Topics & Essential Questions

I.   **Gross Income – What does your pay stub really mean?**
II.   **Net Income – How would your community be affected if there were no state income tax?**
III.   **Recordkeeping – Why is it important to keep track of your expenses?**
IV.   **Checking Accounts – You work, spend, and play each week – What is the impact on your checking account?**
V.   **Savings Accounts – What is compounding interest and how do I calculate it?**
VI.   **Cash Purchases – Are you getting the most for your dollar?**
VII.   **Charge Accounts and Credit Cards –** If you have a $1,000 balance on a credit card with a 15% interest rate, and you only pay the minimum amount of $25 each month, how long will it take to pay off the debt in full? How much interest will you have paid? Can you really afford it?
VIII.   **Loans -** How would you calculate the maturity value and simple interest rate on an installment loan?

IX. **Vehicle Transportation -** What can you do to prepare for a vehicle purchase?

X. **Housing Costs -** Buying a home can be a sound investment that makes financial sense. Why is this true? When is it not?

XI. **Insurance -** When will you ever use health insurance?

XII. **Investments -** What kinds of investments are right for you?

XIII. **Personnel -** What is the process for selecting a new employee?

XIV. **Production -** What part does manufacturing play in our everyday lives?

XV. **Purchasing -** How do market conditions and trends affect business?

XVI. **Sales -** How do you determine a set sales price? What factors affect price?

XVII. **Marketing -** How would society be different if marketing didn't exist?

XVIII. **Warehousing and Distributing -** How has warehousing and distributing changed in the last 25 years?

XIX. **Services -** How should you budget for office space, maintenance costs, and costs of utilities to maintain your business?

XX. **Accounting -** What is the role of accounting in any business?

XXI. **Accounting Records -** What accounting records are necessary for every business?

XXII. **Financial Management -** How do we interpret and make decisions based on the accounting records?

XXIII. **Corporate Planning -** How does corporate planning affect short-and long-term planning? What are the economic considerations?

XXIV. **InVEST – Insurance Industry Curriculum – All Year with speakers and presenters from area businesses.**

Specific Objectives:
1. Apply Math A functions, problems, and theories to business problems.
2. Read and analyze business problems
3. Compute and evaluate real life business math problems
4. Utilize a calculator
5. Create a bank reconciliation
6. Compute simple interest using exact or ordinary dating
7. Compute compound interest
8. Comparison shop
9. Compute finance and interest rate charges for a loan
10. Analyze unit pricing
11. Compute single payment loans
12. Compare and contrast mortgage types
13. Compare and contrast insurance premiums
14. Compute stock purchases, stock sales, dividends, and investment profits/losses
15. Prepare a budget
16. Compute a trade discount, chain discount, using complement methods, and various dating
17. Compute mark-up based on percent of cost and selling price, and compute the value of ending inventory
18. Prepare a balance sheet and income statement
19. Compute depreciation using straight line, sum-of-the-years digits, declining balance and MACRS

Requirements for Satisfactory Completion of Course:
        <u>Minimum Criteria</u>: Individual Chapter Examinations
        Homework Assignments, Quizzes, Exercises, and Problems
        Students must maintain a minimum academic average of 70% and a minimum
        attendance average of 90% in order to remain in the course. Failure to meet
        minimum requirements will result in a reevaluation of status in the course.

Methods For Evaluating Student Performance:
        Formal written examinations and written homework assignments
        <u>Marking Period</u>

Grading Procedures	Tests	60%
	Homework/Quizzes	30%
	Participation	10%

Final Grade	First Semester	45%
	Second Semester	45%
	Final Exam (Comprehensive)	10%

Students will have the opportunity to receive high school as well as college credit for the course.