

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

BCIS 46 - Electronic Calculator (Ten-Key)

2 Unit(s)

Prerequisite(s): NONE

Recommended Prep: Reading Level IV; English Level III; Math Level II

Transfer Status: CSU

34 hours Lecture

17 hours Lab

In this course, students use the features of an electronic calculator to solve business math problems including retail calculations, payroll, and installment buying. Students will develop Ten-Key speed and accuracy using the touch method.

II. OBJECTIVES

Upon successful completion of this course, the student will be able to:

- A. Demonstrate entering mathematical data with accuracy and speed using the touch method on an electronic business calculator.
- B. Accurately round numbers and estimate answers for multiplication and division problems without using a business calculator.
- C. Solve basic business mathematical problems that include whole numbers, fractions, decimals, and percents.
- D. Compute gross pay, net pay, and taxes and complete payroll registers.
- E. Calculate discounts, series discounts, markups, markdowns, and complete invoices.
- F. Calculate interest and installment payments.

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

Lecture

<u>Topics</u>	<u>Hours</u>
1. Ten-Key Touch Method	7.00
2. Multiplication/Division	6.00
3. Percents/Discounts	8.00
4. Retail Calculations/Payroll	7.00
5. Interest/Installment Buying	6.00
Total Hours	34.00

Lab

<u>Topics</u>	<u>Hours</u>
1. Ten-Key Touch Method	3.00
2. Multiplication/Division	4.00
3. Percents/Discounts	4.00
4. Retail Calculations/Payroll	3.00
5. Interest/Installment Buying	3.00
Total Hours	17.00

IV. METHODS OF INSTRUCTION

- A. Lecture
- B. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- C. Demonstrations
- D. Practical Applications

V. METHODS OF EVALUATION

- A. Lab Projects
- B. Homework/Quizzes/Exams
- C. Ten-Key Timings

VI. EXAMPLES OF ASSIGNMENTS

A. Reading Assignments

1. Read the section in the textbook on completing and verifying inventory cards. In a Word document in one to two paragraphs, explain what positive balance means in a problem that includes both plus and minus amounts and then make up a problem that has a negative balance. Please submit to the instructor at the beginning of the next class session for review.
2. Read the lesson in the textbook on crossfooting; and in a Word document in one to two paragraphs, define crossfooting and explain why it is important to use crossfooting to check your answers. Please submit to instructor at the beginning of the next class session for review.

B. Writing Assignments

1. In a Word document in 1-2 paragraphs, respond to the following: 1) What is a factor? 2) Why it is important to estimate your answers? and 3) What is a floating decimal on an electronic calculator? Please submit to the instructor at the beginning of the next class session for review.
2. Write 1-2 paragraphs in a Word document that explains both the shortcut method for changing a decimal to a percent, and a short cut method for changing a percent to a decimal. Submit to the instructor at the beginning of the next class session for review.

C. Out-of-Class Assignments

1. On an electronic calculator, set the Decimal Point Selector at two, the Round switch in the five/four position, and the Constant Operation mode to "on." In the lesson on constant multiplication and division, use the calculator to solve problems 1-64. Run a tape for each problem. On the tape, write your name, the date, and the lesson number at the top and number each problem and circle the answer. Transfer answers to the provided answer tab. Staple the answer tab and tape together, and submit to the instructor at beginning of the next class session for review.
2. Using an electronic calculator, solve problems 1-50 in the lesson on multiplying three factors or more. Determine the setting of the Decimal Point Selector by the method covered in the lesson and class. Run a tape for each problem. On the tape, write your name, the date, and the lesson number at the top and number each problem and circle the answer. Transfer answers to the provided answer tab. Staple the answer tab and tape together, and submit to the instructor at beginning of the next class session for review.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

- A. Polinsky, Mildred. Solving Business Problems Using a Calculator. 6th Edition. Glencoe, 2003.
- B. Salzman, S., Miller, C. D., & Clendenen, G. Mathematics for Business. 9th Edition. Pearson, 2011.

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