

Course Information

Course Prefix/Number	BUS 145
Course Title	Calculator Applications
Lecture Hours/Week	3.0
Lab Hours/Week:	0.0
Credit Hours/Semester:	3.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

Course Description: This course is a study of the use of various types of electronic calculators and functions to help solve simple and complex business problems.

Course Competencies: Upon successful completion of this course, the student should be competent to perform the following tasks.

Module 1 – Introduction to Numbers and Calculators and Fundamental Operations

- Write numbers or amounts in word form
- Approximate and round numbers
- Identify the differences in calculators
- Discuss the electronic calculator key functions
- Perform operations involving basic functions of addition, subtraction, multiplication, and division on the desktop calculator using the touch system

Module 2 – Percentages

- Convert decimals to percentages and fractions
- Convert common fractions to percentages
- Calculate percentage, base, and rate
- Calculate percentage of increase/decrease
- Distinguish between increase and decrease problems
- Find the percentage distribution

Module 3 – Mathematics of Buying

- Perform operations necessary to complete the purchase requisition, the purchase order, and the purchase invoice
- Calculate merchandising discounts and sales tax
- Calculate the sales price
- Calculate the markups and markdowns

Module 4 – Payroll

- Calculate straight time, overtime, and double time
- Calculate gross earnings based on salaried, hourly, piecework, or commission

- Calculate payroll deductions of Social Security tax, Medicare tax, and federal income tax
- Compute net pay and complete the earnings' record and payroll register.

Module 5 – Taxes and Insurance

- Calculate the property tax and the property tax rate
- Calculate the state and federal unemployment taxes
- Calculate the federal income tax due for a single adult and a married couple
- Determine insurance premiums

Module 6 – Financial Statements and Accounting Practices

- Complete a simple income statement for a merchandising firm and a service firm
- Complete a vertical analysis of an income statement
- Complete a balance sheet
- Complete a vertical and horizontal analysis of a balance sheet
- Calculate depreciation using the straight-line method, the declining-balance method, the sum-of-the-years digits method, and the ACRS method
- Calculate overhead by square footage and total sales
- Distribute overhead by assigned percentages

Module 7 – Interest, Credit, and Consumer Loans

- Calculate simple and compound interest
- Calculate principal, rate or time when interest is known.
- Calculate finance charges on charge accounts and determine balances.

Minimum Standards and Performance Objectives

Using the workbook/textbook along with the desktop calculator and interaction with instructor as needed, the student will complete all textbook assignments (chapter illustrations, practice problems, assignments, and review quizzes). The student will demonstrate mastery of modules through completion of each module assessment. For a student who does not take a module assessment, the cumulative final may replace one missed module assessment. The student's final score is the average of the seven module assessment scores. A student with an overall average score of 60% or better will receive credit for the course.

The traditional student will take all module assessments in the classroom on designated test dates. The on-line student will take all module assessments in the Assessment Center. Module assessments should be taken in sequence following the testing dates on the course calendar. **The first module assessment must be taken no later than the date indicated on the course calendar.** Any student who has not completed the first module assessment by the date indicated on the course calendar is subject to withdrawal due to lack of participation (attendance). A student should have completed at least four module assessments by midterm. Any student who has completed less than three module assessments by midterm is subject to withdrawal due to lack of participation/attendance. **All work must be completed in one semester.**

COURSE REQUIREMENTS

Attendance

The traditional student is expected to follow the York Technical College Attendance policy allowing a maximum of 20% absences during the semester.

Other Requirements

Each student is responsible for reading and studying assigned chapters, completing all assignments, developing proficiency on the electronic calculator using the touch system, and taking all assessments no later than the last scheduled date. All work must be completed within the semester. Any student who must withdraw from the course must notify the instructor. Withdrawal by mid-term is with a "W."

Academic Integrity

The student is bound by the policies stated in the York Technical College Catalog and Handbook. Any student violating these policies will be subject to academic discipline.

Equipment

Although the student may use any desktop, ten-key electronic calculator model he/she prefers, one of the Mercury Model 2000 Professional Series is recommended. The electronic calculator selected should have a decimal set function that allows for setting from 0 through 4 and F (floating). The electronic calculator selected should have display and memory functions.

The on-line student should have access to the Internet. Computers with Internet access are available in A208.

EVALUATION STRATEGIES AND GRADING

Grades will be based on the average of the seven module assessments.

The following scale will be the standard:

Score:	Grade:
90-100	A
80-89	B
70-79	C
60-69	D
<60	F

Module Assessments

Module 1 Assessment(s)	14%
Module 2 Assessment(s)	14%
Module 3 Assessment(s)	14%
Module 4 Assessment(s)	14%
Module 5 Assessment(s)	14%
Module 6 Assessment(s)	14%
Module 7 Assessment(s)	16%

ENTRY LEVEL SKILLS

In order to be successful in BUS 145, the student must possess basic math skills such as performing addition, subtraction, multiplication, and division of whole numbers, decimals, and fractions with the paper and pencil method. In addition, he/she should be able to solve simple equations. The on-line student should have some computer knowledge and keyboarding skills.

PREREQUISITES

None

CO-REQUISITES

None