COURSE IDENTIFICATION

Course Code/Number: OTEC 123
Course Title: Office Machines

Division:  ☒ Applied Science (AS)  □ Liberal Arts (LA)  □ Workforce Development (WD)
□ Health Care (HC)  □ Lifetime Learning (LL)  □ Nursing  □ Developmental

Credit Hour(s):  Two (2)
Effective Date:  Fall 2013
Assessment Goal Per Outcome:  70%

COURSE DESCRIPTION

This course emphasizes the development of competent skill in solving business problems with the use of desktop electronic calculators. It is a course designed to study the technological advances, practices, and procedures of the modern electronic office. Also, the course will give students hands-on experience at entering numeric data by use of desktop calculators and the computer numeric keypad.

MINIMUM REQUIREMENTS/PREREQUISITES AND/OR COREQUISITES

None

TEXTS

The official list of textbooks and materials for this course is found on Inside NC.

http://www.neosho.edu/ProspectiveStudents/Registration/CourseSyllabi.aspx

GENERAL EDUCATION OUTCOMES

1. Practice Responsible Citizenship through:
   • identifying rights and responsibilities of citizenship,
• identifying how human values and perceptions affect and are affected by social diversity,
• identifying and interpreting artistic expression.

2. Live a healthy lifestyle (physical, intellectual, social) through:
• listing factors associated with a healthy lifestyle and lifetime fitness,
• identifying the importance of lifetime learning,
• demonstrating self-discipline, respect for others, and the ability to work collaboratively as a team.

3. Communicate effectively through:
• developing effective written communication skills,
• developing effective oral communication and listening skills.

4. Think analytically through:
• utilizing quantitative information in problem solving,
• utilizing the principles of systematic inquiry,
• utilizing various information resources including technology for research and data collection.

COURSE OUTCOMES/COMPETENCIES (as Required)

At the end of this course, the student should be able to:

1. Develop competence using the ten-key touch method techniques.
   a. Enter the digits 4, 5, 6 (home row) by the touch method.
   b. Solve addition problems.
   c. Enter digits 1, 2, 3, 7, 8, 9, 0 and 00 using the touch method.
   d. Solve subtraction problems by the touch method.
   e. Use the Non-Add Key to print problem numbers on the tape.
   f. Use the Decimal Point Key and Subtotal Key by touch.
   g. Use the Add Mode and Decimal Alignment features.
   h. Solve multiplication problems using the touch method.
   i. Use the Constant Key to solve multiplication problems.
   j. Solve division problems using the touch method.
   k. Use the Constant Key to solve division problems.
   l. Solve chain division problems.
   m. Use the memory register in solving business problems.
   n. Use the Grand Total Key in addition problems.

2. Solve common business and personal math problems using a calculator.
   a. Convert fractions and percents to decimals.
   b. Calculate a percent of increase or decrease.
   c. Calculate markup as a percent of selling price.
   d. Use multiple operations to solve business problems.
   e. Use multifactor and negative multiplication to solve business problems.
   f. Process bank deposit slips.
   g. Solve interest and trade discount problems.
   h. Solve cash and chain discount problems.
   i. Demonstrate an understanding of the relationship of metric measurements to one another.
   j. Convert from U.S. equivalents to metric measurements.
k. Perform calculations necessary for figuring income and income taxes.
l. Perform calculations necessary for figuring other types of income and taxes.
m. Perform calculations involving borrowing and saving money.
o. Perform calculations involving personal budgeting and finance.
p. Calculate profit or loss on the sale of stock.
q. Calculate casualty losses.
r. Perform calculations involving school-related mathematical problems.

MINIMUM COURSE CONTENT

1. Introductions, Syllabus Review, Pre-Test
2. Addition; Touch Method: 4, 5, 6 keys
3. Addition; Touch Method: 1, 2, 3, 7, 8, 9, 0 keys - Numeric Drill 1
4. Subtraction, Review, Analyzing Progress and Setting goals
5. Non-Add Key; Decimal Point Key, Add Mode; Decimals; Subtotal
6. Multiplication
7. Division
8. Memory; Grand Total Key
9. Review; Analyzing Progress – Test 1
10. Decimals; Fractions; Percents
11. Multiple Operations; Multifactor and Negative Multiplication
12. Production Drill 2: Bank Deposit Slips
13. Review, Interest and Trade Discounts
14. Cash and Chain Discounts
15. Metrics and International Trade
16. Production Drill: Bank Deposit Slips Test
17. Test 2
18. Wage Earnings, Income Taxes, Other Income and Taxes
19. Money Management
20. Bank Statement Reconciliation, Review
21. Expenditures and Budgets
22. Stock Transactions
23. Casualty Insurance, School Related Mathematical Problems
24. Review: Test 3

STUDENT REQUIREMENTS AND METHOD OF EVALUATION

INSTRUCTIONAL METHODS

Group instruction is recommended when a particular objective can be accomplished best in this manner. Examples of group instruction would include: orientation to course; review of decimals and percentages; demonstration of special keys; position at machine; and special situations that may best be discussed as a group. Much of the instruction in office machines is accomplished on an individualized basis. Students progress from one job to another at their own rate; the instructor is available to help each student adapt
to the calculator and problems that may occur. Three major exams will be given and points will be given for each job completed.

**GRADING SCALE**

Suggested Scale for Grading:  A = 93%  B = 88%  C = 83%

**ASSESSMENT OF STUDENT GAIN**

Pre-assessment ideally begins during the advisement and enrollment process prior to the beginning of the course where the advisor and student determine through the interview process the level of placement for the student. During the period of the first two weeks of a normal semester, each student will be observed and/or interviewed and initial papers produced will be examined to determine needed competency development throughout the course. Post-assessment to determine gain in competency will be measured at the end of each unit of study.

**Attendance Policy**

1. NCCC values interactive learning which promotes student engagement in the learning process. To be actively engaged, the student must be present in the learning environment.

2. Unless students are participating in a school activity or are excused by the instructor, they are expected to attend class. If a student’s absences exceed one-eighth of the total course duration, (which equates to one hundred (100) minutes per credit hour in a face-to-face class) the instructor has the right, but is not required, to withdraw a student from the course. Once the student has been dropped for excessive absences, the registrar’s office will send a letter to the student, stating that he or she has been dropped. A student may petition the chief academic officer for reinstatement by submitting a letter stating valid reasons for the absences within one week of the registrar’s notification. If the student is reinstated into the class, the instructor and the registrar will be notified. Please refer to the Student Handbook/Academic Policies for more information.

3. Absences that occur due to students participating in official college activities are excused except in those cases where outside bodies, such as the State Board of Nursing, have requirements for minimum class minutes for each student. Students who are excused will be given reasonable opportunity to make up any missed work or receive substitute assignments from the instructor and should not be penalized for the absence. Proper procedure should be followed in notifying faculty in advance of the student’s planned participation in the event. Ultimately it is the student’s responsibility to notify the instructor in advance of the planned absence.

**ACADEMIC INTEGRITY**

NCCC expects every student to demonstrate ethical behavior with regard to academic pursuits. Academic integrity in coursework is a specific requirement. Definitions, examples, and possible consequences for
violations of Academic Integrity, as well as the appeals process, can be found in the College Catalog, Student Handbook, and/or Code of Student Conduct and Discipline.

**ELECTRONIC DEVICE POLICY**

Student cell phones and other personal electronic devices not being used for class activities must not be accessed during class times unless the instructor chooses to waive this policy.

**NOTE:**
Information and statements in this document are subject to change at the discretion of NCCC. Students will be notified of changes and where to find the most current approved documents.

**NON-DISCRIMINATION POLICY**

The following link provides information related to the non-discrimination policy of NCCC, including persons with disabilities. Students are urged to review this policy.

[http://www.neosho.edu/Departments/NonDiscrimination.aspx](http://www.neosho.edu/Departments/NonDiscrimination.aspx)

**COURSE NOTES**

**VOCATIONAL/CAREER COURSE DOCUMENTATION**

This course is one course from the approved program in Vocational Business/Office Education. It is taken by those who wish to further develop business skills and by those who seek positions in the administrative office field.

**ADVISORY COUNCIL INVOLVEMENT**

The Business/Office Education program maintains a Board of Reference for this vocational component. The coordinator communicates with the Board on a regular basis concerning issues or problems that occur and meets with the group one or two times each year.