

COURSE INFORMATION

COURSE PREFIX/NO: CPT 101
COURSE TITLE: Introduction to Computers
LEC HRS/WEEK: 3.0
LAB HRS/WEEK: 0.0
CREDIT HRS/SEMESTER: 3.0

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

COURSE DESCRIPTION

This course covers basic computer history, theory and applications, including word processing, spreadsheets, databases, and the operating system.

COURSE COMPETENCIES

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

Module 1: Basic Information Systems Theory

1. Identify:
 - major components of a computer system and their functions.
 - general characteristics of the major classifications of computers.
 - general characteristics of secondary storage and their functions.
 - major components of system software and their functions.
 - major types of applications software.
 - areas where the computer is a useful tool.
2. Correctly use basic information system and computer terminology.
3. Define data communications and telecommunications and identify their effects on today's society.

Module 2: Brief Introduction to Microcomputer Software

1. Demonstrate a working knowledge of and be able to utilize a(n):
 - operating system
 - word processing software package
 - spreadsheet software package
 - database software package

MINIMUM STANDARDS: PERFORMANCE-BASED COMPETENCIES

1. The student will demonstrate:
 - a. Understanding of basic terminology by defining terms such as: I/O, mainframe computer, hardware, minicomputer, software, microcomputer, bit, byte, supercomputer, etc.
 - b. Knowledge of computer architecture by:
 - Naming the main parts of a computer system
 - Describing how data are stored in a computer
 - Defining the functions of an operating system
 - Describing the function of the CPU
 - Describing the function and use of registers
 - Stating the difference between ROM and RAM
 - c. Knowledge of computer hardware through identification of specific pieces of equipment and their function such as: magnetic disks, floppy diskettes, disk drives, CD-ROM drives, magnetic tapes, tape drives, types of printers, types of terminals, ZIP/JAZ drives
 - d. Understanding of basic telecommunications terminology such as: analog, digital, modem, channels, satellite/telephone communications, fiber optics
 - e. Understanding of information system terminology.
 - f. Knowledge of the traditional computer center through the definition of such terms as: work station, systems analyst, computer programmer, computer operator, network manager, database administrator
 - g. Understanding of different levels of programming languages and how they are used: machine language, assembly language, high-level languages, artificial intelligence/expert systems
2. Student will demonstrate:
 - a. A working knowledge of a microcomputer operating system by demonstrating an understanding of: drive specification, default directory, subdirectory or folders and other common tasks using a graphical user interface.
 - b. Ability to correctly identify common computer terminology, i.e., bit, byte, PCI, ISA, queue, SVGA, etc.
 - c. Use of the operating system through lab exercises.

3. Student will demonstrate:

- a. An understanding of how word processing software operates.
- b. Ability to identify applications that would be well suited to a word processing system.
- c. Using a word processing package, the student will perform the following tasks through the creation of several documents given in lab assignments:
 - Retrieve and save files
 - Format text within a document
 - Edit text within a document
 - Print a document
 - Use the Help facility

Criteria: Student will accurately complete the competencies via a lab assignment using word processing software.

4. Student will demonstrate:

- a. An understanding of the function of electronic spreadsheet software.
- b. An ability to identify applications that would be well suited to an electronic spreadsheet system.
- c. Using an electronic spreadsheet package, the student will perform the following tasks through the creation of several spreadsheets in lab assignments:
 - Enter alphanumeric and numeric data
 - Enter formulas and functions
 - Use the menus
 - Retrieve and save worksheet files
 - Print a worksheet
 - Format a spreadsheet
 - Edit a spreadsheet

Criteria: Student will accurately complete the competencies via a lab assignment using spreadsheet software.

5. Student will demonstrate:

- a. Create a searchable database.
- b. Ability to identify applications that would be well suited to a database system.
- c. Identify the field to be used as a key and the importance.

- d. Using a database package, the student will perform the following tasks through the creation of several databases in lab assignments:
- Open an existing database
 - Create a new database
 - Create a table with appropriate fields
 - Edit records in a database
 - Enter new records into a database
 - Sort a database
 - Query a database
 - Retrieve and save database files
 - Format a database

Criteria: Student will accurately complete the competencies via a lab assignment using database software.

COURSE REQUIREMENTS

All students are responsible for attaining competencies through completion of the following course requirements:

- attending class
- reading assigned material
- completing assigned exercises
- completing assigned lab assignments
- completing all tests

ATTENDANCE POLICY

The attendance policy as stated in the York Technical College Handbook will be enforced. Attendance is required on test days. Make-up theory tests will not be given. Instead, students may take the optional final exam to replace their lowest test score.

ACADEMIC INTEGRITY

The policies stated in the York Technical College Handbook will be enforced. Any student violating the policy will be subject to academic discipline. Anyone caught cheating will automatically get a 0 grade for the assignment.

EVALUATION STRATEGIES/GRADING PROCEDURE

A minimum of six tests and five labs will be given covering the above competencies. These tests and the lab work determine the final semester grade. Tests will count 60% of the grade and labs 40%.

GRADING SCALE

A = 90 - 100

B = 80 - 89
C = 70 - 79
D = 60 - 69
F = Below 60

ENTRY-LEVEL SKILLS

No computer skills are assumed. The student must be able to read and comprehend assigned material.

PREREQUISITES

ENG 100 and RDG 100 with minimum grades of C or equivalent test scores

CO-REQUISITES

None

METHOD OF INSTRUCTION

The instructor will discuss the principles introduced in each chapter and demonstrate the methods described there. The student will reinforce this lecture material by reading the textbook as assigned. During this course the student will be given opportunities to practice on a microcomputer the skills being learned by doing lab assignments. These lab assignments will be vital in learning to use sample software packages, and the student should expect to spend time outside the class period as well as time given during class to complete this work. The student will have an opportunity to review solutions in class. Should a student need additional assistance, a tutor will be available as will instructors during their posted office hours.

STUDENT ID CARD OR LAB PASS

Check the lab doors for available hours. A student ID card or a lab pass is required.