

COURSE INFORMATION

COURSE PREFIX/NO: CPT 114
COURSE TITLE: Computers and Programming
LECTURE HRS/WK: 3.0
LAB HRS/WK: 0.0
CREDIT HRS/SEMESTER: 3.0

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

Course Description

This course introduces computer concepts and programming. Topics include basic concepts of computer architecture, files, memory, and input/output devices. Programming is done in a modern high-level language.

Course Competencies

Upon successful completion of this course, the student should be competent in performing the following tasks:

Module 1 – Basic Concepts & Terminology

1. Explain, identify, and demonstrate knowledge of basic computer concepts.
2. Use acronyms and terms related to computers accurately – RAM, ROM, CPU, machine cycle, input devices, output devices, etc.
3. Differentiate between various types of computers.
4. Differentiate between various types of software.

Module 2 – Introduction to Operating Systems

1. Demonstrate a working knowledge of command line interface utilities and tools in operating systems and graphical user interface operating system commands.
 - a. Create, remove, rename, and navigate directories.
 - b. Copy, move, rename, delete, and sort files.
 - c. Recognize file types, sizes, associations, etc.

Module 3 – Programming

1. Apply programming logic by creating hierarchy charts, programming flowcharts and pseudocode for computer programming problems.
2. Create, code, test, and modify C++ programs.

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 assigned programs
- Completing all tests

Attendance Policy

The attendance policy as stated in the York Technical College Handbook will be enforced. Makeup tests will not be given for theory tests. If a student must miss a theory test, he/she will get a zero for that test. However, students have the option of taking the comprehensive final. The student's grade on the comprehensive final will replace his/her lowest theory test grade. It is the student's responsibility to schedule a time for a make-up hands-on test with his/her instructor.

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.

Evaluation Strategies & Grading Procedure

A minimum of four theory tests, two hands-on tests and two programs will be given covering the above competencies. These tests, hands-on tests, and programs determine the final semester grade. The student must achieve an average grade of 70% or better and must accurately complete all lab work. If the student does not meet these criteria, she/he must repeat CPT 114 until the requirements are satisfied.

Module 1 Assessment		Module Grade	Course Grade
Theory Tests - minimum of two	100	100%	
Module Grade		100%	33.3%
Module 2 Assessment			
Hands-on Tests - minimum of two	100	100%	
Module Grade		100%	33.3%
Module 3 Assessment			
Theory Test - minimum of one	100	20%	
Computer Programs - minimum of two	100	80%	
Module Grade		100%	33.4%
Final Grade			100.0%

Grading Scale

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = Below 60

Note: Students in a CPT degree or certificate must achieve a grade of "C" or better for the course to count in their program.

Entry-Level Skills

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

Prerequisites

ENG 100, RDG 100, and MAT 150 with minimum grades of "C" or equivalents

Co-Requisites

NA

Method of Instruction

The instructor will discuss the principles introduced in each chapter and demonstrate the methods described. The student will reinforce this lecture material by reading the textbook and completing the exercises, activities, and programs assigned. Students must complete all assignments. Students should expect to spend time outside the class period to complete their assignments. Instructors are available during their posted office hours. Should a student need additional assistance, a tutor may be available.

Disabilities Statement: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Offices (SR) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.