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

[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.
  - d. Explain networking and Internet concepts
  - e. LANS and WANS
  - f. Internet technology and security
2. Review computer history, careers, and ethics
3. Discuss the basic concept of systems analysis and design

#### **Module 3 – Programming**

1. Apply programming logic by creating pseudo code for computer programming problems.
2. Create, code, test, and modify C++ programs. (The programming language maybe changed by the instructor.)

### **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.

**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 computer the skills being learned by doing lab assignments. These lab assignments will be vital in learning the core concepts, and the student should expect to spend time outside the class period as well as time given during class to complete this

**EVALUATION STRATEGIES & GRADING PROCEDURE**

A minimum of five 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.

**GRADING SCALE**

<b>Module 1</b>	Theory Tests - minimum of two		33.0%
<b>Module 2</b>	Theory Tests - minimum of two, <b>75%</b>	Hands on Test – minimum of one, <b>25%</b>	33.0%
<b>Module 3</b>	Theory Test - minimum of one, <b>20%</b>	Computer Programs - minimum of two, <b>80%</b>	33.4%

**LETTER GRADES**

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

**ENTRY-LEVEL SKILLS**

The student must have basic keyboarding ability. The student must be able to read and comprehend the assigned material.

**PREREQUISITES**

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

**CO-REQUISITES**

None required

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