

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** ITN 107

**Credits:** 3

**Course Title:** Personal Computer Hardware and Troubleshooting

**Course Description:** Includes specially designed instruction to give the student a basic knowledge of hardware and software configurations. Includes the installation of various peripheral devices as well as basic system hardware components. Lecture 3 hours per week.

**General Course Purpose:** This course introduces PC hardware including desktops, laptops, and mobile devices.

**Course Prerequisites and Co-requisites:**

None

**Student Learning Outcomes:**

Upon completing the course, the student will be able to

- a. Identify and differentiate between computer hardware components including motherboards, expansion cards, storage devices, processors, and power supplies;
- b. Explain and identify the purpose of common computer connection interfaces and cables;
- c. Evaluate and select appropriate components for custom configuration of a computer system to meet customer specifications or needs;
- d. Compare and contrast networking devices, their functions and features;
- e. Install and configure laptop hardware and components;
- f. Choose, install, and configure printers; and
- g. Given a scenario, troubleshoot, identify, and remedy common problems related to motherboards, RAM, CPUs, hard drives, RAID arrays, video devices, and power supplies with appropriate tools.

**Major Topics to Be Included:**

- a. Personal Computer, laptop, and mobile device hardware components and peripherals including:
  1. Power supplies
  2. Motherboards
  3. Processors
  4. Memory
  5. Hard drives
  6. Multimedia devices
- b. Networking devices including cabling, routers, switches
- c. Printers

**Date Created/Updated (Month, Day, and Year):** December 2, 2019