

**NorthWest Arkansas Community College  
Business and Computer Information Course Outline**

***NTWK 2053 MICROCOMPUTER HARDWARE SUPPORT (F)***

***Catalog Description***

This course is designed to provide the skills of basic system management for a networked microcomputer system. The students will gain hands-on computer experience providing routine maintenance, installing disk drives, connecting peripheral interface card and other expansion cards.

***Prerequisites***

NTWK 2013 Networking and Information Systems

***Credit Hours: 3***

***Target Audience***

The target audience includes but is not necessarily limited to the following:

- Students pursuing a career in Networking or other computer related field.
- Students who wish to enhance their understanding of PC hardware.
- Community members or networking professionals who wish to expand their understanding of computer hardware.

***General Course Objectives***

- To offer curriculum and instructional methods that support student learning.
- To develop in each learner the skills and attitudes necessary for the attainment of academic and career goals.
- To develop in each learner the enjoyment of learning and the lifelong pursuit of knowledge.

***Core Course Objectives***

A successful student will be able to perform the following tasks in a Windows 2000 Server environment:

- Install and configure Windows and the DOS operating system
- Utilize Windows- and DOS-based utilities for troubleshooting PC hardware difficulties
- Replace PC hardware components
- Completely construct a PC from the motherboard up by assembling the necessary components and installing the operating system

***Required/Optional Texts and Student Resources***

Required:

*Enhanced A+ Guide to Managing and Maintaining Your PC.* Jean Andrews.  
Publisher: Course Technologies, Cambridge, MA: 2001.

Optional:

Web-based resources as may be provided by the instructor during the course of the semester.

***Required Forms of Assessment***

A comprehensive final exam will be required, which accounts for 20-25% of the final grade

***Required Topics Covered***

- Overview of How Computers Work
- Inter-Relationship of Hardware and Software
- System Board

- Memory
- Hard Drives
- Floppy Drives
- I/O Devices
- Multimedia Technology
- Electricity and Power Supplies
- Troubleshooting Hardware Problems
- Installing and Supporting Windows 9x
- Installing and Supporting Windows NT/2000/XP Workstations
- Building a PC

***Optional Coverage***

- Printers
- Notebook Computers