Outline of Instruction

Division: Business  Area: Computer Information Systems
Course Number: CIS 220  Course Name: Hardware Maintenance
Prerequisite: CIS 208
Corequisite: None
Hours Required: Class: 60  Lab: 0  Credits: 4

Course Description/Purpose
This course develops a student's knowledge of micro-computer hardware for the purpose of installation and maintenance at the equipment level. Students will learn to install, protect and troubleshoot CPUs, disk drives, memory, circuit boards, video adapters, displays, CD-ROM drives and more. Students will learn how to use the Internet to upgrade and maintain computers. This course will also bring together all the physical components of equipment evaluation for purchase, future maintenance and growth. In addition, this course will help to prepare students to successfully pass the A+ certification exam.

Major Units
• Hardware Identification and Its Purpose
• Assembly and Disassembly
• Troubleshooting
• Installation and Maintenance

Educational/Course Outcomes
Student learning will be assessed by a variety of methods, including, but not limited to, quizzes and tests, journals, essays, papers, projects, laboratory/clinical exercises and examinations, presentations, simulations, portfolios, homework assignments, and instructor observations.

Cognitive
Each student will be expected to Identify/Recognize...

- the Central Processing Unit
- the concept of memory
- motherboards
- peripheral cards
- input devices
- output devices
- evaluation of hardware for purchase
- utility software

Performance
Each student will be expected to Demonstrate/Practice...

- given a proposal for purchase, be able to develop an equipment selection list that meets the proposal within budget.
- given a situation, determine the appropriate hardware to meet a given need.
- given a situation, be able to determine the difference between a hardware and a line problem.
- given a situation, be able to determine which hardware component is malfunctioning.
- be able to replace components.
- be able to put together a microcomputer system from components.