ACADEMIC AFFAIRS

Course Number: CSET-254   Department: Computer Systems
                                                         Engineering Technology

Course Title: Computer Systems   Semester: Fall   Year: 2008

Objectives/Competencies

Course Objective	Competencies
1. Examine PCAT Computer Architecture.	1. Understand the ATX core architecture. 2. Understand the bus limitations and configuration principles. 3. Performs system diagnostics and burn in of memory, cpu, and other hardware.
2. Drive installation.	1. Basic HD installation procedures. 2. Understand the differences between IDE and scsi integration techniques. 3. USB and IEEE-1394 interfaces and removable storage systems. 4. Install and configure hardware RAID systems. 5. Install and configure software RAID systems. 6. Understand and use read-only and rewritable optical storage.

Course Objective	Competencies
3. Device drivers.	1. Understand the role of the driver. 2. Be able to intelligently select and configure device drivers. 3. Add new hardware and drivers to a Windows system.
4. Tape and backup.	1. Understand tape backup procedures. 2. Use a tape drive and the backup software on Windows. 3. Use a tape drive and the backup software on Linux (cpio and tar). 4. Clone drives using programs like Ghost, Carbon Copy Cloner, and Drive Image.
5. Monitors and displays.	1. Understand the technology used in CRT's, LCD's, and active matrix displays. 2. Understand configuration and troubleshooting of display hardware. 3. Understand configuration and troubleshooting of monitor hardware.
6. Printer and scanners.	1. Understand configuration and troubleshooting of laser, inkjet, and impact printers.
7. Understand the installation and configuration of drivers for common devices under Windows XP, Vista & 2003 Server, Linux, and Macintosh OS X.	1. Install common devices in the lab and configure them under Windows, Linux, and OS X.