ACADEMIC AFFAIRS

Course Number: CSET-210

Department: Computer Systems Engineering Technology

Course Title: Introduction to Computer Systems

Semester: Fall   Year: 2008

Objectives/Competencies

Course Objective	Competencies
1. To develop an understanding of BIOS, OS, driver and application software.	1. To be able to enter and exit the BIOS. To be able to change basic settings and save the changes. 2. To be able to enter and modify common PC settings using the BIOS interface.
2. To be familiar with common components of PC operating systems.	1. To be familiar with the common versions of the Microsoft Windows operating systems. 2. To be able to access and enter commands at the DOS or command prompt. 3. To perform common operations on the Windows systems. 4. To recognize the differences between Windows 7, Vista, 2000, NT, 98, 95, 3.X, and CE. 5. To be able to apply service packs.

Course Objective	Competencies
3. Work with people in the technical world.	1. Understand the fundamental concepts of technical support. 2. Understand the basics of problem diagnosis. 3. Be able to document the problem and any solution to the problem. 4. Understand the basics of working with customers and coworkers. 5. Understand the confidentiality of customer information.
4.) Power supplies and electricity.	1. Be able to describe the basics of AC power distribution. 2. Be able to describe the common AC power problems. 3. Be able to perform the function and testing on a PC power supply. 4. Determine the power requirements for a single PC or a number of PC's and their related peripherals. 5. Perform common electrical calculations. 6. Be able to recite the basic electrical safety procedures and precautions.
5.) Form factors, motherboards, memory, and processors.	1. Be able to describe the common motherboard form factors being used in computers. 2. Be able to describe the common central processing units found in desktops, laptops, and servers. 3. Understand the boot and restart process.

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	4. Be able to replace a motherboard. 5. Be able to choose a replacement motherboard and/or processor. 6. Be able to choose, upgrade, and test memory.
6. Understand storage systems.	1. Be able to describe the operation of hard drives, solid-state storage, and optical drives. 2. Be able to install, partition, and format a hard drive for Microsoft Windows using a GUI or a command line interface. 3. Be able to describe the characteristics of parallel ATA and serial ATA interfaces. 4. Be able to replace or add a hard drive or optical drive. 5. Be able to describe the fundamentals of floppy drives. 6. Be able to describe the basic RAID concepts.
7. Understand I/O devices and peripherals. NOTE: For transfer credit or articulation agreements from other schools the following objectives may be considered as optional, but desirable.	1. Be able to describe the basics of I/O devices. 2. Be able to add device drivers, update device drivers. 3. Be able to add or replace multimedia, video, audio, and network devices.
8. Understand binary, hexadecimal, and octal.	1. Be able to identify the differences between decimal, binary, hexadecimal, and octal numbers. 2. Be able to convert between number bases using a

Course Objective	Competencies
	calculator (Windows calculator).