

CPMT 1404 – Microcomputer System Software (4:3-2)

Informal Description: The world today is relies heavily on computers. This course introduces students to maintaining the software on Windows and UNIX based computers.

Textbooks/Reference/Materials

- A+ Guide to Software – Managing, Maintaining, and Troubleshooting, Jean Andrews, ISBNB 0-619-21326-4
- Access to <http://www.templejc.edu/dept/cis/CCollins/Collins.htm>
- floppy disks or other file storage (home computer, removable USB drive, etc.)

Course Competencies

CIP Code: 47.0104 (Computer Installation and Repair Technology/Technician)

Course Title: Microcomputer System Software

Course Level: Introductory

Course Description: Skill development in the installation, configuration, maintenance and troubleshooting of system software in microcomputers. Topics may include operating systems, utility software and other software affecting the basic operation of a microcomputer system.

Learning Outcomes: Demonstrate knowledge of major functions performed by microcomputer systems software; identify the factors affecting the choice of an operating system for microcomputer system; install, configure, and troubleshoot systems software.

COURSE CALENDAR

6 Week Semester	16 Week Semester	Notes	Lecture Topics	Labs
Week 1	Week 1		Syllabus/Orientation; Mac-Linux	
	Week 2		Chapter 1	Lab 1 due
	Week 3		Chapter 2	Lab 2 due
Week 2	Week 4		Chapter 3	
	Week 5	Review	Chapter 4	Lab 3 due
	Week 6	Test 1	Chapter 5	Lab 4 due
Week 3	Week 7		Chapter 6	Lab 5 due
	Week 8		Chapter 7, 13	Lab 6 due
	Week 9	Review	Chapter 8	
Week 4	Week 10	Test 2	Chapter 9	
	Week 11		Chapter 10	Lab 7 due
	Week 12		Chapter 11-12	Lab 8 due
Week 5	Week 13		Future Issues	Lab 9 due
	Week 14	Review		
	Week 15	Test 3		
Week 6	Week 16	Final		Capstone Lab 10 due

See course website for current semester's calendar, and holidays

Notes:

CPMT 1404, continued COURSE COMPETENCIES, The student will

- 1) Differentiate System Software types
 - a) Utilities
 - b) Operating Systems
- 2) Install various Operating Systems
 - a) Planning
 - b) Fdisk or Partition Magic
 - c) Graphical installation
- 3) Compare Operating Systems
 - a) Standalone Systems
 - i) DOS
 - ii) Windows (9x, XP)
 - iii) Unix
 - (1) Macintosh OSX
 - (2) Linux Workstation, Solaris, Free BSD, SuSe, etc.
 - iv) Macintosh OS 6-9
 - v) OS/2
 - b) Network Operating Systems
 - i) Novell
 - ii) Windows (NT, 200x)
 - iii) UNIX (Linux , Solaris, FreeBSD, SuSe, etc)
- 4) Manage the boot process
 - a) Boot Manager
 - b) Boot Configuration
- 5) Operate a command line interface
 - a) DOS
 - b) Windows 2003
 - c) Red Hat Linux 9 Terminal
- 6) Examine the OS interface with hardware
 - a) Drivers
 - b) IRQs, DMA, Memory Ranges
 - c) Plug and Play
- 7) Analyze the OS interface with application software
 - a) Installation and uninstalling
 - i) Registry, libraries
 - b) Normal Operations
- 8) Configure and manage the Operating System
 - a) Windows 2003
 - b) Red Hat Linux 9
- 9) Implement Printers
- 10) Troubleshoot
 - a) Windows 2003
 - b) Red Hat Linux 9
- 11) Manage Memory
 - a) Physical
 - b) Virtual
- 12) Manage Storage
 - a) Windows 2003 drives
 - b) Linux folders
- 13) Examine the interface with a Local Area Network
- 14) Test the interface with the Internet
- 15) Evaluate various current Operating Systems