

COMT 11009 – Computer Assembly and Configuration

Lab Projects:

Determining Hardware and OS Version and Service Pack Level:

- System Properties print screen
- MsInfo32.exe – System Information print screen
- Speccy Tool – Summary print screen (Download Portable version.)

Determining CPU and Memory:

- CPU-Z – CPU tab print screen (Download both 32-bit and 64-bit zip file versions.)
- CPU-Z – SPD tab print screen (Documenting your current memory.)
- Printout of your computers possible memory upgrades. (Go to www.crucial.com then download and run the “CrucialScan.exe” {system scanner} program. Print screen the results. OR go to www.newegg.com and drill through their memory configurator. Print screen the results. Or go to www.kingston.com and drill through their memory configurator. {Note: You need to know your motherboard’s manufacturer and model for sites other than Crucial’s.})

Testing RAM:

- MemTest86+ CD-R or USB. Documentation worksheet. (Extra Credit: for MemTest86 on a bootable USB flash drive.)

Benchmarking Memory and Virtual Memory (PageFile.sys):

- Extra Credit: Install and print screen Free Meter from <http://www.tiler.com/freemeter/>

Microprocessors:

- 2013 FEB - Microprocessor Compared Worksheet (See S:\BOLEN\COMT11009_A+\ location of mapped school S: {student} drive.)

Removal / Installation of Hardware:

- In an in class lab, we will remove all parts (excluding the CPU/Cooler assembly from the motherboard) and disconnect all cables. Then, reassembly unit and confirm via Device Manager that all components are working correctly. (Remember Electrostatic Discharge (ESD) safety procedures!)

Power Supply Unit:

- Print output of the Power Supply Unit Configurator results.
- In class lab, using a multimeter to test the Power Supply Unit.

Cooling:

- Extra Credit: Install and print screen SpeedFan from <http://www.almico.com/speedfan.php>

Network Interface Card:

- Create a crossover Cat5 cable.

Software / Files / Performance & Security:

- Secunia PSI – Examine to see if software is up to date.
- CCleaner – Clean out old files from system.
- EaseUS Backup (Extra Credit) – Backup unit before changing unit or to recover unit.

Printers:

- Printer installation and test via IP port.

Other OS's:

- Install Ubuntu into VMware environment.