MWSSLS
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Additional Information:

High-End Workstations*

Workstation Tasks	CPU	RAM	DISK	VIDEO
Software Development	X	X	X	
Database Development	X	X	X	
Advanced Statistical Large Datasets	X	X	X	
Graphic Intensive Development**	X	X	X	X
Web Development		X	X	

* High-end workstations are likely to require upgrades during the life of the machine. It is recommended that the key components be upgradeable.

** Recommend more powerful graphics card (increased video RAM, on-board processor to offload screen rendering).

High-End Software Requirements

Workstation Tasks	RAM	Software
Database Development	1GB or higher	ORACLE Forms
Advanced Stat / Large Datasets	2GB or higher	SPSS SAS
Graphic Intensive Development	2 GB or higher	Adobe Photoshop Adobe PageMaker Adobe Flash Adobe Premier Quicktime iMovie
Web Development	1GB or higher	Macromedia Dreamweaver

Memory

Having sufficient system memory (RAM) is critical to the reliable function of your workstation. Without adequate memory you will experience unacceptably slow operation and frequent crashes (system failures). The figures set forth in the specifications should provide adequate RAM for most applications currently being run on campus. You should be aware that minimum RAM requirements are updated frequently. Our current recommendation is 1GB of system

RAM. This amount could be obtained using a number of different configurations. Please see the notes below. You should always try to equip a new workstation with the specified amount of RAM taking up the least amount of space (SLOTS) internally. This will facilitate future upgrades that may probably be needed over the workstations life. What does this mean? In any given computer, there are typically 2 to 4 slots available in which to install RAM. When specifying a new workstation you should make sure that the base RAM fits in only ONE SLOT on the motherboard, if possible. This should be done to simplify future expansion.

On a more technical note, each motherboard (different computers from the same manufacturer use different motherboards) will need a specific type of RAM. These include DDR, DDR-2, SDRAM, RAMBUS and others. Within these broad classifications there exists RAM with and without parity as well as ECC (Error-Correcting Code) and non-ECC RAM. RAM also comes in various clock speeds. With the plethora of motherboard-RAM combinations it is critical to select the correct RAM if you are purchasing it as an upgrade. If you include, as part of your original computer order from the manufacturer; e.g. Dell, or Apple an increased amount of RAM, you will be assured that they will supply the correct type of Memory. We are not currently making a recommendation in preference for one type of RAM or the other. The purpose of this note is to inform you of the current trend so you may make a more intelligent choice.

Monitors

It is important to the ergonomics of the computer as was well as the welfare of the user that special care be given when selecting a monitor. Any monitor purchased for use on campus must follow these basic specifications:

- LCD Display -17 inch Viewable
- Compliant Standards - Energy Star, FFC-B, MPR-II
- Display Frequencies (able to adjust automatically)
- Maximum Horizontal Refresh Frequency: 80KHz
- Vertical Refresh Frequency @ 1280X1024 resolution, @60Hz Dot Pitch - 0.264
- Connector:
- Both DVI-D & 15-Pin mini D-sub
- Power – 3-Pin Plug
- Warranty - Three-Year parts and labor

FireWire

FireWire is Apple Computer's version of a standard, IEEE 1394, High Performance Serial Bus, for connecting devices to your personal computer. It has become an industry standard. FireWire has advantages, including:

- You can have up to 63 devices in the FireWire chain.
- FireWire devices can be attached and removed while the device are powered on.
- FireWire can transfer data at rates up to 400 Mbps.

The first products to be introduced with FireWire included digital cameras, digital video disks (DVDs), digital video tapes, digital camcorders, and music systems. Because IEEE 1394 is a peer-to-peer interface, one camcorder can dub to another without being plugged into a computer. With a computer equipped with FireWire, any device (for example, a video camera) can be plugged in while the computer is running.

USB

Short for *Universal Serial Bus,* USB is an external bus industry standard for attaching external devices to computers. USB Version 2.0 is the current standard. This standard allows for transfer speeds of up to 480Mbits/second. This is a complete overhaul to the Universal Serial Bus input/output bus protocol which allows much higher speeds than the older USB 1.1 standard. USB has several advantages over SCSI, including:

- USB devices do not have to be manually numbered in the peripheral chain.
- You can have up to 127 devices in the USB chain.
- USB devices can be attached and removed while the devices are powered on.
- USB devices can be powered from the USB cable eliminating the need for an A/C power source.