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MASTER OF EDUCATIONAL TECHNOLOGY

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FIRST ASSIGNMENT : A CRITICAL ANALYSIS OF ICT HARDWARE AND SOFTWARE -ANTIVIRUS-

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What is Virus and Antivirus?

Virus is a program or piece of code that is loaded onto the computer without our knowledge and runs against your wishes. Viruses can also replicate themselves. All computer viruses are manmade. A simple virus that can make a copy of itself over and over again is relatively easy to produce. Even such a simple virus is dangerous because it will quickly use all available memory and bring the system to a halt. An even more dangerous type of virus is one capable of transmitting itself across networks and bypassing security systems. Generally, people do not distinguish differences between Viruses, *Worms* and *Trojan Horses*.

Trojan Horse is a destructive program that masquerades as a benign application. Unlike viruses, Trojan horses do not replicate themselves.

Worm is a program or algorithm that replicates itself over a computer network and usually performs malicious actions.

In addition, we have another definition: **Blended threat** that combine the characteristics of viruses, worms, Trojan Horses, and malicious code with server and Internet vulnerabilities.

Since 1987, when a virus infected ARPANET, a large network used by the Defense Department and many universities, many antivirus programs have become available. These programs periodically check your computer system for the best-known types of viruses. Shortly, **Antivirus** program is an utility that searches a hard disk for viruses and removes any that are found.

Preventative Maintenance Tips

- Always keep your operating system and programs up-to-date.
- Install an antivirus and antispyware program that automatically scans for viruses when the system boots.
- Update the virus/spyware definitions daily to ensure your system is protected against the latest threats.
- Do not download any files from the Internet unless you are certain the source is not transmitting a virus to you, or that the files are spyware-free.
- Do not use any storage media that has been used in another computer unless you are certain the other computer is free of viruses and will not pass the virus on to your system.
- Never open e-mail attachments from people you don't know; and don't open any file attachment that ends in '.exe., All downloaded files should be scanned by your anti-virus application before you run or install it.

Different kinds of Antivirus

Nowadays, it is not acceptable to use of computer specially on the web without antivirus software. More than 1000 kind of antivirus program are over the world, such as

- Kaspersky Internet Security 2009
- Symantec Norton
- McAfee VirusScan
- BitDefender 9 Standard
- F-Secure Anti-Virus
- Trend Micro Internet Security Pro
- Panda
- Alwil Avast! 4.6 Home Edition (free)
- Aviva AntiVir PersonalEdition Classic 7 (free)
- AVG (free)

Performance advantages

Performance Advantages	Symantec	McAfee	Kaspersky
Scanning Throughput of Media Files and Documents on Windows Server 2003 (virusbulletin.com, February 2008)	20.5 MB/s	27 MB/s	16.4 MB/s
File Access Lag Time (virusbulletin.com; August 2008)	0.04 MB/s	0.08 MB/s	0.04 MB/s
Commit Charge (Clean Systems, West Coast Labs; September 2008)	186.3 MB	157.93 MB	156.12 MB
Application Startup Time (Internet Explorer, West Coast Labs; September 2008)	3.1 seconds	3.74 seconds	2.17 seconds
Boot Times (West Coast Labs; September 2008)	229 seconds	187 seconds	168 seconds

My recommendation is Kaspersky Internet Security 2009. The main reason to choose Kaspersky Antivirus is that it's currently the only antivirus software to deliver all the way in every important category: Offering a 99.9X% detection rate for all types of viruses, including script viruses, polymorphic viruses and backdoors/trojans, - offering full protection for email, web surfing, and all archive formats, - and even checking itself to make sure its antivirus components have not been tampered with. Shortly it can be said *Kaspersky Internet Security 2009* is the best, because,

- o Currently has the best detection record of all antivirus programs
- o Detects and removes viruses, worms, Trojans
- o Easy to install, works right out of the box
- o Daily updates ensures full protection at all times
- o Small program, uses only 11 MB disk space, requires minimal resources
- o Scans all types of archives, not only ZIP-files
- o Protects all parts of the PC... system memory, boot sector, files, mail databases, etc.
- o Has an heuristic (learning) engine to detect unknown viruses
- o DOS scanner included
- o Very good user manual (250 pages) included
- o Phone and email support included for free

Kaspersky Internet Security 2009 is a totally new approach to data security. The main feature of the application is restricting the programs' rights to access the system resources. It helps prevent unwanted actions by suspicious and hazardous programs. The application's capabilities in the protection of user's confidential data have been considerably enhanced. The application now includes wizards and tools which substantially facilitate execution of specific computer protection tasks.