User maintenance or preventative maintenance (PM) is performed by the end user; the person actually touching and using the computer on a regular basis. It is not the job of Information Technology Services support personnel. Preventative maintenance is the practice of performing a series of small tasks to ensure your computer runs optimally throughout its full life-cycle. This is similar to maintaining your car. You fill it up with gas, check the oil, the wipers, lights, etc, and your car will run for years. A computer works the same way.

Preventative maintenance is the number one way to ensure your computer runs well. It will protect you from thousands of computer viruses, Trojans, worms, and many other anomalies ensuring the protection of your files and personal information. Behind you are many more layers of security and virus protections performed by ITS. For example: Did you know that in January 2010 that 96.5% of all incoming email to Amarillo College contained spam, viruses, invalid recipients, etc. (for a total of 3,703,064 email messages)? It’s hard to believe that many emails are rejected and filtered in a single month at Amarillo College. But this fact is true, and it is similar to the national average when compared to over 3,400 colleges and universities.

Preventative maintenance is important and it should be performed daily, weekly and monthly. When done on a regular basis it only takes a few minutes. But if maintenance is performed sporadically, then it usually takes several hours to perform, leaving your computer exposed to the entire world and jeopardizing the integrity of your data and information. While the following suggestions are not an exhaustive list, they are the bare minimum recommended for PC users; Apple users should follow the same principles. ITS recommends the following steps to perform preventative maintenance:

- Update your Windows operating system (weekly and monthly)
- Update your Symantec anti-virus definitions and run a scan (at least two times weekly)
- Run CCleaner (weekly and monthly)
- Clean up your Outlook email folders (daily, weekly, and monthly)
- Keep your computer “turned on” – as much as possible.
- Call the Technology Information Center at (806) 371-5100 if you need assistance
**Update your Windows operating system.** Keeping your operating system up to date is the first step in keeping your computer safe. At Amarillo College, all PC computers at the time of issue are set to automatically update when your computer is logged into the network. This update process occurs during the evening hours so always leave your computer turned on Monday through Friday, and these updates should be automatically done. Leaving your desktop computer on does not hurt it or reduce its lifecycle. In fact, a desktop computer runs better if it is left on. However, at least once weekly, the computer must be physically shut down. We recommend doing this on Friday afternoons as you leave for the weekend, holidays and vacations.

Laptop users – The previous comments also apply to you with a few modifications. It is assumed that laptop users take their laptops with them to and from classes, to home, on field trips, etc., because of the mobile capability. Laptop users should manually run a Windows update at least weekly. Laptop users should never leave their laptop computer plugged in on a continual basis. Laptops plugged in on a continual basis suffer higher failure rates and a shorter battery life. (The replacement of a laptop battery is an expendable supply and must be paid from the user department supply funds.)

**Update your Symantec anti-virus definitions and run a scan (at least two times weekly).** All users, lab computers, and other general purpose computers should strive to keep their anti-virus software up to date. As previously described, leave your desktop computer on Monday through Friday and these updates will occur automatically every evening. However, laptop users and infrequent desktop users should manually update their virus definition files and run a full scan at least twice a week. When scans are performed on a regular basis, full scans generally take less than an hour; if your computer is not scanned very often, then it is recommended to let the computer scan run all night. Your computer is only protected from viruses when your definitions are up to date and a scan has been performed.

**Run CCleaner (weekly and monthly).** CCleaner (formerly called Crap Cleaner), is a utility program used to optimize a user's computer performance and clean its registry. ITS installs this utility on all new and refurbished PC computers. Regardless if you have a desktop or a laptop, manually run this utility weekly and your computer will run better. It normally takes about 15 seconds to run. If it takes longer then you should run CCleaner more often.

**Clean up your Outlook email folders (daily, weekly, and monthly).** ITS recommends that you perform four simple steps as often as possible (at least weekly)
to keep your Outlook email box flowing smoothly.

- Move email messages you want to keep from your “Inbox” to personal folders stored on your computer. Do not allow them to live in your “Inbox”. If you do not have personal folders set up, then please contact the TIC and they will be happy to show you how to do this. (This is particularly important with email attachments that you want to save and access later. Your mailbox is not the place to store attachments!)
- Delete all of the email in your “Sent Items” folder.
- Delete all of the email in your “Junk E-Mail” folder.
- Delete all of the email in your “Deleted Items” folder. Once email is deleted from the “Deleted Items” folder, they are really gone. ITS does not backup email messages.

These four simple steps will make your computer run much faster.

Keep your computer “turned on” – as much as possible. As previously mentioned, desktop computers should be turned on for a week at a time. The electrical usage for leaving a computer on is insignificant in today’s modern electronics. All computers have some form of Energy Star compliance in support of the national campaign sponsored by the US Environmental Protection Agency (EPA). Your computer’s lifecycle is affected more by the power surges from frequently powering it on and off than it is by leaving it powered on.

Laptop users – nothing can degrade your laptop’s battery more quickly than being plugged into electrical power 24 hours a day. Laptop users should exercise their battery by running their computer on battery power as long as possible before plugging into electrical power for a recharge. A battery exercised properly will easily last four years completing the laptop’s full life cycle. However, laptops plugged into electrical power a majority of time will find their battery life decreases to an inoperable state in less than 18 months. Because laptop computers should not remain on all the time, laptop users will have to learn how to perform manual updates to keep their laptops up to date with the latest operating system changes and anti-virus software and protection.

Call the Technology Information Center (TIC) at (806) 371-5100 if you need assistance. Tip Sheets providing step-by-step instructions for the recommended updates and utility installations are available from the TIC. Many computer problems are solved by simply turning off your computer for a couple of minutes and restarting it. If this simple procedure doesn’t fix the problem, calling the TIC is the next smartest thing that anyone can do when you experience a computer anomaly. The TIC monitors network outages, system slowdowns, and generally responds quickly depending on the particular issue; many problems can be resolved over the phone without having to wait for a technician to come to your office.
Preventative maintenance starts with you, the user. While this list may seem long or difficult to remember, it is important to your success to learn these small steps to maintain your computer system. When these steps are performed on a regular basis, your computing experience will be better, not to mention that your productivity will be improved (and stress level reduced!).