What computer hardware and software do I need to participate in this unit?

The following information has been adapted for this unit from Information Communication Technology at University: Skills for Success, Author: Shaw, Greg, Charles Darwin University Press. Darwin 2007

CDU Students have access to extensive computing resources on its various campuses. All the computing resources (hardware and software) necessary for this unit are provided on campus. However many students do not have ready access to these resources and/or choose to provide their own resources. The following is a brief discussion and summary of the types of computing resources that students will provide useful.

Hardware and software configuration guidelines are also available on the CDU website at http://learnline.cdu.edu.au/support/learnline/systemrequirements.html

What type of computer do I need?

Windows or Macintosh?

Generally¹ today there are two types of personal computers, determined by their operating system. These are computers with Windows-based operating systems - of which there are many manufactures, and computers with Macintosh-based operating systems made by Apple Computers.

The choice is really up to you depending on the features that you want with your computer and how much you are willing to pay for it and the software.

Apple Computers these days can operate both Windows and Macintosh software and there are versions of Microsoft Office and other office software such as OpenOffice for both types of computers.

If you are not sure what kind and type of computer you need you should get some advice from someone that knows something about computers who you trust. Remember, there is a great variety in price and features. Generally the more expensive computers will have additional features.

However, the entry-level models these days are usually very well equipped and capable of doing the kind of work that you need to do as a student. There is no need to purchase an expensive computer in order for the computer to be helpful to you in your study.

What software do I need?

The software that you will probably need on your computer for your work as a student includes:

- Word-processing software, such as Microsoft Word, or OpenOffice Writer
- Spreadsheet software, such as Excel, or OpenOffice Spreadsheet
- Presentation software such as Powerpoint, or OpenOffice Presentation.
- World Wide Web browser software such as Internet Explorer, FireFox, Opera, Safari etc...
- Adobe PDF Reader or similar
- Adobe PDF Creator or an OpenSource PDF creation software such as CutePDF or Bullzip (suggested)
- Media software such as Windows Media Player, Quicktime, Real or VLC Media Player.

Other software (generally optional but may be required for use on some units eg. CMA304 and PRBA006)

- Microsoft Project or similar OpenSource software, such as OpenProj project management software.
- Microsoft Visio or similar OpenSource software, such as Dia flowcharting software.
- OpenSource Freemind, mind mapping software.

Software Plug-ins and System Applications

- Audio and Video Codecs (Techsmith and Windows)
- Adobe Flash Player
- Java

In fact there are many more than two types of computer systems but these two operating systems thoroughly dominate the computer marketplace.

Microsoft Office has some of the software listed above included in the software suite. You can purchase Microsoft Office under an academic license as a student quite a bit cheaper than the standard price, so please enquire about this at your university bookshop. Please make sure that you are only using licensed software as to do otherwise is stealing and pirate versions of software can damage your computer and potentially cause problems with your work.

If you would rather not pay for software like Microsoft Office there is a completely free and excellent office suite that you can download from the Internet. This suite is called *OpenOffice* and is accessible from www.openoffice.org or for the Macintosh Neo Office at www.neooffice.org.

There are other office and word-processing applications that you might have access to such as Word Pad, Microsoft Works, Core1 Office, and even an online office suite provided by Google called Google Docs. For this unit, a generic approach to software is taken. However, many of the examples are based on the Microsoft Office 2003/2007/2010 Suite, which was the most common at this time of writing. Many of you will be increasingly using Microsoft Office 2010 suite of software. There are quite a few differences between the interface of this suite and the earlier versions of Microsoft Office. However, many of these differences are cosmetic, or relate to the way features are organised. The basic principles are still the same. If you are moving from one version to another, you need to be thinking about the processes that you will be engaging in, rather than specific visual organization.

One place where you can find some assistance in using different versions of Microsoft's office suite is that the Microsoft Office website - http://office.microsoft.com/en-us/word/.

Another site that can help you identify the differences between the two major Microsoft Office suites is the following:

http://blogs.msdn.com/roberdan/archive/2006/12/09/differences-between-the-2007-office-system-and-office-2003.aspx and http://technet.microsoft.com/en-us/library/ee523661.aspx

You also need to have *World Wide Web browser* software such as Internet Explorer on your computer well as the software discussed above. The preferred browser for Learnline use is the latest **Firefox** release combined with the latest version of Java Runtime Environment (JRE) 7. FireFox is an excellent World Wide Web browser and it is available free from the Internet (http://www.mozilla.com).

A *PDF reader* and *PDF creator* software is also required. This software is free, with Adobe PDF Reader freely available from http://www.adobe.com/products/reader/. Whilst PDFCreator is the PDF creator software installed as standard student software at CDU, Adobe Acrobat Professional is installed on a limited number of computers in the CDU Library Precinct. Both CutePDF and Adobe Acrobat Professional can be used to create PDF files however you will need to use Acrobat to manage PDF files (such as combining pdf documents, deleting and extracting pages in pdf documents). For students wishing to install a free PDF creator and management software on their own systems, there a many software options available, that can be readily found on the internet. However if in doubt, it is suggested that you install

- the PDFCreator software, available from http://www.pdfforge.org/pdfcreator or
- the PDFill FREE PDF Tools software available from http://www.pdfill.com/pdf tools free.html.

The latest version Microsoft Office, has PDF creation facilities, as does many other software application. However the PDF features are limited and a lot of software still requires a separate PDF creation software. So it is good practice to install the free PDF creation and reader software, so as to give you the greatest flexibility.

Multi-media players are required to view various audio and video files provided with your learning materials. Recommended is the **Windows Media Player** which is freely available from Microsoft and can be downloaded from the internet - http://www.microsoft.com/windows/windowsmedia/default.mspx. Other multi-media viewers such as Real (<a href="http://www.real.com.au/?country=au&language=en&src=apac_home&rsrc="home&rsrc

Microsoft Project or similar OpenSource software, such as *OpenProj* may also be used for your learning materials and assessments in this unit. MS Project and OpenProj is installed as standard software on the CDU student system. A trial version of Microsoft Project is available from the Microsoft site, http://www.microsoft.com/project/en-us/try.aspx but this trial version has a limited period of use (60 days) which cannot be extended without purchasing the software. OpenSource OpenProj software is free software available from http://sourceforge.net/projects/openproj/.

Microsoft Visio or similar OpenSource software, such as *Dia*. MS Visio is installed as standard software on the CDU student system. A trial version of Microsoft Visio is available from the Microsoft site, http://office.microsoft.com/en-au/visio/FX100487861033.aspx but this trial version has a limited period of use which cannot be extended without purchasing the software. OpenSource Dia software is free software available from http://live.gnome.org/Dia.

OpenSource Freemind, mind mapping software is also installed on the CDU standard system and is useful software for analysing, managing and presenting concepts and ideas. OpenSource Freemind is free software available from http://freemind.sourceforge.net/wiki/index.php/Download.

OpenSource Xmind, another mind mapping software that is useful software for analysing, managing and presenting concepts and ideas. OpenSource Xmind is free software available from http://www.xmind.net/

Students may find that they will need to install or update several applications or *plug-ins* to more readily access your Learning Materials.

These might include:

- **Audio and Video Codecs** such as the **Techsmith ScreenCapture Codec** available from http://www.techsmith.com/download/codecs.asp.
- You may also want to ensure your have the latest Windows media codecs, available from http://www.microsoft.com/en-au/download/details.aspx?id=507
- Adobe Flash Player is a popular multi-media plug-in and can be obtained from http://get.adobe.com/flashplayer/
- Many applications (including Blackboard and Collaborate) require a recent version of *Java* to be installed. If you need to install or update Java on your computer you can access this software from http://www.java.com/en/download/index.jsp

Computer hardware.

Go to Student Support for Learning at http://learnline.cdu.edu.au/support/index.html for more information related to computer hardware and software configuration and specification details.

Browser Configuration necessary to use Learnline:

Go to the CDU Learnline login page (under the Welcome Tab) but before proceeding to login select the *Check Your Computer* option and click on the button to check that your browser is properly configured to use the Blackboard Learnline site.

The same option is available under the For Students Tab where there is also an option to check other settings on your computer. The computers in the CDU Computing Labs and Library IT Precinct have already been configured.

Browser Configuration necessary to use Blackboard Collaborate Online Classroom:

Go to the CDU Learnline login page (under the For Students Tab) but before proceeding to login select the Online Classroom Support option on that page and click on the *Setup for Online Classroom* to check that your computer is properly configured to use Blackboard Collaborate Online Classroom. The computers in the CDU Computing Labs and Library IT Precinct have already been configured.

In addition to the basic computer hardware configuration, you may need to have peripheral hardware such as speakers and a microphone.

There are various configurations that students may already have with their computers or you may need to acquire all or part of these requirements. You should ensure that you have the required equipment and that it is configured and working correctly before you start classes.

Speakers or Headphones will be necessary to listen to various multi-media resources including audio presentation of lectures and tutorials.

A microphone is necessary for participation in live classroom and other interactive activities.

Equipment configuration options might include:

- Built in speakers and microphones common on many modern computers and laptops
- Built in speakers with separate microphone
 - These two configurations are adequate but you may find that you get unwelcome interference and sub-optimal outcomes when interacting online due to problems like audio/electronic feedback.
- A microphone/headset (minimum quality is all that is necessary) combination of headset and microphone.
- Earbud type headphones with separate microphone

The most useful configuration, regardless of built in facilities, is a relatively inexpensive microphone/headset that can be plugged in to various computers you may be using. This ensures that you have access to audio resources.

To ensure you have the correct hardware configuration for participation online, you should test your equipment and settings before you attend classes etc. There are a number of configuration wizards available to test your settings etc. on sites such as the Blackboard Collaboration and Learnline sites.