O Level Computer Studies 7010 Unit 6: Generic software

Recommended Prior Knowledge

None but many students may have some experience of using software packages before starting the course

Context

Practical use of software packages links with all the units and can provide the basis for project work both the implementation and documentation. If unit 1 has already been covered then the students will have experience of practical use of the Internet.

Outline

A broad view of generic software packages to be gained through practical work; only a general knowledge is required of the kinds of features typical of generic packages.

AO Learning outcomes

4.1 General knowledge of software for word-processing, database management, spreadsheets, graphics, communications, multimedia, data logging, CAD programming, desktop publishing and web design.

How applications packages solve sets of standard problems. Typical problems capable of solution by packages. Use of standard techniques or routines for established forms of processing (for example, file processing, sorting, simulation).

Suggested Teaching activities

Practical use of software packages started early in the course to allow time for skills to develop. Perhaps start with word-processing software, as your students should use this to write up project work.

Internet use of search engines and web browsers – link this into work done in unit 1.

Use of spreadsheet packages to include:

- use of formulae
- types of data (text, numbers, date, etc.)
- sorting
- what if scenarios
- cells required to produce graphical representations etc.

Use of database packages to include:

- types of data
- field length

Learning resources

http://www.theteacher99.btinternet.co.uk/theteacher/gcse/newgcse/others/spreadsheets.htm introduction to spreadsheets

http://www.theteacher99.btinternet.co.uk/theteacher/gcse/newgcse/others/databases.htm introduction to databases

http://www.theteacher99.btinternet.co.uk/theteacher/gcse/newgcse/others/wordprocessing.htm introduction to wordprocessing

http://www.teach-ict.com/software/word/word.htm links to word-processing tutorials

http://www.teach-ict.com/gcse/software/gcse_swhome.htm
links to many types of software including a sample database,
lesson ideas and handouts

http://www.bbc.co.uk/schools/gcsebitesize/ict/databases/2da tabasesrev1.shtml provides a look at database structures

AO Learning outcomes

Suggested Teaching activities

- search criteria
- features of relational databases
- sorting

Look at data logging tools either practically or use a simulation.

Learning resources

http://www.theteacher99.btinternet.co.uk/theteacher/gcse/newgcse/module5/task5.htm introduces sorting, searching of databases

http://www.bbc.co.uk/schools/gcsebitesize/ict/databases/5se archingrev1.shtml looks at searching different types of data storage systems

http://www.psionica.co.uk/gcseict/database.htm looks at data base structure links with unit 7

http://www.bbc.co.uk/schools/gcsebitesize/ict/measurecontrol/3dataloggingrev1.shtml an introduction to data logging

http://www.ictgcse.com/sub_projects/ictgcse_th_datalog.htm animated data logging of fish tank

http://www.teach-

ict.com/gcse/software/datalogging/datalogging/index.htm introduction to data logging including the use of sensors and analogue to digital conversion

L+W 11.1, 11.2, 11.3 and 11.4

L+W 11.7