

# Gentle Introduction to Computers

By Michalis Faloutsos and the UCR Teach-To-Learn team – Handout 1

Computers consist of software (programs) and hardware (wires, glass, metal parts).

The computer compared to a human:

- a) Hardware (wire and metal -> flesh and bones)
- b) Operating system (what controls hardware -> brain and elementary functions)
- c) Applications (interesting functions like word editing -> ability to perform tasks)

Examples of each category:

- a) Hardware: The mouse, the screen, the hard-drive (permanent storage), the memory (temporary storage), disk or floppy disk (moveable storage)
- b) Operating Systems: Microsoft Windows 95, 98, 2000, XP (our lab) and linux, OSX etc
- c) Applications: Word processing with Microsoft Word, searching the web with Netscape or Internet Explorer, Games

Some basic terms:

**Cursor:** pointer which shows the point in the screen we are at.

**Mouse:** controls the pointer – moving the mouse moves the pointer

By clicking (pressing a button, typically the left one) we “select” something or place the cursor.

**Keyboard:** a typewriter plus some more control buttons: we can type letters and numbers.

When we write: We can use: the **arrow or “cursor”** buttons to move the cursor, the **backspace** button to delete unwanted letters. The **Enter** button changes a line.

Files and Directories

Think of the computer as an actual office:

- a **file** is a document, it contains information, it was written by someone and will be read by someone.
- a **directory** is a folder where you can keep a number of files for convenience.

Some files in the computer are applications: if you click on them a program will execute. We often use the term “**run**” instead of execute. A program is running means it is active. To run a program, we typically select it with our mouse (place cursor on program icon and click twice). Directories can be organized in a hierarchical fashion: a directory of “All offered classes” can contain directories of “Class 1” “Class 2” and each class can contain the file of a student that is registered in the class.

In fact, everything in the computer is organized in one large hierarchy of directories.

Surfing the Web –In lab exercise

[If you have not done this before ask the help of someone that has]

Run the program “Internet Explorer” or “Netscape”. Go to the site “www.google.com”. Type a word, your name for example, and press the Enter button.

Managing files – In lab exercise

Creating a file: Run the program Word. Type anything. Save the file giving it your name.

Exit word. Find the file in the computer. Click-select it. What you wrote is still there.