EVANGELOS C. ZIOULAS

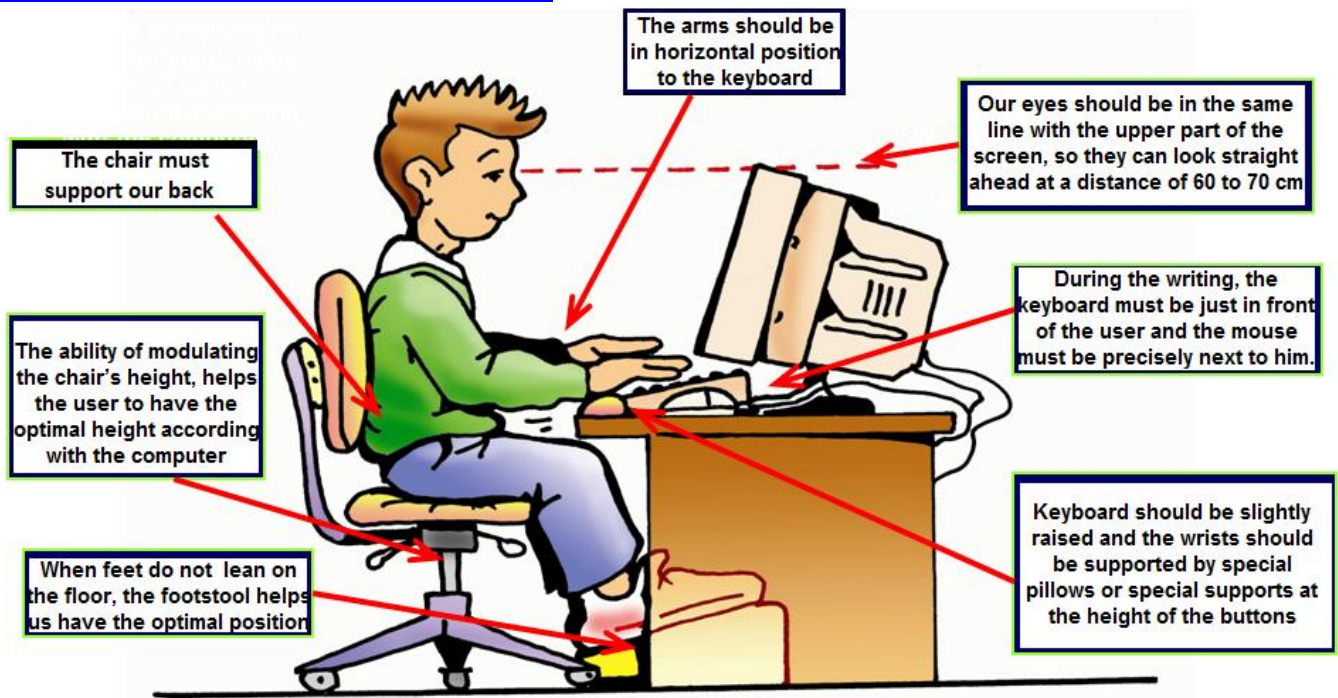**IT Teacher**

VCZ

CHAPTER 3

ERGONOMICS

ERGONOMICS

It is a term used to describe the design of different devices human uses, as long as their **order** and **installation** inside a workspace, in such a way that a user's work becomes…

- ➢ more pleasant
- ➢ more refreshed
- ➢ more comfortable
- ➢ more efficient
- ➢ less harmful

> Ergonomics refers to a more **efficient usage** of hardware and software

THE IDEAL POSITION OF THE BODY

The arms should be in horizontal position to the keyboard

Our eyes should be in the same line with the upper part of the screen, so they can look straight ahead at a distance of 60 to 70 cm

The chair must support our back

During the writing, the keyboard must be just in front of the user and the mouse must be precisely next to him.

The ability of modulating the chair's height, helps the user to have the optimal height according with the computer

Keyboard should be slightly raised and the wrists should be supported by special pillows or special supports at the height of the buttons

**When feet do not lean on the floor, the footstool helps us have the optimal position**

SCREEN (ERGONOMICAL RULES)

- ▪ The screen should reflect as little as possible
- ▪ The image must be **stable**
- ▪ The top of the screen should be at **eye level**
- ▪ The **brightness** and **resolution** must be properly set
- ▪ Every 50 minutes of work, we need **10 minutes break**
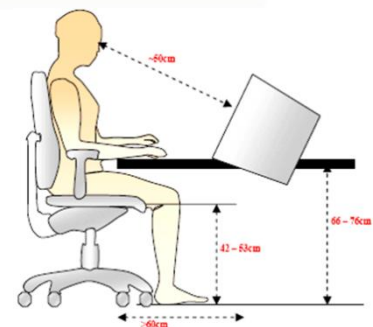
The screen is divided into thousands or millions of tiny rectangular areas called **pixels** (picture elements). Each pixel displays only one colour at a time for some miliseconds (refresh rate).

The Screen resolution is the number of pixels we find in a horizontal row and in a vertical column of the screen e.g. 640*480, 1024*768, 1280*1024, 1600* 1200.
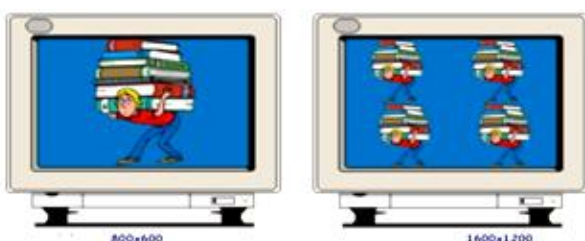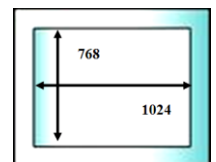
When we increase the resolution, the objects of the screen become **increasingly smaller**.