

## What is Ergonomics?

Ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance.

Practitioners of ergonomics and ergonomists contribute to the design and evaluation of tasks, jobs, products, environments and systems in order to make them compatible with the needs, abilities and limitations of people.



Ergonomics helps harmonize things that interact with people in terms of people's needs, abilities and limitations.

Source: <http://www.iea.cc/whats/>

## Pro Active Ergonomics (Preventative Approach)

Good posture is only one part of preventing repetitive workplace injuries.

1. Seating- adjust the height of your chairs so that the keyboard is at the same height as the elbows. Both feet should be flat on the floor or a footrest. If you cannot adjust your chair to obtain the appropriate height you might want to consider a keyboard tray or adjustable desk.
2. Back support- make sure that you are seated so that your hips reach the back of the chair with your lower back supported. Do not sit at the front of your chair.
3. Computer Screen adjustment- the screen should be about an arm's length away and directly in front of you.
4. Height of the Computer Screen- your eyes should be level with the top of the screen, unless using bifocals or trifocals. If using either than your eyes should be about 3 to 4 inches above the top of the screen.

5. Lighting- make sure that the screen is not getting glare caused by overhead lighting. Do not have a window directly behind or in front of the computer screen. Use natural lighting or alternative lighting sources to reduce eye strain caused by bright overhead office lighting.
6. Breaks- you should look up and away from your computer at least every hour to reduce eye strain. Also it is important that every 1 -2 hours get up and move around, stretch, get your blood circulating. This will help reduce stiff aching muscles in your neck, back and knees.
7. Typing- try to maintain neutral positioning of wrists, this might require an alternative keyboard to reduce repetitive injuries such as Carpal Tunnel Syndrome.
8. Mouse- try to maintain neutral positioning of the wrists. Try several types to find the right fit for how you utilize your mouse.
9. Phone- make sure that you are not cradling the phone in-between your ear and shoulder. If you use the phone as a routine part of your job consider using a headset to avoid shoulder and neck injuries.
10. Lifting- keep your back straight and bend from the knees. Avoid jerky movements as this can lead to back strain and injuries. If unsure if it is too heavy, use a team lift (2 or more people).