

University of Limerick

Ergonomics Research Centre



MIRTH office checklist

Dr. Leonard O'Sullivan & Prof. Tim Gallwey

Ergonomic Assessment of Computer Work Stations

This checklist is a tool to improve the ergonomics of visual display work.

Assess your work station with the aid of the checklist and answer the questions.

If possible, assess your work station together with your workmate, in order to get a more objective picture of your situation.

First assess your present situation by selecting either the Yes or No option in the 'All in order' box.

If you find a need for improvement, correct immediately the items you can, and make suggestions for further improvements if needed. Write down the **improvements and suggestions**.

The last page of the checklist contains questions on your health. The answers will be treated confidentially, if this form is returned to the occupational health personnel.



Enterprise	Date
Name	Department

1. Space Arrangement

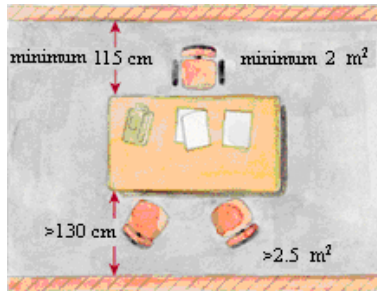
Is the furniture arranged in such a way that you can **move** about freely? Are all the necessary equipment within easy reach?

All in order?

Around the chair is there 2 m^2 of free space, and is the distance between the edge of the board and the nearest obstacle behind the user $\geq 115 \text{ cm}$?

If space for visitors in front of the table is required, is there free space $> 2.5 \text{ m}^2$, and is the distance between the edge of the desktop and the nearest obstacle $> 130 \text{ cm}$?

Is the ceiling of the room is 2.5 m in height?



Improvements and suggestions

2. Noise & View

Is your **work area quiet** and can you see the rest of the room at a glance (e.g. when someone arrives)?

All in order?

Improvements and suggestions

3. Work Surface Access

Does the placing of the furniture, equipment, telephone and PC cables, etc., allow **easy cleaning** of surfaces?

All in order?

Improvements and suggestions

4. Lighting

Is there glare from windows, lights or (wall) surfaces in your normal working direction?
Are there reflections on the screen when you are in a normal working position? Does the screen have an anti-glare treatment or filter to prevent glare?

All in order?

Is lighting level in the working area 500 lux?

Do the windows have blinds, curtains or similar to regulate the outside lighting?

Is there no glare in the line of sight of the user (from the screen, keyboard, table, etc)?

Improvements and suggestions

5. Chair

Is it comfortable? Does it give enough support in different work postures? Are you familiar with the functions and adjustments of your chair, and do you know how to adjust it?

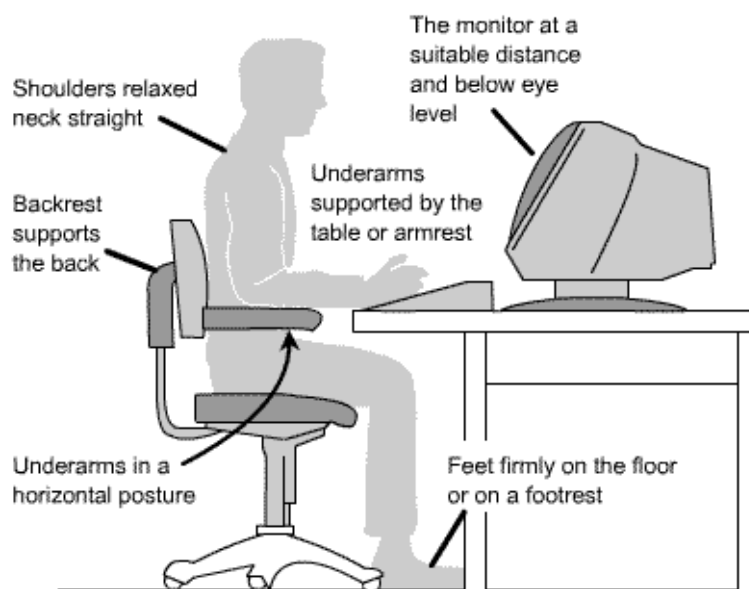
All in order?

GENERAL

Are seats and backrests cushioned?

Does the seat rotate 360° and does the chair have 5 wheeled supports?

An example of a good working posture



Improvements and suggestions

6. Footrest

Is it available, even if your desk is adjustable?

All in order?

Does the user have a footrest to support the feet, once the seat chair has been adjusted in relation to the table?

Is the footrest width ≥ 45 cm?

Is the footrest depth ≥ 35 cm?

Is the footrest inclination adjustable, including the range 0-15° in relation to the horizontal?

Improvements and suggestions

7. Desk Features

Is there sufficient space under your desk for your legs and thighs?

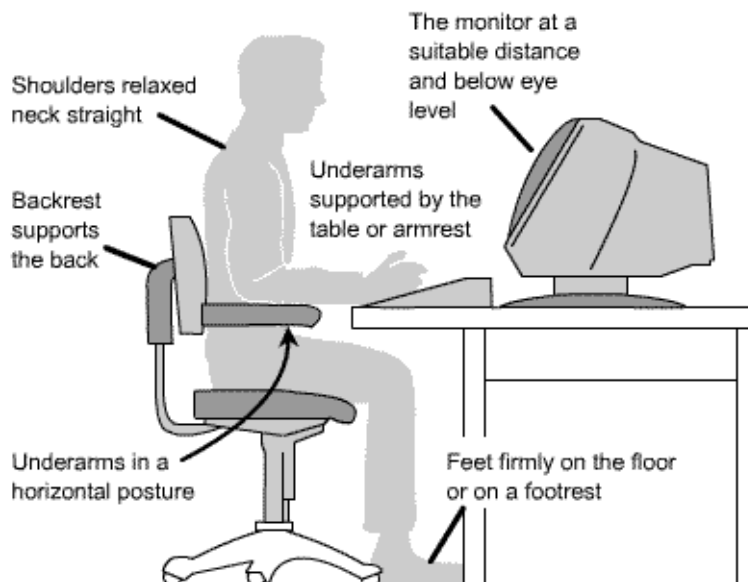
All in order?

Are the edges and corners rounded?

Are there no drawers under the central part of the desk surface?

Does it have pale colour and matt finish?

An example of a good working posture



Improvements and suggestions

8. Screen Position and Size

Is the height and placement of the screen suitable? The top of the screen should be below eye level. The distance from the eyes to the screen is 50-80 cm. Is screen size ≥ 35 cm (14") for reading tasks, and ≥ 42 cm (17") for tasks including graphics?	All in order?
--	----------------------

Is the computer placed in such a way that:

Upper edge of the screen is maximum at eyes' height

The screen is between the horizontal line of sight and maximum 60° below this horizontal

Visual distance between the screen and the eyes is ≥ 40 cm (better ≥ 50 cm)

Screen is in front of the user

Keyboard is in front of the user

Horizontal distance between the front edge of the board and the keyboard is ≥ 10 cm?



Improvements and suggestions

9. Keyboard & Mouse

Are the keyboard and the mouse on the same level and immediately next to each other?
Is there sufficient space on the desk to support the wrists? Are your shoulders relaxed when working?

All in order?

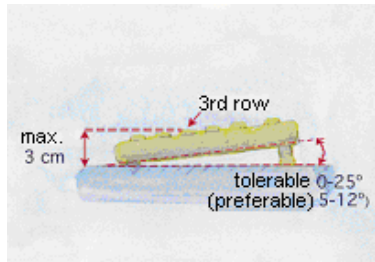
Is the keyboard inclination adjustable and does it remain stable in the selected position?

Is the keyboard inclination range between 0 and 25° (better 5-12°)?

Is the height of the third row of keys 3 cm maximum?

Does key activation have tactile and/or audible feedback?

Is there a support for wrists and hands while using the keyboard (in the armrests, in the desk or in a special support)?



Improvements and suggestions

10. Document Holder

Is a document holder available, and placed so that you don't need to hold up your arm?
Can you keep your neck straight?

All in order?

Improvements and suggestions

11. Desk Space

Is there sufficient space on the desk, so that the necessary equipment (papers, books, telephone) are near at hand? Is the surface of the desk matt and light coloured?

All in order?

Improvements and suggestions

12. Breaks

Do you move around sufficiently during the workday?

All in order?

Is it possible to take breaks of 10-15 minutes every 90 minutes of computer work; if the task demands great attention, 10 minutes break every hour of work?

Improvements and suggestions

13. Improvements & Suggestions

Describe the three **most important improvements in** your work and working conditions, which will help you to cope better with your work in the future.

1.

2.

3.

4.

Appendix 1

Chair

SEAT

Is seat height adjustable while seated, and include the range 42-53 cm?

Is effective seat depth 40-43 cm, and/or does it allow the user to have support in the backrest without feeling pressure on the back of the knees?

Is seat inclination 2-4° backwards (for an intense use of computer, 2-7° and adjustable)?

Is seat width 43-49 cm?

BACKREST

Is backrest inclination adjustable while seated, and does the seat-backrest angle include the range 95-110°?

Is height from seat to bump of lumbar support 17-22 cm (for an intense use of computer, 12-22 cm and adjustable)?

Is height from upper edge of backrest to seat > 36 cm (for an intense use of computer > 45 cm)?

Is backrest width > 42 cm

ARMRESTS

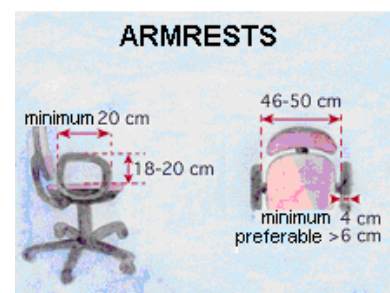
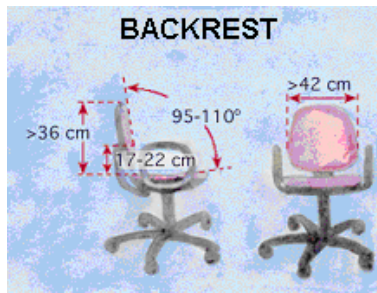
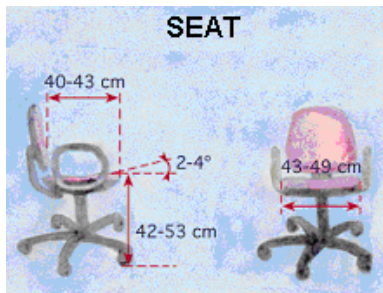
Does the chair have armrests?

Is the distance between armrests 46-50 cm?

Is the height from the armrest to the seat 18-20 cm?

Is useful width of the armrest ≥ 4 cm

Is useful length of the armrest is 20 cm



Improvements and suggestions

Appendix 2

Desk Features

Is desk height 72 ± 1.5 cm (up to 75 cm for the tallest users)?

Is free space under the desktop \geq :

60 cm width

65 cm height, from the front edge of the desk

62 cm height, at 20 cm from the front edge

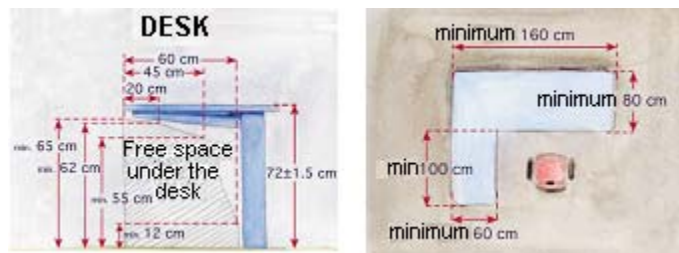
55 cm height, at 45 cm from the front edge

12 cm height, at 60 cm from the front edge

Is board thickness ≤ 4 cm

Is the surface of the desktop $\geq 60 \times 80$ cm (for an intense use of computer 180×80 cm, and 180×90 cm if the computer monitor is big)?

Is the surface of the side desk $\geq 100 \times 60$ cm (100×80 cm if a computer is placed on it)?



Improvements and suggestions

Background information

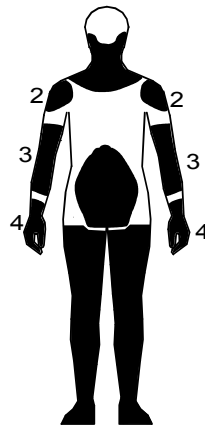
1. Name _____
(you can also answer anonymously)
2. Gender
 - 1 male
 - 2 female
3. Age _____ years
4. How long have you worked in your present job or in a similar job?
_____ years
5. How long is your usual workday?
_____ hours
6. How many hours per day do you work with a computer?
_____ hours
7. Do you use the mouse?
not at all
now and then
quite a lot
constantly
8. Do you use glasses?
no
ordinary monofocal lenses
reading glasses
multifocal lenses
bifocal lenses
other
9. Have your glasses been prescribed especially for your work (viewing angles and distances)?
yes
no
10. Have you had **eye discomfort** (tiredness, smarting, 'sand in the eyes') **during the past 12 months?**
not at all
a little
to some extent
a lot

11. Has **headache** handicapped your daily activities **during the past 12 months**?

- not at all
- now and then
- quite a lot
- constantly

12. Has **pain or discomfort** in the following parts of the body handicapped your daily activities **during the past 12 months**? Tick as appropriate.

	pain or discomfort	not at all	a little	to some extent	a lot
1. in the neck					
2. in the shoulders					
3. in the elbows and forearms					
4. in the wrists and fingers					
5. in the lower back					
6. in the legs and feet (e.g. swelling)					



13. Assume that **your work ability** at its best has a value of 10 points. How many points would you give your current work ability?

0 1 2 3 4 5 6 7 8 9 10
 Unable to work work ability at its best

***End of questionnaire.
 Thank you for your participation***