Work Efficiently and Safely

Workstation Ergonomics

Human Resources
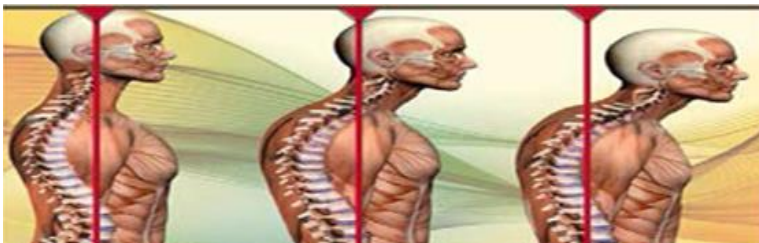
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What is Covered?

Apply Ergonomic Principles to…

- Work efficiently and safely.

- Reduce or limit pain or discomfort.

- Reduce the risk of injury from your workstation.

- Minimise the pressure on your neck, shoulders, backs and legs as awkward postures can strain your back and neck.

Sustained awkward postures place strain on your spine.
Diagram. Purdue University

The Basics of Good Postures

- Sit in a way that supports good postures, which are frequently changed, as work and visual demands change.

- Experiment and trial new postures, as there is not a single correct way to sit at a workstation, and vary your tasks so that you are using different muscles throughout the day.

- Extended periods, in similar postures, can lead to fatigue or the overloading of body parts.
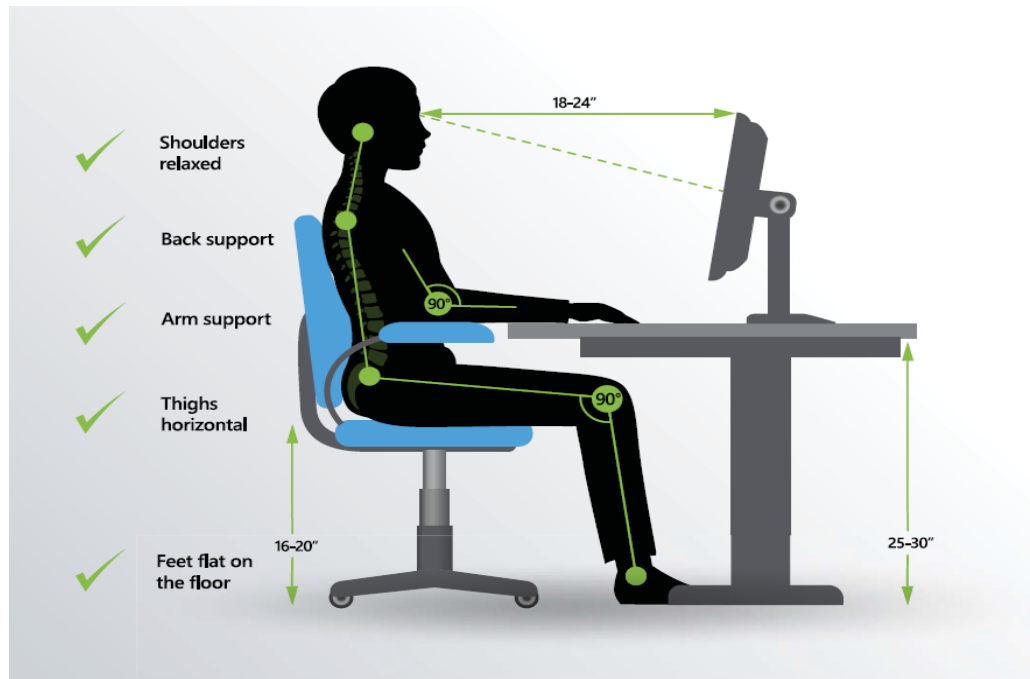
Your Sitting Posture

- Place your body close to the desk with your head and neck facing forward in a midline position.

- Keep your shoulders symmetrical and relaxed, and your elbows close to your body.

- Use the preferred keying posture (see page 14).

- Your knees should be at the same level as your hips or slightly lower.

- Maintain a gap, equivalent to 2-3 finger lengths, between the front of your chair and knees, and keep your feet flat on the floor or use a footrest. Also, ensure that your back is adequately supported by the backrest.
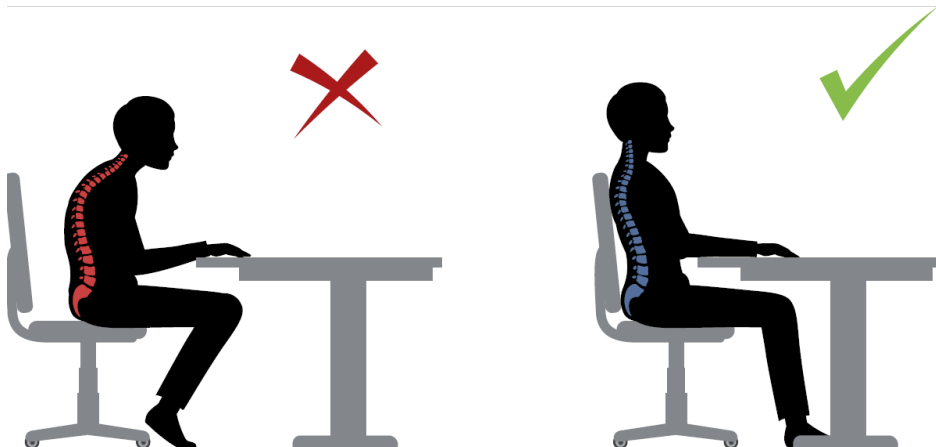
Position Yourself the Right Way

You should be well balanced over the chair prominences.
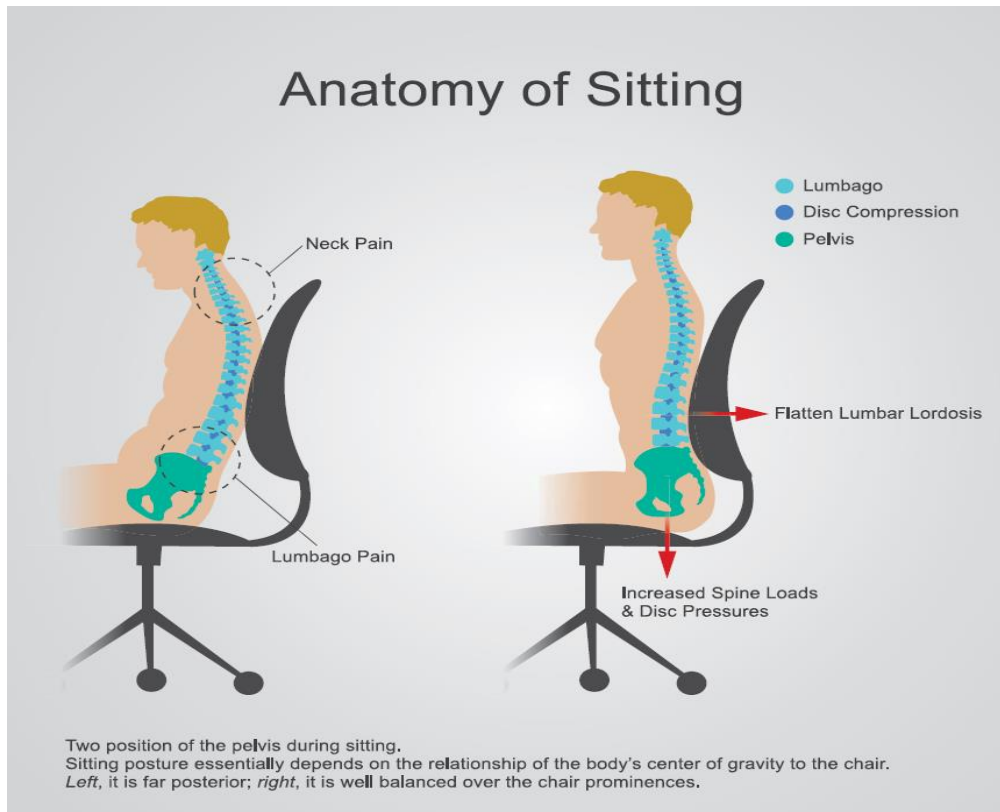
Position a Single Monitor

- Your monitor should be positioned directly in front of you to avoid awkward postures.

- Adjust the monitor so that your eyes are hitting the top third of the monitor (wearers of multi-focal lenses and reading glasses will position the monitor at a lower height).

- You should be at an arms' length from the monitor.

- Adjust the font size or display so that you can easily read content.

Position Multiple Monitors

You Should:

- Minimise the gap between your monitors.

- Position the screens at the same height.

- The primary monitor, which is typically the largest screen, should be positioned straight ahead so that you avoid twisting your body.

- Maintain a neutral body position while you are viewing multiple screens.

- The monitors can be placed at a longer working distance to avoid having to turn the head and body as much, to see the display.

Do You Frequently Use Multiple Monitors?

If you use these screens with equal frequency:

- Arrange the monitors in an arc.

- Place the screens at an equal viewing distance from you.

- Position the screens right next to each other.

What is the Optimal Height?

Adjust the height of your chair, so:

- Your feet are resting firmly on the floor (reducing the weight on your feet and legs).
- The highest point of the seat is at the same level or just below your knee cap.
- You are not feeling pressure near the back of the seat.

Positioning Your Back Rest

- Optimise the height of your back rest to support the natural curve of your lower back.

- Tilt the back rest so that you are sitting comfortably and supported.

- Angle the back rest at approximately 90-110 degrees.

Position Your Seat Pan

- Ensure that your thighs are fully supported by the seat pan and the front of the pan is not pressing against the back of your knees.

- If you need to make an adjustment, the pan may be adjustable. Alternatively, use a back support.

- Adjust the seat tilt for comfort and weight distribution. A tilt of 5 degrees is normally ideal (i.e. with the seat pan sloping downwards).

Armrests

You should be able to rest comfortably on your armrests, with relaxed shoulders.

Remove them if they:

- Stop you from moving close to your desk and comfortably positioned in front of the keyboard and screen.
- Interfere with your use of the keyboard and mouse.
- Restrain you from using the chair or easily getting up.
- Aren't adjustable.
- Result in you twisting your back sideways when leaning on the armrests.

Using Your Mouse

- Position your mouse on the same level as your keyboard so that it is in easy reach.

- Keep your shoulders in a neutral position when you use the mouse.

- Reduce fatigue by using different hands, throughout the hand, to use your mouse.

Do You Need a Document Holder?

Assess whether to use a Document Holder as this equipment can reduce or eliminate head and neck fatigue, headaches and eye strain.

If you already have a horizontal or vertical Document Holder, position this equipment between your keyboard and monitor.

Using Your Keyboard

- Maintain the recommended seating position while you are using your keyboard.

- Position the keyboard straight in front so that your forearms are supported and you avoid twisting your neck or body.

- Your fingers should be positioned comfortably on the middle row of keys.

- Position your keyboard so that it is either flat or negatively inclined (titled slightly away from you) and your wrists are straight when you are touching the middle row of this device.

- Hover over the keys without lifting your shoulders or winging your wrists/arms.

Minimise Glare

- Access good lighting so that you can see clearly and perform your work safely.

- To reduce glare from natural light, position your monitor so that your line of sight is parallel to the window. If this is not an option, consider covering part or all of the window.

- Contact the Concierge Desk (concierge@acu.edu.au) to reposition or redirect lights if they are contributing to screen glare.

Optimise the Layout of Your Desk

Keep frequently used items within arms' reach to minimise the strain on your muscles. Items that you use occasionally should be positioned further way from you.
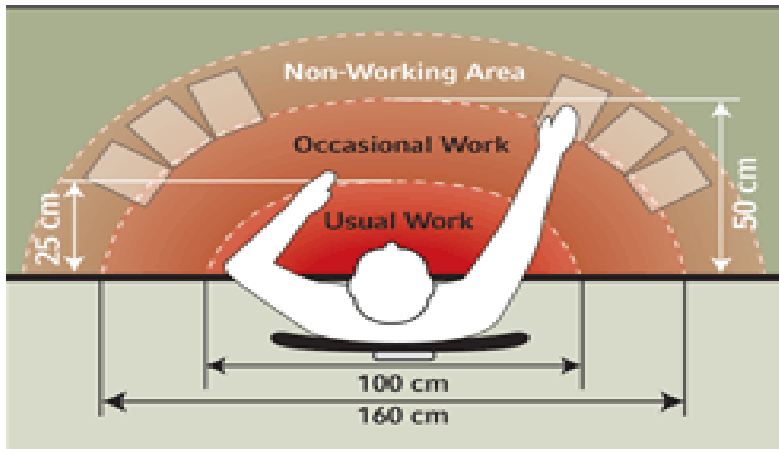

Diagram. Buildings. Smarter Facility Management

Use Your Laptop Efficiently

- Continue to maintain good postures when you are using a laptop.

- If you are using laptops for extended periods of time, it is strongly recommended that a 'docking station' is used which is connected to a keyboard, mouse and monitor.

- If you do not have access to a docking station, an external keyboard, mouse and monitor stand are recommended.

Keep Moving and Burning Energy

Remember to:

- Regularly change postures between sitting, standing and moving to break sedentary habits and burn energy.

- Avoid using this desk as a substitute for regular exercise.

- Listening to your body and sitting down, whenever you experience fatigue in the standing position.

- Building up endurance for standing.

- Wearing low heel and supportive shoes.

- Obtaining medical advice to verify the suitability of this type of desk if you are pregnant, suffer from leg pain, varicose veins or have pre-existing musculoskeletal problems, including lower back pain.

Develop the Right Postures

- When you are standing, you should be facing forward and your eyes should be aligned with the top of the screen.

- The top of the standing desk surface should be at elbow height or just below.

- Adjust the workstation so that your keyboard and mouse can be comfortably used on the same level and they should be positioned close to each other.

- Place the keyboard directly in front of you so that your forearms support you, at the front of the desk, when you are typing.
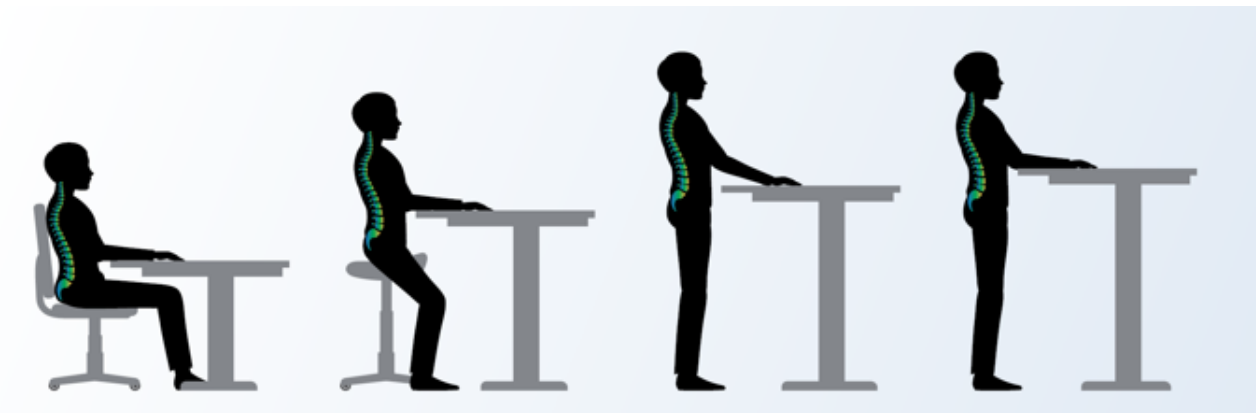
Are you experiencing fatigue?

Review these common contributing factors to fatigue and apply these trouble shooting tips:

Affected Body Part	Common Contributing Factors	Tips for Resolving
Back of neck	Looking down at documents or keyboard	• Use a document holder • Improve your keyboard skills • Check monitor height
Side of neck	Looking to one side	• Locate documents and screen in front of you
Top of shoulder, outside or front of shoulders	Keyboard is too high, arms unsupported	• Raise chair, use footrest, rest palms on desk, reduce desk height (if adjustable)
Lower back	Inadequate lumbar support	• Adjust backrest height and angle to give firm support, remove arms from chair, remove obstructions under desk, such as drawer.
Upper back	Twisted posture	• Sit straight on • Locate documents, screen and documents in front of you
Right arm or shoulder	Arm outstretched and unsupported	• Move mouse closer • Use single surface desk

Are you experiencing fatigue? (Continued)

Affected Body Part	Common Contributing Factors	Tips for Resolving
Left arm, shoulder or neck	Reaching for telephone or cradling phone on shoulder	• Bring phone in closer to the body • Use a headset
Leg discomfort, swollen feet	Underside of thighs are compressed against chair seat	• Use footrest • Reduce desk and chair height
Headaches	Posture, visual problems, noise, stress, glare, high workload	• Rearrange work area, re-direct traffic, use a screen filter, rearrange work area, re-direct traffic, use a screen filter, close blinds, shut door, vary tasks, take micropauses, smooth out workflow, reduce computer time, schedule an eye test.
Eye fatigue, temporary short sightedness	Visual problems, screen too close, screen reflections	• Rearrange work area • Use a screen filter • Close blinds, • Vary tasks • Order an eye test

If you are still experiencing pain after applying these trouble shooting tips, contact Human Resource's WHS staff (hr@acu.edu.au or ext. 4222) about a referral for an ergonomic assessment. Ergonomic assessments are also obtained whenever staff members have sustained an injury.

Take Regular Breaks and Stretch

You increase the risk of a workstation injury by moving forcefully, repeating motions, sustaining awkward postures, and by not taking adequate rest breaks.

To manage this risk:

- Take short frequent breaks from your computer to stretch your neck, eyes, head, neck, eyes, chin, back, shoulders, legs, feet, wrists and arms. Rest breaks and break time exercises and stretches can strengthen your body and help you to recover.

- Develop good postures which are varied, throughout the day.

- Go online and search for some stretching exercises that you can apply throughout your working day.