



Computer Workstation Ergonomics

Self-Setup Guide

Use this guide to setup your workstation while in the office or working from home on a regular or extended basis.

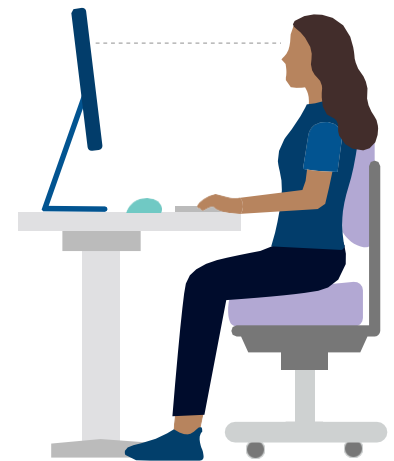


PennState

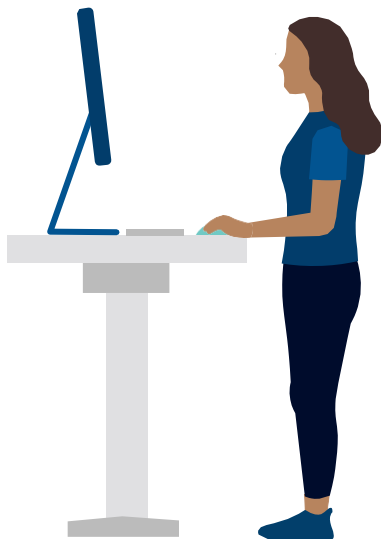
Environmental Health and Safety
Phone: (814) 865-6391

Seated Posture

1. **Head, neck, and trunk** should be upright and in-line (not tilted forward or back or twisted).
2. **Trunk** should lean slightly back (about 100 degree recline angle, never forward). Make sure to use the back rest.
3. **Shoulders and upper arms** should be in-line with the torso and relaxed (not elevated or cupped forward).
4. **Upper arms and elbows** should be close to the body (not extended outward to front or sides).
5. **Forearms, wrists, and hands** should be straight and in-line with elbows and same height as keyboard (elbows bent at about 90 degrees).
6. **Wrists and hands** should be straight (not bent up/down or sideways) and not rest on sharp or hard edges.
7. **Thighs** should be parallel to the floor and the **lower legs** should be close to vertical (knees may be slightly elevated above hips, never below).
8. **Feet** should rest flat on the floor or a stable footrest (books, piece of wood, wrapped reams of paper, etc.).



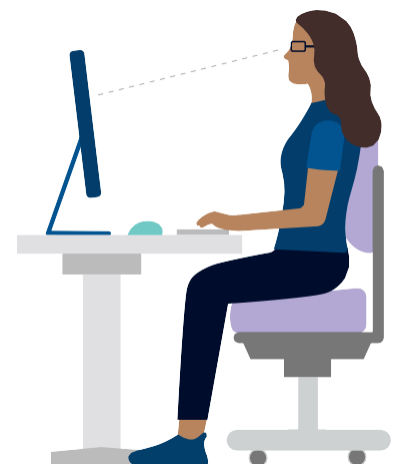
Normal Vision Set-Up



Standing Desk Set-Up

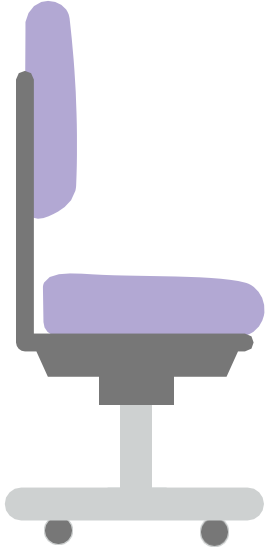


Seated Posture



Bi-focal Set-Up

Chair Adjustments



1. **Backrest** should provide full support and you should sit back against the cushion. The goal is for your torso and head to be supported by your chair and spine, not your muscles. If you do not have a computer task chair, try using a pillow to help support your back. Make sure the pillow is large enough to cover the entire back rest.
2. **Seat width** and **depth** should fit the user. (seat pan is not too wide or too long).
3. **Seat pan front edge** should not press against the back of your knees or lower legs (seat pan not too long). A pillow behind your back may help with this as well.
4. **Seat** should have adequate cushioning and be rounded in front (no sharp edge).
5. **Armrests**, if used, should lightly support both forearms while performing tasks and should not interfere with movement. Never support your body weight on chair arms.

Keyboard and Mouse

1. **Keyboard/mouse platform(s)** if present, should be:
 - stable and large enough to hold a keyboard and mouse.
 - flat so that wrists and forearms are not bent.
 - set about the same height as elbows so that wrists and forearms are not bent.
2. **Mouse** or **trackball** should be next to your keyboard and as close as possible to prevent reaching.
3. **Mouse** speed should be set so you only need to move about an inch to move cursor across the screen.
4. **Mouse** or **trackball** short-cut keys should be used as often as possible to minimize use in general.
 - Shift + Arrows = Highlights text
 - CTRL + X = Cut
 - CTRL + C = Copy
 - CTRL + V = Paste
 - CTRL + S = Save
 - CTRL + P = Print
 - CTRL + O = Open
 - ENTER = "Ok"
 - ESC = "Cancel"

Monitor



1. **Monitor height** should be set so the top of the screen is at or slightly below eye level so you can read without tilting your head or neck down/back.
2. **Bifocal/trifocal users** should set monitor/chair height so you can read without tilting the head back.
3. **Monitor distance** or **text size** should allow you to read without leaning your head, neck, or trunk forward/ backward.
4. **Monitor position** should be directly in front of you, so you don't have to twist your head, neck, or torso.
5. **Glare** (from windows, lights) should not be reflected on your screen, which can cause you to assume awkward postures to see clearly.

Laptops

1. **Laptops** for long term stationary use at a workstation should have:
 - stand-alone monitor(s). If not, laptop should be placed on a stand or on a few books for proper height.
 - Separate keyboard and mouse.
2. **Laptops** for short-term projects and field work should not need any adaptation (e.g., field work, short meetings, etc.).



Work Area

1. **Thighs** should have sufficient clearance under desk or keyboard/mouse platform (e.g., thighs are not trapped).
2. **Legs and feet** should have sufficient space under the work area so you are able to get close enough to sit with proper postures. No extra clutter under desk or table.

Accessories

1. **Document holder**, if provided, should be:
 - stable and large enough to hold the type of documents you most commonly work with.
 - placed at about the same height and distance as the monitor to reduce head movement or the need to re-focus when you look from document to screen. Or if possible, place slightly below and between you and the monitor.
2. **Wrist/palm rest**, if provided, should:
 - be padded and free of sharp or square edges that pinch on your wrists.
 - should allow you to keep your forearms flat, wrists/hands straight and in-line.
 - never be used as a solid rest. Palms or hands should slide across pad when typing or using mouse.
3. **Phone** should only be used with your head upright (not tilted) and your shoulders relaxed (not elevated).
 - **Avoid cradling the phone.** If your hands are free, you do not need to cradle the phone. Use headset or speaker when available/feasible.
4. **Printer** should be accessed by standing, rather than leaning and reaching. This will also give you a short break out of your chair while you review your work.

General

1. Work should be organized in a way that allows you to vary tasks with different activities, using different muscle groups when possible.
2. **Take frequent micro-breaks**, out of your chair if sitting. If standing, take frequent sitting breaks.
3. **Micro-breaks or task changes should be 2-3 minutes and occur at least every 30 minutes.** If you are busy, you can still take phone calls, read mail, file papers, etc.