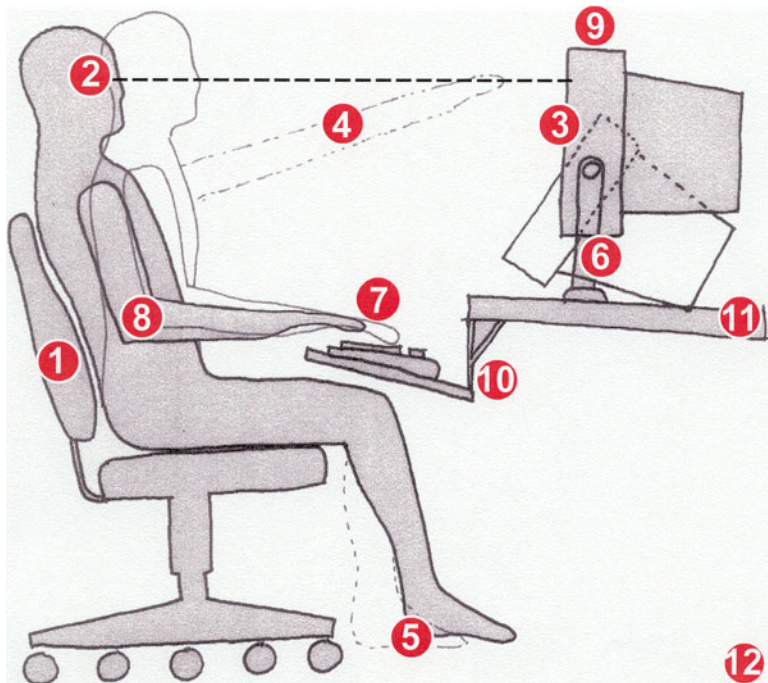


Computer Workstation Ergonomic Self Evaluation

Use this guidance to perform a preliminary evaluation of your workstation, and make any adjustments that are necessary to achieve a correct neutral posture. If you need instructions on how to operate the adjustable features of your workstation or chair, contact your supervisor or unit IIPP coordinator. Guides to adjusting chairs are also available on the manufacturer's websites. Additional ergonomic information is also available at:



<http://ehs.ucsc.edu/safety/ergonomics.php>

1. Adjust the back support of your chair so that it supports your lumbar spine. It is acceptable to sit upright or slightly reclined, as long as your back is supported and your spine retains its proper shape. If your lumbar support is not adjustable, adding a rolled up towel or small cushion may help. Most chairs are able to either recline or be locked upright, so experiment to find the proper type of support for your back.

2. The top inch of visible monitor screen should be level with your eyes. If you lean back while working, adjust the monitor lower to accommodate your more typical seated position.

3. Move light sources or cover windows to remove glare or reflections from the screen. Ensure default color choices for applications maximize contrast and ease of use. The monitor screen should be at 90 degrees to your line of vision, and not tipped too far upward. Proper monitor positioning is essential to avoid eye strain.

4. The distance to the monitor should be such that when you are seated comfortably, you can see the screen clearly without needing to squint or lean forward. If you lean forward in your seat, you may experience back or neck pain from this posture. Move the monitor as often as necessary to maintain comfortable viewing distance.

5. Your feet should rest flat on the floor. Lower your seat until this happens and you feel the pressure ease off from the underside of your thighs. Your monitor and keyboard should be adjusted so you can sit down at this level. If they do not move low enough, raise the seat pan and procure a footrest so that when you are seated higher, you are still supported correctly, with your hips and knees at the same level.

6. If you spend significant time working from documents to the screen, you should have a document holder instead of placing papers flat on the desk and leaning or twisting your neck to see them. For lightweight items, a monitor-mounted holder works well. For frequent, intensive use, an inline holder is best. For intermediate and occasional use, a freestanding holder next to the monitor usually is satisfactory.

7. Your wrists should be flat and straight in relation to your forearms when using the keyboard or mouse. Look at your hands as you type - is your middle finger in a straight line following the bones of your forearm (not deviating left or right)? If not, you may need a different keyboard. This is common if you have broad shoulders, long arms, and large hands, any of which can make a standard straight keyboard uncomfortably small. There are a number of alternative keyboards to solve this problem. People with narrower shoulders and a small build should not use a keyboard that is too large for them; this may cause elbow problems. If you rest your palms on the desk while typing, your wrist is bent back to reach the keyboard and you should have a soft palm-rest to level out that angle.

8. (a) Your arms should hang relaxed and close to your body with no effort put into keeping your shoulders in position or your elbows out. Your elbows should be bent at about a 90 degree angle - perhaps a little more open, but no less. If the angle is too large, your wrists will need to bend back to reach the keyboard, and you need your forearms to be level.

(b) Look at the reach to your mouse. If it is on the right side, you may have significant external rotation at the elbow and/or stress in the shoulder. To alleviate these problems, you need to either move the mouse to the left side of the keyboard and use your left hand (it takes about two weeks to make the transition completely) or find a way to move the mouse closer to the space bar on the right. This may mean getting a keyboard with a built-in mouse, or without a number pad, or changing to a centered mouse device. Call EH&S for advice in this matter.

9. The monitor and keyboard should be centered in front of you, not off to an angle. There should be a straight line from your nose to your belly button to the center of the space bar to the center of your screen. There should be no twisting in your shoulders or neck. Centering the keyboard properly often pushes the mouse too far away to the right. This means you need to reposition the mouse, not use the keyboard in an incorrect posture.

10. Adjust the keyboard tray to a negative tilt, which means tilting down as it goes away from you. At no time should the keyboard be tilted upward toward the back; this increases wrist angles and stresses. If your keyboard has little feet in the back, lower them to remove tilting.

11. Take frequent microbreaks i.e. 20 seconds to 2 minutes. It is far better to take regular microbreaks than a few large ones. Rotate your tasks so you are not doing the same motions for too long at a time. Do some stretches at least once an hour, and remember to look away from your screen every 20 minutes, focus on something at least 20 feet away, and hold that distant focus for at least 20 seconds. This can help prevent eye fatigue and premature near-sightedness. It is far better to take many small breaks than a few large ones.

12. (a) If you spend more than half your time at the computer and have not taken any ergonomic training, please sign up for one of the computer ergonomics classes at bas.ucsc.edu/events. The class is an hour long and covers the basics of correct workstation set-up and the types of alternatives available.

(b) Report any work-related discomfort or symptoms immediately. Repetitive strain injuries only get worse with continued exposure, so follow all the advice in this guide and ask for help in changing your workstation as soon as you notice it's affecting you. If you feel you need medical treatment as a result of symptoms caused by your workstation, inform your supervisor or contact Risk Services at 9-2850.

(c) If you identify a need for new equipment or changes to your workstation that you cannot accomplish on your own, talk to your supervisor. UCSC strives to make all reasonable ergonomic improvements necessary to prevent employee injuries. EH&S has information on equipment types and a variety of example keyboards and pointing devices which are available for loan so that you may try them before committing to a purchase.

(d) EH&S provides ergonomic assessments to employees who are experiencing discomfort which they cannot resolve. Please call 9-1448 to schedule an ergonomic evaluation if you are experiencing symptoms you believe are related to your workstation, or if you have identified ergonomic problems but are not sure of the best solutions. Have the self-assessment checklist completed when calling to help EH&S target your problems.

Phone: If you spend more than an hour a day in combined phone and desk tasks that cause you to balance the phone between your neck and shoulder, you should request a headset from your supervisor. If your job requires you to access materials away from your desk while on the phone, a wireless unit would be the preferable choice.

Lighting: Individual sensitivities to light vary enormously, so you should adjust the light levels of your work area to your taste. This may require negotiating for some overhead fixtures to be darkened, or requesting task lighting to increase the available light on your desktop.

Ergonomic Set-Up Completion Checklist

After reviewing the guidelines provided on the previous two pages, answer the questions below and review this list with your supervisor. If the answer to any question is "no" this indicates a need for an ergonomic change to avoid the risk of repetitive stress injury. Document the intended change in the space below each finding or on the back of this page. Contact EH&S if you need assistance. When you have completed the checklist, sign below and give your supervisor a copy of the form.

- Y/N Do your feet rest flat on the floor or a footrest?
- Y/N Are your knees bent at approximately a 90 degree angle?
- Y/N Does your chair support your lower back?
- Y/N Is there about 2-3 inches between the front of the seat pan and the back of your knees?
- Y/N Can you easily reach your work without interference from the arms of your chair?
- Y/N Are your arms and shoulders relaxed without interference from the arms of your chair?
- Y/N Are your shoulders relaxed and not elevated when you work on your keyboard?
- Y/N Are your arms resting at your sides rather than stretched out in front of you?
- Y/N Can you reach your mouse without rotating your arm outward or reaching to the side?
- Y/N Is your keyboard at approximately elbow level, with your forearms level and flat?
- Y/N When typing, are your wrists in line with your forearms and not bent upward or to the sides?
- Y/N Is the top of your computer screen at or just below eye level?
- Y/N Can you see detail comfortably on the screen without leaning forward?
- Y/N Are you able to read the entire screen comfortably without tilting your head up or down?
- Y/N Do you have an adjustable document holder for reference materials if you type from paper to the screen?
- Y/N If you spend more than an hour a day in combined computer and phone work, do you have a headset?
- Y/N Are all your input devices (mouse, tablet, etc.) at the same level as your keyboard?
- Y/N If you use an adding machine, is it close and easy to reach?
- Y/N Are your keyboard and monitor located on a centered line in front of you?
- Y/N Do you take short and frequent breaks throughout the day to reduce fatigue?
- Y/N Are you comfortable and free of pain while working?

WORKSTATION USER: _____ Date: _____

SUPERVISOR: _____ Date: _____

Signature indicates only that form has been completed and reviewed.