

TIER 1 DEPARTMENTAL COMPUTER WORKSTATION EVALUATION FORM

UC DAVIS ENVIRONMENTAL HEALTH & SAFETY

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EMPLOYEE INFORMATION				
Employee Name _____		Phone _____		Date _____
Dept _____		Bldg. _____		Room _____
E-mail _____		Job Title _____		
Supervisor _____		E-mail _____		Phone _____ Date of Hire/Transfer _____
Reason for Evaluation: <input type="checkbox"/> New hire <input type="checkbox"/> Office move <input type="checkbox"/> Supervisor requested <input type="checkbox"/> Other: _____				
Average Daily Computer Use: <input type="checkbox"/> < 2 hrs <input type="checkbox"/> 2-4 hrs <input type="checkbox"/> > 4 hrs Number days/week worked: _____				
<input type="checkbox"/> Right Handed <input type="checkbox"/> Left Handed				
DISCOMFORT REPORTED				
<input type="checkbox"/> Not experiencing discomfort <input type="checkbox"/> Has had some discomfort <input type="checkbox"/> Currently in discomfort <input type="checkbox"/> Other: _____		Location of Discomfort: <input type="checkbox"/> Neck <input type="checkbox"/> R / L Shoulder <input type="checkbox"/> Back <input type="checkbox"/> R / L Elbow/Forearm <input type="checkbox"/> Legs <input type="checkbox"/> R / L Wrist/Hand <input type="checkbox"/> Eyes <input type="checkbox"/> R / L Thumb		Comments: _____
WORKSTATION SET-UP				
CHAIR	YES	NO	CHANGES MADE	
Model: _____				
Back against/supported by backrest?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Backrest adjusted	<input type="checkbox"/> Employee re-positioned
Seat depth OK?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Depth adjusted	
Seat tilt OK?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Seat pan tilt adjusted	
Seat width OK?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Arm width adjusted	
Armrests supporting arms shoulders relaxed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Height adjusted	<input type="checkbox"/> Armrests adjusted
Armrests allow close access to desk/keyboard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Armrest caps reversed	<input type="checkbox"/> Armrests removed
Feet supported by floor/footrest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Chair seat height adjusted	<input type="checkbox"/> Footrest adjusted
KEYBOARD			CHANGES MADE	
Shoulders relaxed and open?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Keyboard/employee re-positioned	
Elbows slightly open (100–110 degrees)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Keyboard raised	<input type="checkbox"/> Keyboard lowered
			<input type="checkbox"/> Chair adjusted	
Keyboard within easy reach (arms by sides)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Keyboard/employee re-positioned	
Keyboard centered to body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Keyboard/employee re-positioned	
Wrists straight and centered when resting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Keyboard tilt adjusted	<input type="checkbox"/> Wrist rest adjusted
Wrists aligned when typing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Instructed to keep wrists aligned	<input type="checkbox"/> Instructed to float
Fingers/thumbs relaxed when typing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Instructed to relax digits	<input type="checkbox"/> Instructed to reduce force
POINTING DEVICE			CHANGES MADE	
Model or Type: _____				
Pointer same level/adjacent to keyboard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Pointer re-positioned	
Pointer easy to reach?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Pointer re-positioned	
Wrists straight and level when pointing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Pointer re-positioned	<input type="checkbox"/> Wrist rest removed
Wrists aligned with forearms when pointing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Instructed to keep wrists aligned/move larger joints	
Finger/thumbs relaxed when pointing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Instructed to relax digits	<input type="checkbox"/> Instructed to reduce force/grip
Uses pointer without fatigue/discomfort?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Alternate/change hands	<input type="checkbox"/> Use keystrokes
			<input type="checkbox"/> Take breaks	
Mouse speed optimized?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Speed adjusted	
MONITOR			CHANGES MADE	
Monitor in center front of user?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Re-positioned to center front of worker	
Comfortable viewing distance? (@ an arm's length)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Re-positioned to appropriate distance	
Screen slightly below eye level?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Height lowered/raised _____	
			<input type="checkbox"/> Chair height adjusted	
Screen tilt perpendicular to eye gaze?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Tilt adjusted	
Screen free of glare or reflections?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Tilt/position adjusted	<input type="checkbox"/> Blinds/lights adjusted
			<input type="checkbox"/> Brightness ↓	
Screen free of flicker?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Refresh rate ↑ (if available)	
Monitor font size appropriate for vision?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Font size adjusted	

DOCUMENTS	YES	NO	CHANGES MADE
Documents in-line with monitor and angled?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Re-positioned in front/close to monitor
Neutral neck posture maintained while reading/writing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Re-positioned to reduce bending when writing
TELEPHONE			CHANGES MADE
Awkward neck postures avoided during phone use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Headset installed <input type="checkbox"/> Use speakerphone <input type="checkbox"/> Employee instructed to avoid cradling handset
Is phone within easy reach?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Phone re-positioned closer <input type="checkbox"/> Phone elevated/angled
WORKSTATION			CHANGES MADE
Materials positioned within close reach?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Files, notebooks, etc. re-positioned
Leg clearance OK?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Boxes, equipment, etc. re-positioned
Lighting OK?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Lights dimmed <input type="checkbox"/> Blinds adjusted <input type="checkbox"/> Lights reduced
WORK HABITS			CHANGES MADE
Sits supported against seat backrest?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Repositioned
Sits balanced rather than leaning to side?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Instructed in posture/body mechanics
Takes regular breaks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Instructed to take frequent breaks <input type="checkbox"/> Alternate tasks
WORKSTATION RECOMMENDATIONS			
CHAIR			
<input type="checkbox"/> Seat cushion	<input type="checkbox"/> Remove armrests		
<input type="checkbox"/> Back cushion	<input type="checkbox"/> New chair		
<input type="checkbox"/> Footrest			
KEYBOARD			
<input type="checkbox"/> Replace keyboard tray	<input type="checkbox"/> Low profile wrist rest		
<input type="checkbox"/> Re-position keyboard tray	<input type="checkbox"/> Standard wrist rest		
<input type="checkbox"/> Install corner bridge	<input type="checkbox"/> None		
<input type="checkbox"/> Split keyboard			
POINTING DEVICE			
<input type="checkbox"/> Mouse bridge	<input type="checkbox"/> Alternative mouse		
<input type="checkbox"/> Mouse pad	<input type="checkbox"/> Track ball with center ball design		
MONITOR/DOCUMENTS			
<input type="checkbox"/> Monitor riser	<input type="checkbox"/> Glare guard		
<input type="checkbox"/> Monitor arm	<input type="checkbox"/> Task lighting		
<input type="checkbox"/> Replacement CRT	<input type="checkbox"/> Light filters		
<input type="checkbox"/> Flat panel	<input type="checkbox"/> Remove overhead bulbs		
<input type="checkbox"/> Document holder			
TELEPHONE			
<input type="checkbox"/> Headset	<input type="checkbox"/> Extension arm		
<input type="checkbox"/> Tilt stand			
WORKSTATION			
<input type="checkbox"/> Reduce clutter	<input type="checkbox"/> Use CPU trolley		
<input type="checkbox"/> Re-position CPU	<input type="checkbox"/> Replace workstation		
<input type="checkbox"/> Re-organize files			
COMMENTS			
_____			_____
Evaluator			Date

INSTRUCTIONS: TIER 1 DEPARTMENTAL COMPUTER WORKSTATION EVALUATION FORM

UC DAVIS ENVIRONMENTAL HEALTH & SAFETY

The Computer Workstation Evaluation form is provided by Environmental Health & Safety to give you an efficient and concise method of documenting your findings, interventions and recommendations.

The form is divided into four basic sections:

1. Employee Information
2. Discomfort Reported
3. Workstation Set-up
4. Workstation Recommendations

Employee Information

The employee information section includes basic information concerning the employee's job title, location, department and supervisor. It is important to maintain contact with both the employee and the supervisor throughout the evaluation process.

The date of the evaluation, reason for the evaluation, the average computer use per day and number of days per week worked should be filled out.

Discomfort Reported

This section includes issues that the employee is having while working. Ask the employee if they are having discomfort. If so, they should identify the location of the discomfort.

If the employee is not having discomfort, ask them if they have had discomfort in the past.

Use the "Other" section to explain any discomfort as it relates to work tasks. Do not include medically sensitive information such as medical diagnosis, medications or medical restrictions. If the employee has filed a workers compensation claim, refer them to Employee Health Services for a Tier III Ergonomic Evaluation.

List any other information relevant to discomfort under "Comments". For example, this could include tasks that create discomfort, or length of time worked before discomfort is experienced.

Workstation Set-up

Chair:

Indicate the chair model if known. Many chairs have the manufacturer's name and model printed on a tag under the seat. However, do not put yourself at risk of injury by flipping the chair by yourself.

Observe how the person sits while performing work tasks. Ask questions such as:

- "Do you know how to adjust your chair?"
- "Can you move around your workstation easily in your chair if you need to?"
- "Does your chair support your lower back?"

Indicate any changes you are able to make during the evaluation to improve the chair or the person's sitting posture.

The second page of the evaluation has a section to make recommendations. The "Chair Recommendations" range from adding a seat or back cushion, using a footrest, removing armrests to providing a new chair. Remember, it is not always necessary to buy a new chair to provide adequate support.

Keyboard:

Observe how the employee uses the keyboard. Determine whether they are typing with their shoulders relaxed, elbows slightly open, and wrists straight with hands aligned with forearms. Look for proper typing technique. They should be floating above the wrist rest or keyboard and using light force. Thumbs, fingers, and knuckles should be in a relaxed position.

Make sure the keyboard is centered and within close reach. Employees have a tendency to lean forward (resulting in an unsupported back) if the keyboard is not close enough.

It does not matter whether the employee is using a keyboard tray or the desktop as long as they are positioned properly and using good technique. If problems are evident, reposition the height, tilt or placement of the keyboard to improve posture.

If the keyboard cannot be repositioned as needed, indicate recommendations. They can range from using an alternative keyboard or wrist rest to getting a new keyboard tray. If you recommend a keyboard tray, make sure to indicate where it should be installed on the desk. If you recommend a new keyboard, indicate the type of computer (PC, Mac) and the type of connection (USB, PS2).

Pointing Device:

Indicate model or type of pointing device used. It is important to position the pointer adjacent to and approximately level with the keyboard. Determine whether wrists are straight and hand aligned with forearm during use. Fingers should be relaxed with device held in a loose grip.

Identify changes made during the evaluation. These can include re-positioning the pointer, or changing technique used to operate the pointer. Suggestions can include reducing grip, relaxing fingers, using arm and shoulder rather than wrist or changing the style of pointer. Techniques to reduce pointing can include using keystrokes, adjusting pointer speed, and taking more frequent breaks.

Many employees use a wrist rest in front of the mouse. Check to make sure the wrist rest is the right height and does not encourage the worker to plant his wrist and turn sideways to move the mouse. Remove it if problems are observed. Instruct the employee in correct mouse operation.

Make sure that the mouse cord is managed with guides or positioned appropriately. Be sure to check that there is sufficient cord length to allow placement of the mouse as desired.

Ask the employee whether they are currently having discomfort when they mouse. If so, review techniques, pacing guidelines and breaks as needed.

Monitor:

Look to see if the monitor is directly in front of the employee. (The keyboard should also be positioned between the employee and the monitor.)

The viewing distance (distance between the employee and monitor) depends on available space and the employee's visual acuity. Generally, it should be at least arm's length distance. Most employees will find it more comfortable to look at the monitor when it is positioned as far away as possible; however, it should still be close enough to read the font size comfortably. Consider increasing the size of the font if necessary. Make sure that program windows fit on the screen comfortably for easy viewing if you increase the font size. If they don't, the user will have to use more mouse movements to work.

The height of the monitor should allow the employee to view the screen at a slight downward gaze while holding their head upright. Employees who wear bifocal lenses will want the screen somewhat lower to avoid awkward neck posture.

Since monitors are getting larger with 21" monitors often seen in the workplace, do not follow the old rule of positioning the top of the screen slightly below eye level. It might not be possible to accomplish the placement due to the height of the desk. Try to consider the position of the screen most frequently viewed, and adjust the height so that this area is at a comfortable height.

Remember to consider both the height and the tilt of the screen. The screen should be tilted so that it is perpendicular to the viewing angle. If viewed with a slight downward gaze, the screen should be tilted upwards (with the bottom slightly closer to the employee than the top). If the monitor must be viewed with an upward gaze (this is not recommended), the screen should be tilted downward.

Look for glare on the screen. (Be sure to evaluate glare from the angle and position of the employee sitting at the monitor.) Generally, if the employee can see reflections of light or their own reflection on the screen, there is a glare issue. Try to eliminate the source before resorting to a glareguard or hood. These devices only mask the problem. Glareguards will reduce the glare, but often reduce screen clarity. If recommending a glareguard make sure to select one that is made of high quality glass. If window glare is a problem, the glareguard should be polarized.

To eliminate window glare, close blinds or shades. If this is not an option, consider moving the computer so that the monitor is at least 3 feet away and at right angles to the window. If directly in front of the window, the contrast between the screen and the window brightness can cause eye discomfort.

Many monitors are delivered with a preset refresh rate of 60 Hertz. Flicker can be evident at this refresh rate, especially if the monitor is near a bright light source such as a window. Increase the refresh rate by going into the Control Panel and selecting Display. The rate can be changed by going into Advanced Settings and selecting the Monitor tab. Try to increase it to at least 75 Hertz. If your computer does not have this setting available it may be accessible directly on the monitor controls.

Documents:

Ask the employee how frequently they either view or write on source documents. Check to make sure they are easy to see and reach. Placement will depend on frequency of use as well as size and quantity of documents. There are several document holder styles to select from if one is needed. Choice will depend on space available on the desk, size of documents, height of bottom of screen (for placement between screen and keyboard) and need to write on documents.

Telephone:

The telephone should be positioned within close reach if frequently used. Generally, the phone should be on the same side of the desk as the ear used. Most of the time, the employee will naturally use the arm on the same side of the body as the listening ear to reach for the phone. Make sure they are not reaching across their body to answer the phone.

Tilt stands can be used to position the telephone within closer reach. They also make it easier to see the digital display. Avoid placing the telephone on platforms that make the employee reach up to answer the phone.

If the telephone is used simultaneously with the computer for prolonged or frequent times, consider recommending use of a headset if one is not already in use. Both over-the-head and around-the-ear models are available. Cordless headsets might be necessary if the employee is highly mobile and must answer the telephone.

Workstation:

Check out the workstation for placement of work items. Files and other materials that are used throughout the day should be within close and easy reach. The most frequently used items should be within the closest reach. Check to see that items used often are not placed on the floor or in drawers that are difficult to open. Also, make sure file drawers are not stuffed so tightly that files are difficult to pull out or replace.

Look under the desk to see if there is leg clearance when working. CPU's, boxes and personal items can interfere with sitting enough close to the desk to work comfortably.

The lighting in the work area should be sufficient to allow the worker to view both the monitor and printed work without straining. A good lighting situation is one in which all of the visual objects in the field of view have nearly equal brightness. This could require the adjustments of overhead or desk lighting. Issues relating to glare on the monitor should have been reviewed during evaluation of the monitor.

Work Habits:

Observe the worker's posture when working. Their hips should be against the back of the chair with their back supported. Make sure they are not slouched, sitting on the front edge of the seat, or leaning to the side.

Taking regular breaks is one of the most effective things an employee can do to avoid discomfort and injury. Ask whether the employee takes frequent breaks and makes posture changes. Emphasize the “20-20-20” rule and encourage them to take 20 second breaks every 20 minutes and look 20 feet away to relax eyes.

Recommendations

Use this section of the evaluation form to summarize changes that need to be made.

After the form has been completed, give the employee and the employee’s immediate supervisor a copy. Keep a copy for your files.

Check back with the employee after 30 days to determine if the ergonomic recommendations have been implemented.

Additional Information

Go to our web site: ehs.ucdavis.edu and choose "Ergonomics" for access to Safety Nets, articles, videos and links to additional ergonomic web sites. Use these resources to obtain more detailed information on a variety of topics including vision and lighting, keyboard and mouse use, workstation arrangement, and furniture selection.