GEORGIA INSTITUTE OF TECHNOLOGY

ENVIRONMENTAL HEALTH AND SAFETY

ERGONOMIC GUIDELINES

To improve your workstation:

- Arrange your work so you can sit or stand comfortably in a position that does not put stress on any specific area of your body.
- Keep your neck in a neutral position and minimize the need to look up or to the sides continuously.
- Keep the workstation and desk equipment within reach without having to lean, bend, or twist at the waist frequently.
- Take short breaks to reduce eye strain and buildup of muscle tension.
- Stretch your body by getting up out of your chair and stretching your arms, shoulders, back, and legs.
- Exercise is an effective method of preventing back and neck pain.

Choose workstation tools that fit your personal physical and comfort needs:

- A desk or work surface:
  - Large enough to accommodate papers, reference manuals, and other workstation tools.
  - At a height that allows enough space for your knees and thighs to comfortably fit under the desk.
- A computer monitor that is:
  - Clear and easy for you to see without leaning forward or looking up or to one side.
  - At a height where the top of the screen is at eye level, or within 15 degrees below eye level.
  - Positioned 16 to 26 inches away from user.
  - Protective against eye strain, which may lead to vision problems and headaches. For example, glare guards are available either as part of the monitor or to be placed over the monitor screen. Plasma screens also have fewer glares than other monitors.
- A chair that maintains normal spinal curvature. A supportive chair:
  - Is adjustable, so that you can set the height to rest your feet flat on the floor. Keep your feet supported on the floor or on a footrest to reduce pressure on your lower back.
  - Supports your lower back.
  - Have adjustable armrests that allow your elbows to stay close to your sides. If you are not comfortable with armrests, move them out of your way. It is still important to keep your arms close to your sides even if you choose not to use armrests.
  - Has a breathable, padded seat.
  - Rolls on five wheels for easy movement without tipping.
- A computer keyboard and keyboard tray that allow comfortable typing or keying.
  - Your keyboard should be at a height that allows your elbows to be open (bent no more than 90 degrees) and close to your sides.
  - There are many variations for keyboard design, including split, curved, or rotated keyboards.
  - Many keyboards and keyboard trays have wrist supports to help keep your wrists in a neutral, almost straight position. However, wrist pads are just there for brief rests. They are not meant to be used while you are typing, but some people find they help even during keying. When you type, try raising your wrists from the support so your wrists are in a neutral position. You may want to alternate between resting your wrists on the supports and raising them up.
  - You can adjust the tilt of the keyboard. Try different tilt angles to see what is most comfortable for you.
- A computer mouse or pointing device that does not require a lot of forearm movement or force, such as a trackball mouse or touch pad, is more comfortable than a standard mouse for some people.
- A document holder that holds your papers level with your computer monitor, so that as you look back and forth between paper and monitor, your eyes do not need to continually refocus.

GEORGIA INSTITUTE OF TECHNOLOGY

ENVIRONMENTAL HEALTH AND SAFETY

ERGONOMIC GUIDELINES

- A comfortable room temperature, a relatively quiet area, and sufficient lighting without glare from office lights, sunlight, or the computer screen.
- A telephone headset or speaker phone, so you avoid awkward positions while talking and doing other tasks, such as typing.
- A location for any reference manuals that is close to the centre of your workstation, for easy access.

Many people use laptop computers as secondary workstations. You should not use a laptop as your primary computer. Using a docking station that provides an adjustable keyboard can help keep your wrists in a neutral position to reduce stress and strain. If you use a **laptop** often, try the following to improve ergonomic factors:

- Take a short break every 20 to 30 minutes. Resting and stretching for 3 to 5 minutes or changing tasks gives your body a chance to recover from working a long time in one position.
- Keep your head and neck in a neutral position and about 18 to 30 inches away from the monitor screen.
- Position the keyboard so that it is at elbow height, and try to keep your wrists relatively straight and your fingers slightly curved while you are working.
- Use an external mouse instead of the small touch pad or trackball that is on the laptop keyboard.
- When you have to carry your laptop with you:
    - Carry only what you need with you.
    - Use a carrying case with a padded strap and handle. Backpacks with two straps are the best. If you use a case with one strap, it's best to put the strap over the opposite shoulder to help distribute the load you are carrying, or to switch hands regularly.
    - Use a luggage cart with wheels when possible.