Creating a Work or Home-Based Ergonomic Workspace with Peter Johnson

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Course Outline

> How to set up your workstation
  – Desk, chair, keyboard and monitor height and set-up
  – Keyboards and pointing devices and how to select and position for optimal work
  – Monitor Placement
  – Sit stand workstations

> Your workstation on the go
  – Laptop stands
  – Portable mice and keyboards

> Common physical ailments from computer work
  – Common potential ailments
  – When to take Action
Workstation Set Up
Work Station Set up

> If your workstation is height adjustable, adjust your chair first to optimize sitting posture

> If your workstation is not adjustable, you have to adjust your chair to meet your workstation
  – Foot rests so feet can rest flat on the floor
  – Keyboard drawer to lower the height of your worksurface

> Adjust your keyboard, pointing device and monitors
Adjustable Workstation

1) Feet resting firmly and flat on the floor
2) Thighs ~parallel floor and open angle at the hips
3) Back supported, ears and hips in alignment
4) Table adjusted to just below elbow height when arms relaxed at sides
5) Monitors at or just below eye level
1) Adjust chair to bring elbows just below desk height with arms relaxed at sides (keyboard drawer to lower desk height)

2) Feet flat on floor, thighs ~parallel floor and open angle at the hips (add a footrest if needed)

3) Back supported, ears and hips in alignment

4) Monitors at or just below eye level
Monitors

- Monitor and keyboard need to be in line
- Monitor Distance: 18” – 32” eyes to screen (arms distance)
- Monitor Height: in general, eyes near the top of the screen. Actual position will depend on size of monitor and vision issues for user (low monitor height lower for bifocal wearers)
- Laptops: Use laptop holder and peripherals for extended use
Keyboard Trays

> Adjustable height and angle
> Sturdy
> Room to accommodate mouse
Keyboard Trays

**Stand Up Desk Store Large Clamp-On Retractable Adjustable Keyboard Tray/Under Desk Keyboard Tray | Improve Comfort While Increasing Usable Desk Space (27.5" W x 12.25" D) (Black) (Large)**

4.3 out of 5 stars

$54.00

**Mount-It! Under Desk Computer Keyboard and Mouse Tray, Ergonomic Keyboard Drawer with Gel Wrist Pad, Black**

3.9 out of 5 stars

$65.99

**VIVO Adjustable Computer Keyboard and Mouse Platform Tray | Ergonomic Under Table Desk Mount Drawer (MOUNT-KB01)**

4.3 out of 5 stars

$79.99
Invest in a good chair, you use it all the time

Two types of chairs, personal preference
  - Static chairs, lock you in a position
  - Dynamic chairs, allow you to move

Not a fan or arm rest (can’t get close to your desk), should be adjustable to gently support your elbows

Casters to match flooring (hard floor or carpet)
Chairs

Passive Chair
Herman Miller Classic Aeron Chair - Fully Adjustable, Adjustable Posture, it
4.3 out of 5 stars
$400 - $900

Static Chair
Steelcase Amia Ergonomic Office Chair with Adjustable Back Tension and Arms | Flexible Lumbar with Sliding Seat | Black Frame and Buzz2 Blue Fabric
4.1 out of 5 stars
$720.00

Static or Dynamic Chair
Office Star High Back ProGrid Back FreeFlex Seat with Adjustable Arms and Multi-Function and Seat Slider, Black Managers Chair
4.0 out of 5 stars
$186.44

Dynamic Chair
Office Factor Executive Ergonomic Office Chair Back Mesh Bonded Leather Seat Flip-up Arms Molded Seat with a 55kg Foam Density Double Handle Mechanism You Can Lock The Back in Any Position (Black)
3.9 out of 5 stars
$194.90 - 249.00
Keyboards
Postural benefits for children and adults when using the mouse next to a small keyboard

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University of Washington, Seattle WA
Keyboards and Mice

> Like small footprint keyboards
> Use your more 2 to 4 times more than keyboard
Keyboards

Perixx PERIDUO(2,406, Wired Mini Ergonomic Split Keyboard and Portable Vertical Mouse Combo, Adjustable Palm Rest, Tilt Scroll Wheel, and Membrane Low Profile Keys

3.9 out of 5 stars

$39.99

Microsoft Sculpt Ergonomic Wireless Desktop Keyboard and Mouse (L5V-00001)(with Mouse)

4.2 out of 5 stars

$179.99 ($79.99 without mouse)

Arteck 2.4G Wireless Keyboard Stainless Steel Ultra Slim Keyboard for Computer/Desktop/PC/Laptop/Surface/Smart TV and Windows 10/8/7/Vista/XP Built in Rechargeable Battery

4.5 out of 5 stars

$29.99

Macally Slim USB Wired Small Compact Mini Computer Keyboard for Apple Mac, iMac, MacBook Pro/Air, Mac Mini, Windows PC Desksops, Laptop (Space Gray)

4.3 out of 5 stars

$29.99
Mice

Kinesis DXT2 Ergonomic Vertical Mouse (RF Wireless)
3.8 out of 5 stars
$99.00

Standard size Vertical Wireless Mouse, Jelly Comb Ergonomic Mouse Reduces Wrist Strain, Easy Switch Between 3 Computers with Bluetooth, USB or Type C Connection, Rechargeable - MV09D
4.5 out of 5 stars
$40.99

NORMIA RITA Foldable Arc Wireless Mouse Silent Click Bluetooth 2.4GHz Dual Modes Portable Curved Mouse for Home, Office, Travel
4.3 out of 5 stars
$38.99

Wired Vertical Mouse, Jelly Comb Small Ergonomic Mouse High Precision Optical Mice with Adjustable Sensitivity 800/1200/1600 DPI, 6 Buttons, - Black
4.5 out of 5 stars
$19.99
Hoteling

- Working in different places for brief periods of time
Laptop Stands

OMOTON Laptop Stand, Adjustable
Aluminum Laptop Tablet Stand,
Foldable Portable Desktop Holder
Compatible with All Laptops (Up to 14 inch)
4.7 out of 5 stars
$23.99

Laptop Stand - JUESR Adjustable
Laptop Stand Portable Foldable
Ergonomic Desktop Stand Holder
Mount for MacBook Notebook
Computer PC iPad Tablet
4.5 out of 5 stars
$21.99

Nexstand Laptop Stand – Portable
Laptop Stand – PC and MacBook
Laptop Stand
4.5 out of 5 stars
$39.95

UNIVERSITY of WASHINGTON
Sit Stand Workstations
Occupational Sitting and Standing and Cardiovascular Disease

David Rempel, MD, MPH, CPE

Professor Emeritus, Department of Medicine
University of California San Francisco

Professor, Department of Bioengineering
University of California, Berkeley

[I have nothing to disclose]
Sit – Stand and Health

• Reduces back-neck pain
• Reduces cardiovascular risk?

“You were right - I do feel more productive standing up”
Standing at Work Increases CVD
Standing compared to Smoking

Common Computer Ailments
The End

Questions?

Feel free to contact:
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