[Ergonomic Training - Office Ergonomics]

Target Audience: All internal staff

Learning Objectives:

Cover the topic of office ergonomics from hazards to precautions so that you can avoid developing work-related MSDs. By the time the session is over, you should be able to:

- 1. Recognize the importance of ergonomics.
- 2. Define MSDs.
- 3. Identify ergonomic risk factors.
- 4. Recognize MSD symptoms.
- 5. Set up your workstation to minimize stress and strain.
- 6. Perform tasks safely, and avoid musculoskeletal injuries and illness.

Seat Time: Approx. 30 minutes

Outline:

- Welcome / Overview / Objectives Navigation slide
- What Is Ergonomics, and Why Is It Important to You?
- What Are MSDs?
- What Are the Risk Factors?
- What Are the Signs and Symptoms of MSDs?
- What Will the Pain Be Like?
- Are There Any Outward Signs?
- What Are Some of the Most Common MSDs?
- What Should You Do if You Experience Symptoms?
- Computer Workstation: Head and Shoulders
- Computer Workstation: Elbows and Wrists
- Computer Workstation: Legs and Feet

- Chair Adjustments: Seat Surface
- Chair Adjustments: Back and Arms
- Computer Monitor
- Neutral Keyboard Position
- Using a Mouse
- Using a Laptop
- Break Time
- Exercises
- Focus on Your Posture
- Key Points to Remember (Summary)
- Ergonomic Evaluations Available
- Knowledge Checks two (one in each lesson) with a final 5 question quiz (passing rate 80%, unlimited)
- Congratulations

Directions: This module will be Closed Captioned and audio will be provided by female voiceover, Images will be similar to ones shown below from PowerPoint and will be provided by Free Clip Art, Freepik and CAISO. Please leave any notes under each slide section for me to address and edit all of your concerns.

Module Resources/References: [Office Ergonomics in the Resources tab] *Correct link below to add resource mentioned in PPT https://records.oa.caiso.com/sites/ops/CO/safety/Records/Web%20posts/Ergonomics_Home_Office_Humantech.pdf #search=Office%20ergonomics

Will learners have access to the next button at all times or will it appear timed with VO to ensure they are not moving ahead? Ask Chantele

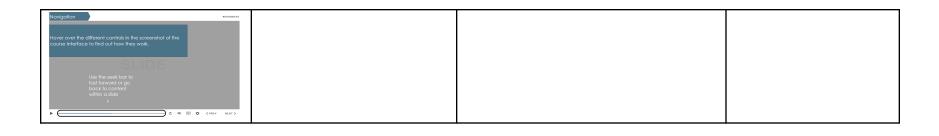
- Font: Century Gothic
- Palette colors: used sparingly
- *Palette colors should be minimalistic. White or black backgrounds only. Shapes should not have brand colors, but numbers can. Use little bullets and more drop down menus (click on shapes, etc.)
- All selected states are gray in color.

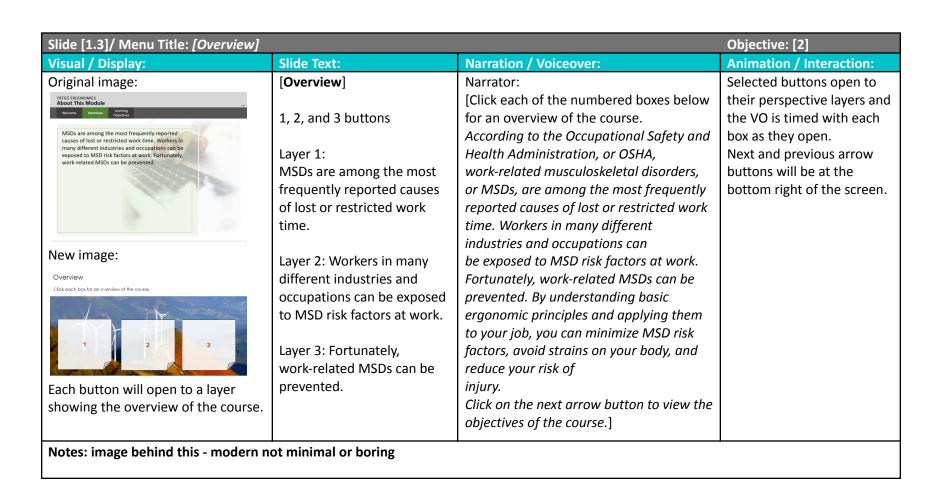
- Logo appears on the Welcome page top right.
- California ISO
- Menu should be hidden.
- No AVATARS
- VO is Alana B. from Well Said Labs

Slide [1.1]/ Menu Title: [Welcome]	Objective: [#]		
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original Image: OFFICE RECORDINGS About This Module Office Ergonomics BE SAFE! New Image: Welcome to the Office Ergonomics Course Lefors we dive in, would you like some quick paiders for nowloging this course? No Brook	Welcome to the Office Ergonomics Course Before we dive in, would you like some quick pointers for navigating this course? Yes, please No, thanks	[Script Text] Welcome to the Office Ergonomics computer based training course, where safety is our first priority. Before we dive in, would you like some quick pointers for navigating this course? Click the yes button for the navigation slide or the no button to continue.	Question and button answers timed in with VO. Next arrow is at the bottom right.

Notes: 5/19: Square buttons, image should be on the entire screen as in example of Bids and Schedules. Should not look like a PPT. Modern not minimalistic

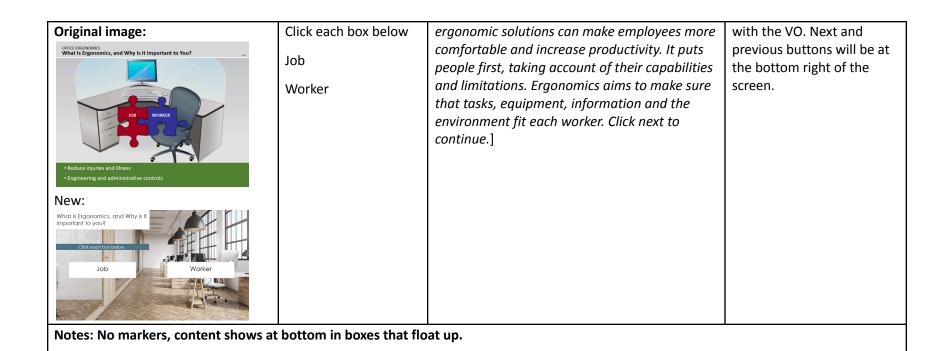
Slide [1.2 with layers]/ Menu Title: [Navigation] Objective: [NA]				
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:	
See Image Below.	[Navigation]	Narrator:	Next and previous arrow	
	Hover over the different	Hover over the different controls in the	buttons will be at the	
Slide layers will open showing	controls in the screenshot of	screenshot of the course interface to find	bottom right of the	
each feature with description.	the course interface to find out	out how they work. Click the next arrow	screen.	
	how they work.	button when you are ready to begin the		
		course.		





Slide [1.4]/ Menu Title: [Learning Obj	jectives]		Objective: [All]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original: OFFICE ERCONOMICS Learning Objectives At the completion of this module, the participant will be able to: Recognize the importance of ergonomics Define MSDs Identify ergonomic risk factors Recognize MSD symptoms Set up your workstation to minimize stress and strain Perform tasks safely, and avoid musculoskeletal injuries and illness New: Learning Objectives At the end of this module, you will be able to: Recognize the importance of ergonomics Define Musculoskeletal Disorders Identify ergonomic risk factors Recognize the importance of ergonomics Design your workstation to minimize stress and strain Complete tasks safely, and avoid musculoskeletal injuries and illness	[Learning Objectives] At the end of this course, you will be able to: Recognize the importance of ergonomics Define MSDs Identify ergonomic risk factors Recognize MSD symptoms Design your workstation to minimize stress and strain Complete tasks safely, and avoid musculoskeletal injuries and illness	[The main objective of this session is to cover the topic of office ergonomics from hazards to precautions so that you can avoid developing work-related MSDs. By the time the session is over, you will be able to: Recognize the importance of ergonomics. Define Musculoskeletal Disorders Identify ergonomic risk factors. Recognize MSD symptoms. Design your workstation to minimize stress and strain. Perform tasks safely, and avoid musculoskeletal injuries and illness. Click next to continue]	Next and previous arrow buttons will be at the bottom right of the screen.
Notes:			

Slide [1.5]/ Menu Title: [Lesson One:	Objective: [2]		
Visual / Display: Slide Text: Narration / Voiceover:			Animation / Interaction:
Title and two boxes with puzzle [What is Ergonomics,		[Ergonomics is designing a job to fit the worker	Learner will click on the
pieces. Bulleted information will and Why Is It		so the work is safer and more efficient. Click	worker and job boxes to see
appear inside the pieces.	Important to You?]	each box below to learn more.Implementing	more information timed



Slide [1.6]/ Menu Title: [What Are M	Objective: [2]		
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
See original image below. OTRES REGISTRATES What Are MSDs? Injuries or disorders involving: - Muscles - Tendons and ligaments - Joints - Cartilage - Blood vessels - Nerves	[What Are MSDs?] Injuries or disorders involving: • Muscles • Tendons and ligaments • Joints • Cartilage • Blood vessels • Nerves	[Click on each of the hotspots to learn more about MSDs. MSDs are disorders involving the nervous system or soft tissue in the fingers, wrists, elbows, shoulders, neck, back, and knees. MSDs are caused by stress and strain due to activities that you perform on the job (keyboarding, sitting for long hours in an awkward	Learner clicks on each of the circles to list MSD's while the VO is narrating the screen. Next and previous buttons will be at the bottom right of the screen.
New:			



position, and so on). Click on each of the hotspots to which of the affected body tissues are included.

- Muscles,
- Tendons and ligaments,
- Joints,
- Cartilage,
- Blood vessels, and
- Nerves.

Click next to learn about the risk factors involved.]

Notes:

Slide [1./]/ Menu Title: [What Are	Objective: [3]		
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original:	[What Are the Risk	[There are five risk factors for MSDs. Prolonged	Each word floats in
OFFICE ERGONOMICS What Are the Risk Factors?	Factors?]	exposure to any of these risk factors in your job	timed in with VO.
• Repetition	Repetition	puts you at risk of an MSD. Repetition, awkward	Next and previous
Awkward postures Contact stress	Awkward	postures, and contact stress are the most common	buttons will be at the
Force and vibration	postures	risk factors for office workers. Less common risk	bottom right of the
	Contact stress	factors include force and vibration. Click on each	screen.
	Force and	of the risk factors for some examples.	
	vibration	• Repetition might include daily and lengthy use of	
	Do any of these	a keyboard and mouse.	
New:	ergonomic risk factors	Awkward postures might include extending arms	
What are the Risk Factors?	apply to you?	to type or sitting forward with shoulders hunched.	
Repetition		Contact stress might include soft tissue damage	
Awkward Postures		by contact with a hard surface, such as leaning	
Contact Stress		against a counter or pressing your wrists against	
Force and Vibration Do any of these ergonomic fisk factors apply to you?		the edge of your desk while you type.	
Ecousty on more engoriorine last rections applying 10 your		Force and vibration are usually more associated	
Layers contain specific images:		with production or construction jobs. But force	
		might be an issue for an office worker who does a	



lot of lifting of heavy files or office supplies, spends a lot of time pushing or pulling heavy file drawers, or performs other activities that require the use of force, which stresses specific muscle groups.

Think about your job. Do any of these ergonomic risk factors apply to you? When you are finished answering that question,

click next to learn about the signs and symptoms of MSDs.

Notes:

Slide [1.8]/ Menu Title: [What Are th	Slide [1.8]/ Menu Title: [What Are the Signs and Symptoms of MSDs?] Objective: [4]				
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:		
Original: Original: Original: What Are the Signs and Symptoms of MSDs? What are the Signs and Symptoms of MSDs?	[What Are the Signs and Symptoms of MSDs?]	[For office workers, the most common symptom that an MSD might be developing is pain or swelling in the: • Hands, wrists, or forearms; • Fingers; • Elbows; • Shoulders; • Neck; or • Back Click the next arrow to see the type of pain you may experience.]	Boxes around images will highlight timed with VO. Next and previous buttons will be at the bottom right of the screen.		
Notes:					

Slide [1.9]/ Menu Title: [What W	ill the Pain Be Like?]		Objective: [4]	
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:	
Original: Original:	[What Will the Pain Be Like?] Tightness Stiffness Discomfort	 [The type of pain you experience will vary depending on the type of MSD and the type of injury you have suffered. Click on each term to learn more. Tightness might occur in muscles or tendons from overuse. Stiffness might occur from damage to joints or cartilage. 	Terms are on the left of the screen. Learner will click on each to hear VO description. Next and previous buttons will be at the bottom right of the screen.	

New:	Soreness	Discomfort can occur from damage to any of	
Tightness Stiffness What Will the Pain Be Like?	Burning	the nerves or soft tissues. • Soreness may occur from overused muscles or	
Discomfort Click on each term to learn more.	Tingling	tendons.	
Burning Tingling Coldness	Coldness	Burning may occur from damage to blood vessels or nerves.	
Numbness	Numbness	Tingling can occur from damage to nerves.	
		Coldness may occur from damage to blood vessels.	
		• And numbness might occur from damage to	
		nerves or blood vessels.	
		Have you ever experienced any of these	
		symptoms over a prolonged period of time?	
		Such symptoms could be a sign of a developing	
		MSD. Click next for noticeable outward signs.]	
Notes:			

Slide [1.10]/ Menu Title: [Are There	Objective: [4]		
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original: OFFICE RECORDANCS Are There Any Outward Signs? - Swollen or Influmed points	[Are There Any Outward Signs?]	[You might notice that you or a co-worker is developing an MSD by outward signs.	Terms will appear timed with VO. Next and previous buttons
Vignous shaking of hands and wrists. Massaging of hands, wrist, or arms. Crading of arms. Swollen or inflamed joints Massaging of hands, wrists, or arms.		•Unconscious massaging of hands, wrists, or arms; or	will be at the bottom right of the screen.
New:	 Vigorous shaking of hands and wrists Cradling of arms 	circulation;Cradling of arms to give extra support or to hold the arm in a position that reduces pain.	

Slide [1.10]/ Menu Title: [Are There Any Outw	ard Signs?]	Objective: [4]
Are There Any Outward Signs? Swoten or Inflamed Jeints Massaging of hands, wittis, or arms Vigorous shaking of hands and wists Crading of arms	Click next to find out what the r common MSDs are]	most
Notoci		<u> </u>

Notes:

Slide [1.11]/ Menu Title: [What Are Some of the Most Common MSDs?]				
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation /	
			Interaction:	
Original:	[What Are Some	Select each tab to learn more about some of the most	Terms will be	
OFFICE ERIGONOMICS What Are Some of the Most Common MSDs?	of the Most	common MSDs.	placed in an	
Carpal Tunnel Syndrome	Common	 [Carpal tunnel syndrome is probably the best known to 	accordion view	
Tendinitis	MSDs?]	office workers. Carpal tunnel involves compression of	and will be	
Tenosynovitis		the median nerve in the wrist. The median nerve	clickable timed	
Thoracic Outlet Syndrome De Queryain's Disease	Carpal Tunnel	provides the sense of touch for the fingers, where it	with VO. When	
Trigger Finger	Syndrome	passes through the wrist and into the hand. Carpal	each one is clicked,	
	Tendinitis	tunnel is usually the result of repetitive motion such as	the VO will begin	
New image:	Tenosynovitis	keyboarding.	the description.	
New image: Select each table to bom more. What are Some of the Most Common MSDs? Who Common MSDs? Who Common MSDs?	Thoracic Outlet Syndrome De Quervain's Disease Trigger Finger	 Tendinitis is the inflammation of a muscle or tendon caused by repeated overuse. Tenosynovitis is one of the two membranes of a tendon sheath that covers a tendon. Tenosynovitis is usually the result of excessive motion. Thoracic outlet syndrome involves compression of nerves and blood vessels as they travel from the neck, under the collar bone, through the armpit, and down into the arm. This MSD is often attributed to repetitive arm extension and slouching. De Quervain's disease is an inflammation of the tendon sheath of the thumb. It's usually caused by forceful gripping or twisting motions of the hand. This 	Each accordion will open with an image to show an example. Next and previous buttons will be at the bottom right of the screen once accordions have all been reviewed.	

Notes:	experience symptoms]	
	sheaths in the fingers and is associated with using tools with hard handles. Again, this MSD affects production workers more than office workers. Click the next arrow to find out what you should do if you	
	MSD is more common among production workers than office workers. Trigger finger also involves tendons and tendon	

Slide [1.12 a, b, and c]/ Menu Title: [What Should You Do	if You Experience Symptoms?]	Objective: [4 & 5]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original:	[What Should You	If you notice any signs or symptoms of a	Rectangles with titles will fly
OFFICE ERGONOMICS What Should You Do if You Experience Symptoms?	Do if You	developing job-related MSD, report the problem	in one at a time from top
	Experience	immediately-both to your supervisor and to your	and the VO will describe
	Symptoms?]	doctor.	each. They will remain on
Report MSD seek medical symptoms immediately reatment reducing risk factors on the job		• Early reporting allows you to begin taking steps to proper treatment, beginning with a medical evaluation. The sooner you begin treatment, the more likely you are to make a complete recovery, and the sooner you can get rid of the pain and	the slide until the end. Next and previous button will be on screen.
What Should You Do if You Experience Symptoms? Raport M.D. symptom Temmediately Te		 Early reporting also allows us, with your help, to take steps toward reducing or even eliminating risk factors that are causing the MSD. That way, the problem won't become worse, and you won't risk reinjury. Ask your supervisor about the correct procedures for reporting MSDs at your workplace. 	
		Click next for your first knowledge check.]	

Slide [1.13]/ Menu Title: [Knowledge	Check]		Objective: [4]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Female avatar is in a scenario with another male avatar that looks uncomfortable. Knowledge Check # I Choose the best option below based on the scenario to submit your response. Ryan, I noticed that you keep shaking your hands at your desk. Is everything ax? Hi Gianna, I'm not quite sure. My wrists and hands have been bothering me lately. Option 01 Ryan should confinue withit and hands feel which and	[Knowledge Check #1] Ryan, I noticed that you keep shaking your hands at your desk. Is everything ok? Hi Gianna, I'm not quite sure. My wrists and hands have been bothering me lately. Option 1: Ryan should continue keyboarding until his wrists and hands feel better. Option 2: Ryan should wait at least a week before reporting anything to see if the pain subsides on its own. Option 3: Ryan should report his symptoms immediately to his doctor and his supervisor. Option 4: Ryan should continue to vigorously shake his hands until they feel better.	Knowledge Check #1, Multiple Choice. Read the scenario between Ryan and Gianna and click on the best option below to submit your response.	Submit button clickable once choice is made and will take the learner to the correct/incorrect layer.

Slide layers [1.13a, b, c, and d]/ Menu Title: [Knowledge Check]				
Visual / Display: Slide Text:		Narration / Voiceover:	Animation/	
			Interaction:	

Ryan is standing with arms folded. Text appears in a box next to him for all incorrect responses.



Ryan is smiling and pointing his finger out front for the correct response.

Ryan's pose is the same as a and b answers above.

[Knowledge Check #1]

Incorrect Layer: Incorrect Layer

Correct Layer 1.12c Option 3: Ryan should report his symptoms immediately to his doctor and his supervisor.

Incorrect Layer: 1.12d Option 4: Ryan should take more breaks from typing at his desk.

Continue button is on the feedback layers.

Narrator: [Not quite, If you notice any signs or symptoms of a developing job-related MSD, report the problem immediately-both to your supervisor and to your doctor. Click the continue button to move on to Lesson 2.]

Same as above

That's correct. If you notice any signs or symptoms of a developing job-related MSD, report the problem immediately-both to your supervisor and to your doctor. Click the continue button to move on to Lesson 2.

	Same as a and b answers	
	above.	

Slide [2.1]/ Menu Title: [Lesson 2: Computer Workstation] Objective: [5]			Objective: [5]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original image: OTHER DECORDANCE Computer Workstation: Head and Shoulders - Need workstated and facing forward - Tilted head puts stress on neck and shoulders - Minimize head rotation - Shoulders relaxed - Arms tucked close to body - No extended reaching New image: Computer Workstation Click and drog the sider for more reformation.	[Computer Workstation: Head and Shoulders] Head vertical and facing forward Tilted head puts stress on neck and shoulders Minimize head rotation Shoulders relaxed Arms tucked close to body No extended reaching	[You can set up your computer workstation to reduce stress on your body and decrease your risk of developing an MSD. Click and drag the slider to the right for more information on how to position your head and shoulders. • When working on the computer, keep your head vertical and facing forward. • Holding your head off balance—for example, leaning it to the side—puts stress on your neck and shoulders. • Minimize head rotation by putting your work—the information you're using while you type—in front of you. • Make sure your shoulders are relaxed and in a neutral position. Keeping your shoulders raised or hunched for long periods puts stress on your muscles, blood vessels, and nerves. • Also, keep your arms tucked in close to your body and hanging relaxed when not working or typing. • Avoid extended reaching. Objects on your desk that you use frequently should be within easy reach. Repetitive reaching all day with your arms or leaning forward all the time to reach items can contribute to MSDs. Click and drag the slider to the right again for information on how to care for your elbows and wrists.	Learner will click on parts of the body using pulsating speaker markers. VO will be timed with animation. Next and previous arrow buttons will be at the bottom right of the screen.

Slide [2.1a]/ Menu Title: [Compu	Slide [2.1a]/ Menu Title: [Computer Workstation]		
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same image from main slide	[Computer Workstation:	You can set up your computer workstation to	Learner will click on parts
layer 2.1	Head and Shoulders	reduce stress on your body and decrease	of the body using markers.
Computer Workstation Head and Shoulders	 Head vertical and 	your risk of developing an MSD. Click and	VO will be timed with
Head vertical and facing forward	facing forward	drag the slider to the right for more	animation.
shoulders Minimize head rotation	 Tilted head puts 	information on how to position your head	Next and previous buttons
Shoulders relaxed Arms tucked close to bady	stress on neck and	and shoulders.	will be at the bottom right
No extended reaching Click and drag the slider to the flaht again	shoulders	When working on the computer, keep your	of the screen.
	 Minimize head 	head vertical and facing forward.	
	rotation	Holding your head off balance—for	
	 Shoulders relaxed 	example, leaning it to the side—puts stress	
	 Arms tucked close to 	on your neck and shoulders.	
	body	Minimize head rotation by putting your	
		work—the information you're using while	
	No extended	you type—in front of you.	
	reaching	Make sure your shoulders are relaxed and	
		in a neutral position. Keeping your shoulders	
		raised or hunched for long periods puts	
		stress on your muscles, blood vessels, and	
		nerves.	
		Also, keep your arms tucked in close to	
		your body and hanging relaxed when not	
		working or typing.	
		Avoid extended reaching. Objects on your	
		desk that you use frequently should be	

within easy reach. Repetitive reaching all day
with your arms or leaning forward all the
time to reach items can contribute to MSDs.
Click and drag the slider to the right again for
information on how to care for your elbows
and wrists.

Slide [2.1b]/ Menu Title: [Compu	1b]/ Menu Title: [Computer Workstation]		Objective: [5]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Visual / Display: Same image from main slide layer 2.1 Computer Workstation Elows relaxed and close to the body Bown not estended forward or bookward With it in a trigital line with lover arms Click and drag the slider one last time	Slide Text: [Computer Workstation: Elbows and Wrists] • Elbows relaxed and close to the body • Elbows not extended forward or backward • Wrists in a straight line with lower arms	[You also need to take care of your elbows and wrists while working on the computer. • Elbows should be positioned comfortably, hanging in a relaxed fashion below the shoulders and not extended outward from the body. • Elbows should not extend forward or backward from the shoulders. • Wrists should be kept in a straight line with the lower arms. • Hands flexed down or up, or bent inward or	Animation / Interaction: Learner will click on parts of the body using markers. VO will be timed with animation. Next and previous buttons will be at the bottom right of the screen.
	 Hands not flexed up or down or bent inward or outward 	outward, will put pressure on the nerves and soft tissues in the wrists and could result in carpal tunnel syndrome. Click and drag the slider one last time to the right for information on how to position your legs and feet.	

Slide [2.1c]/ Menu Title: [Computer Workstation]			Objective: [5]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation /
			Interaction:



[Computer Workstation: Legs and Feet]

- Knees bent about 90 degrees
- Thighs parallel to floor
- Chair at a comfortable height
- Obstructions removed
- Feet flat on the floor or on a footrest

[The position of your lower body while you work on the computer is also important in preventing MSDs.

- Your knees should be comfortably bent about 90 degrees. The angle doesn't have to be exact, as long as you're comfortable.
- Your thighs should be approximately parallel to the floor.
- Adjust your chair at a comfortable height to allow your knees and legs to be comfortable.
- Remove any obstructions under your workstation to your legs and feet so that you can maintain a comfortable working position.
- Your feet should be resting flat on the floor or on a footrest. Although it's good to change the position of your feet occasionally, you don't want to be on your toes or heels for extended periods. Click next for proper chair adjustments.]

Learner will click on parts of the body using markers. VO will be timed with animation. Next and previous buttons will be at the bottom right of the screen.

S	Slide [2.2a]/ Menu Title: [Chair Adjustments]			Objective: [5]
1	/isual / Display:	Slide Text:	Slide Text: Narration / Voiceover:	
				Interaction:

See image below.



[Chair Adjustments: Back and Arms]

- Backrest with adjustable angle and lumbar support
- Armrest broad and cushioned to support shoulders, elbows, and wrists
- Armrests independently adjustable in height and side to side

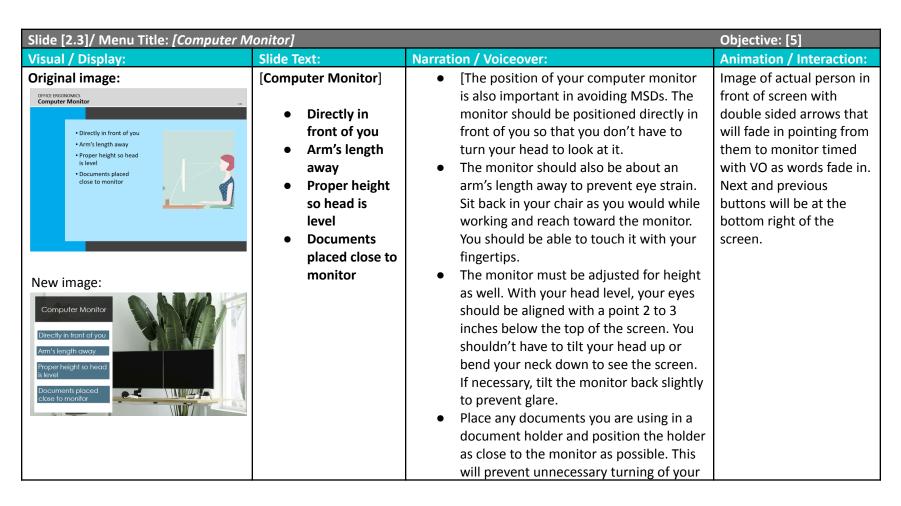
A comfortable, ergonomically designed chair is critical when working at a computer workstation for extended periods every day. Click on the back and arms button for proper chair adjustments.

- To prevent stress and strain, your chair needs to be properly adjusted. The backrest is very important because you need adequate back support when sitting and working for extended periods. You should be able to adjust the angle of the backrest relative to the seat so that you can lean back and forward or sit straight up.
- The backrest must also have adequate lumbar support. The lumbar region is your lower back.
- Armrests provide support for your shoulders, elbows, and wrists. They should be broad, cushioned, and comfortable. But armrests should not be too cushioned, because when working a mouse or keyboard, you want to keep your wrist straight and work the mouse with movement from your elbows. If the armrest is too cushioned, you won't be able to slide your elbow back and forth to move the mouse.
- Armrests should be independently adjustable both in height and side to side so that they can fit you properly.

Same chair from the main slide layer. Chair parts will be described as they are hovered over and timed with VO. Next and previous buttons will be at the bottom right of the screen.

•	Think about your workstation chair. Is it	
	properly adjusted for your body to keep you	
	comfortable while you work? If you	
	answered no, go ahead and adjust your chair	
	now. When you're ready, click the Seat	
	Surface Button to continue.	
		i

Slide [2.2b]/ Menu Title: [Chair Adjustr	Slide [2.2b]/ Menu Title: [Chair Adjustments]		
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original image:	[Chair Adjustments:		The Ergonomic Chair rolls
OFFICE ERGONOMICS Chair Adjustments: Seat Surface	Seat Surface]	 The seat surface should be properly 	in from the right and
		padded and comfortable, even after	swivels to face front.
Comfortable	Comfortable	sitting for 30 to 60 minutes. The seat	Parts of the chair will
Slightly wider than hips/thighs	Slightly wider than	should also be at least an inch wider	glow as they are timed
Proper length	hips/thighs	than your hips and thighs.	with VO.
Adjustable height		To determine the proper length of the	Chair rolls in from the left
Adjustable tilt	Proper length	seat, sit with your back against the	of the screen. Terms fade
		back support. In this position, the	in timed with VO's
	Adjustable height	front edge of the seat should be	descriptions.
New image:		about an inch from the back of your	Next and previous
Chair Adjustments	Adjustable tilt	knee. Also, the front edge should be	buttons will be at the
Click the buttons below for more information.		contoured so that you're not	bottom right of the
Circk the Burious Serow for mole monitarion.		subjecting the back of your legs to contact stress with a hard corner of	screen.
Back and Arms		the front of the seat.	
Seat Surface		 The chair height must be adjustable 	
		so that your feet can rest on the floor	
		or on a footrest.	
		 Some seat surfaces can also be tilted 	
		to help maintain a balanced posture.	
		You may, for example, prefer a seat	
		that is tilted slightly forward, so that	



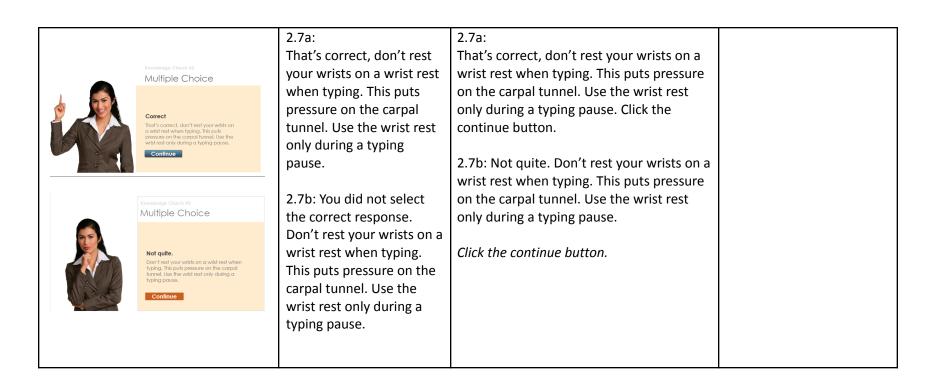
•	head to read documents related to your computer activity. Now, think about your own computer monitor. Is it properly positioned to avoid stress and strain on your neck and shoulders? Again, feel free to adjust your monitor now, before clicking next.]
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Slide [2.4]/ Menu Title: [Neutral	Slide [2.4]/ Menu Title: [Neutral Keyboard Position]				
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:		
Original image: Original image: Original image: Fibous dose to body and bent about 90 degrees Wrists flat and in line with forearms Hands not angled up/down or turned in/out No wrist rest when typing Neutral Keyboard Position Elbows close to body and bent about 90 degrees. Wist flat and in line with forearms Hands not angled up/down or turned in/out No wrist rest when typing	[Neutral Keyboard Position] Elbows close to body and bent about 90 degrees Wrists flat and in line with forearms Hands not angled up/down or turned in/out No wrist rest when typing	 [Keeping a neutral keyboard position while typing is one of the most important things you can do to prevent carpal tunnel syndrome and other MSDs. Keep your elbows close to your body and bent about 90 degrees while using the keyboard. Avoid reaching toward the keyboard or allowing your elbows to extend away from your sides. Adjust the height of your keyboard so that your wrists are flat and in line with your forearms. Your hands should not be angled up or down or turned in or out. Working in these positions would put stress on nerves and blood vessels. Don't rest your wrists on a wrist rest when typing. This puts pressure on the carpal tunnel. Use the wrist rest only during a typing pause. Think about the position of your elbows, wrists, and hands as you work on the computer. Do you always maintain a neutral position to prevent injuries? 	Image of actual person in front of screen with arrows pointing from their face timed with VO and as words fade in. Next and previous buttons will be at the bottom right of the screen.		

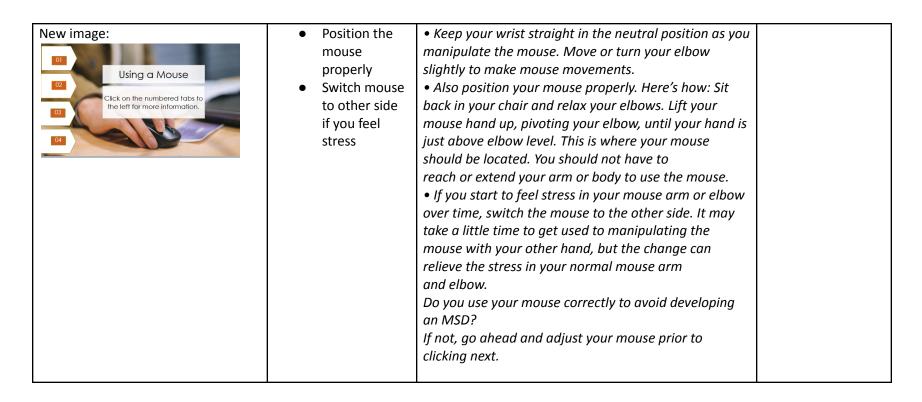
Take a moment to ensure that you are maintaining a	
neutral keyboard position. Then, click next to continue	
to the second knowledge check.	

Slide [2.5]/ Menu Title: [Knowledge Cl	5]/ Menu Title: [Knowledge Check #2]			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:	
Multiple Choice Question Question Four Choices	Multiple Choice Question How can you position your head and shoulders at your workstation to decrease the risk of developing an MSD?	Knowledge Check #2 Multiple Choice Choose the best answer below and then click submit.	Checkmark button is at the bottom of the screen but cannot be clicked until the learner chooses appropriate response.	
Knowledge Check #2 Multiple Choice How can you position your head and shoulders at your workstation to decrease the risk of developing an MSD? O Till or lean your head while typing. (a) Minimize head rotation by putting work in front of you. O Keep shoulders raked to avoid tension. Peach repeatedly for documents throughout the day.	 Tilt or lean your head while typing. Minimize head rotation by putting work in front of you. Keep shoulders raised to avoid tension. Reach repeatedly for documents throughout the day. 			

Slide [2.5a and b layers]/ Menu Title: [Knowledge Check #2]			Objective: [5]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Multiple Choice Question 2.7 a Correct 2.7b Incorrect	Multiple Choice Question Which of the following might be considered ergonomic concerns?		Continue button is on the screen underneath the explanation on both layers.



Slide [2.6]/ Menu Title: [Using a Mouse]			Objective: [5]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original image: CRICE RECOGNACES Using a Mouse - Control mouse movement from the elbow - Keep wrist straight in neutral position - Position the mouse properly - Switch mouse to other side if you feel stress	 Control mouse movement from the elbow Keep wrist straight in neutral position 	[Most people consider the keyboard to be the main contributor to computer-related MSDs. However, the mouse, when used improperly, can also contribute to injuries. Click on each of the numbered tabs to the left for more information. • Control the mouse movement from your elbow. Controlling the mouse with wrist movements will put strain on your nerves, blood vessels, and other soft tissue in your wrist.	Learner will click the mouse and bullet points will appear. Next and previous buttons will be at the bottom right of the screen.



Slide [2.7 a and b]/ Menu Title: [Using	Objective: [5]		
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation /
			Interaction:
Original image:	[Using a Laptop]	[Working on a laptop can present ergonomic	Learner will see
OFFICE ERCONCARICS Using a Laptop	Occasional users	problems because the monitor and keyboard are	Occasional users on
Occasional users Saroffee neck posture rather than wirst posture sit back in a comfortable chair and eight latipop Full-time users Position screen like workstation monitor Use separate keyboard and mouse	 Sacrifice neck posture rather than wrist posture Sit back in a comfortable 	not separated, which means you can usually achieve either good neck and head posture while working or good wrist and hand posture, but not both. Click on the occasional users button. • If you use a laptop occasionally or for short periods, it's best to sacrifice neck posture rather than wrist posture	computer screen. Each description will fade in timed with VO. Learner will then see Full-time users and
New image:	comfortable	than wrist posture.	Full-time users and



chair and adjust laptop

Full-time users

- Position screen like workstation monitor
- Use separate keyboard and mouse
- Sit back in a comfortable chair and position the laptop, so that you can maintain a neutral wrist position. Angle the screen to avoid neck strain as much as possible. Click on the full time users button to continue.
- If you use a laptop exclusively, position the laptop screen as you would a workstation monitor: directly in front of you and at a comfortable height.
- Use a separate keyboard and mouse to prevent strain while keyboarding and mousing for long periods of time. Click next to learn how to incorporate breaks into your day.]

each description will fade in timed with VO.

Next and previous buttons will be at the bottom right of the screen.

All info will remain on screen until the end of the slide.

Slide [2.8 a, b, c]/ Menu Title: [Break	Objective: [6]		
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original image: OFFICE PRICONOMICS Break Time Minibreak: • Relax your hands Rest break: • Do a different task Eye break: • Look away and blink New image is a video clip on base layer:	[Break Time main layer] Minibreak: • Relax your hands Rest break: • Do a different task Eye break: • Look away and blink	[Taking enough of the right kinds of breaks from keyboarding is another important way to prevent MSDs. Click on the orange play button below for information on mini breaks. • Minibreaks are not breaks from work. Rather they are very short breaks from using typing or mousing muscles. During a minibreak, allow your hands to relax in a flat and straight posture. Use the wrist rest to relax your wrists for a few moments. Click on the orange play button again for information on rest breaks.	Short video begins with man turned away from his desk, blinking and stretching his wrists. The numbers 1,2,3 will be selected and darken in color timed with the VO. There will also be a play button at the bottom that shows the description. Next and previous buttons will be at the bottom right of the screen.



Layers a, b, and c:



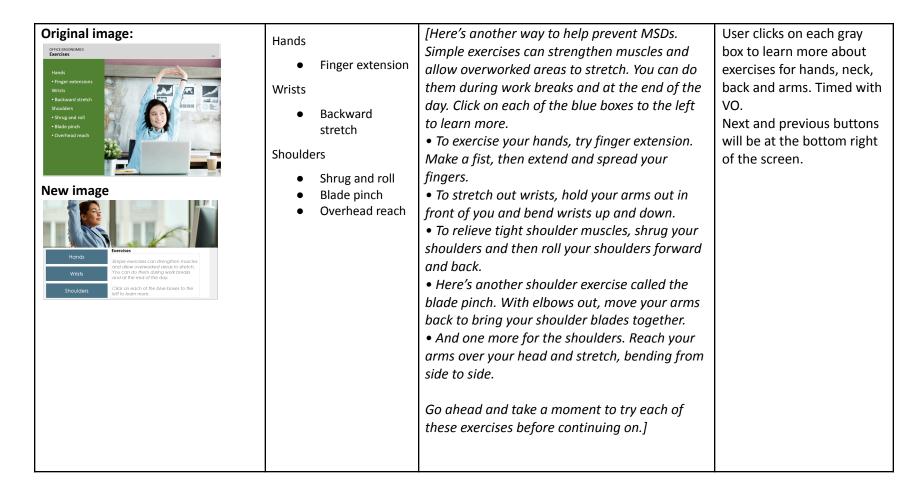




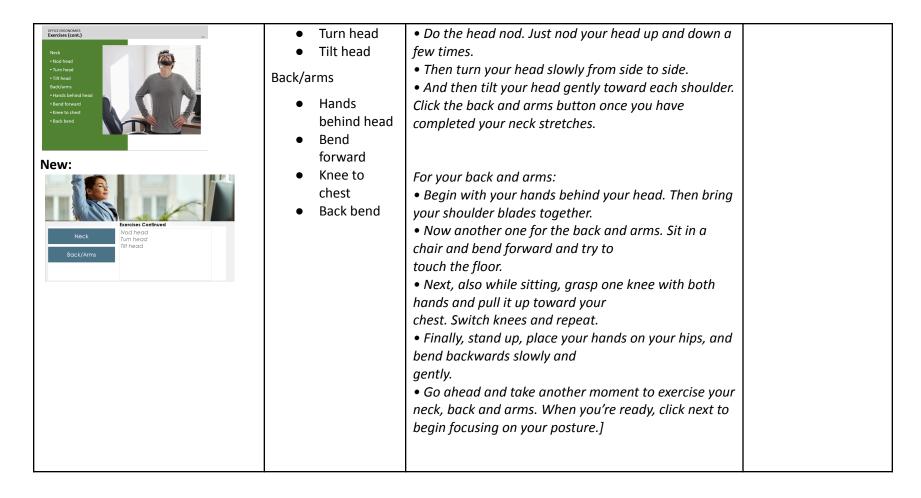
- Rest breaks are longer periods in which you actually take a break from work. During a rest break, get up from your workstation and move around a little. Get a drink of water, or do a different task for a few minutes. You should take a short break from computer work at least every hour. Click on the orange play button one last time for information on eye breaks. Then, click next to continue.
- You also need to rest your eyes periodically. Take an eye break every 20 minutes or so, and look away from the monitor for 20 seconds at something 20 feet across the room. This allows your eye muscles to relax. Also, blink rapidly for a few seconds to refresh your eyes. When typing, you might not blink as much as normal, and your eyes can become dry and sore.

If you haven't done so already, take a mini break now by relaxing your hands and wrists while looking away from your monitor.

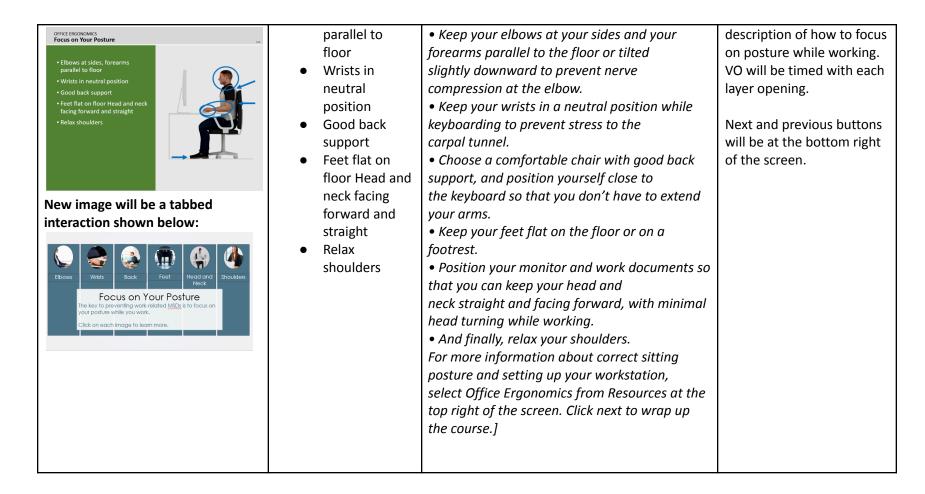
Slide [2.9 a, b, c]/ Menu Title: [Exercises]			Objective: [6]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:



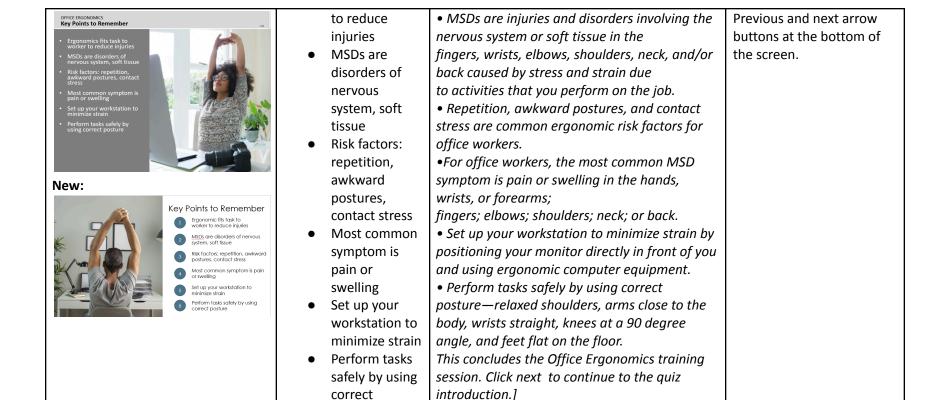
Slide [2.10 and b]/ Menu Title: [Exercises Cont'd]			Objective: [6]
Visual / Display:	Slide Text:	Slide Text: Narration / Voiceover:	
			Interaction:
Original:	[Exercises Continued]	[Now let's look at some exercises for the neck, back, and arms. Click on the blue buttons to the left to	Next and previous buttons will be at the
	Neck	begin.	bottom right of the
	Nod head	To stretch your neck:	screen.



Slide [2.11 a, b, c, d, e, and f layers]/ Menu Title: [Focus on Your Posture]		Objective: [6]	
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
See original image below.	[Focus on Your	[The key to preventing work-related MSDs is to	Each image of posture will
	Posture]	focus on your posture while you work.	be a tabbed interaction.
	rostulej	Click on each of the images to learn more.	Learner will click on the
	Elbows at	Remember to:	ovals and be taken to a
	sides, forearms		slide layer that has the



Slide [2.12]/ Menu Title: [Summary: Key Points to Remember]			Objective: [All]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original:	[Key Points to	[Here are the main points to remember from	
	Remember	this session on office ergonomics:	Key points will fade in
	Nemember]	• The goal of ergonomics—the science of fitting	timed with VO.
	 Ergonomics fits 	the task to the worker—is to reduce	
	task to worker	the risk of injuries.	



Slide [3.1]/ Menu Title: [Quiz Introduction]			Objective: []
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Quiz Introduction with 3 pictures from the course across the middle of the page.	Quiz Introduction You need a score of at least 80% (4 out of 5	You are now ready for the course quiz. The following 5 questions are from both lessons.	Instructions will be timed with VO and will fade in. Next and previous arrow buttons at the bottom of the screen.

introduction.]

posture



- ➤ You need a score of at least 80% (4 out of 5 answered correctly) in order to pass this course.
- > You can retake the quiz until you achieve a passing score.

answered correctly) in order to pass this course.

You can retake the quiz until you achieve a passing score. You need a score of at least 80% or (4 out of 5 answered correctly) in order to pass this course.

You can retake the quiz until you achieve a passing score.

Click next to begin.

Slide [3.2]/ Menu Title: [Hidden from Menu: Question 1]			Objective: [6]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Question 1 What should Ryan do about the seat surface of his chair to prevent work-related MSDs? Make sure that the seat surface is not wider than his hips and thighs. Check that the forth edge is not ocntoured, so that his legs touch the front of the seat. Adjust the height, so that his feet rest flat on the floor. Ensure there is no tilt, forwards or backwards for better support.	Question #1 What should Ryan do about the seat surface of his chair to prevent work-related MSDs? • Make sure that the seat surface is not wider than his hips and thighs. • Check that the front edge is not contoured, so that his legs touch the front of the seat. • Adjust the height, so that his feet rest flat on the floor. • Ensure there is no tilt, forwards or backwards for better support.	Question #1 Multiple Choice Choose the best answer and then click submit to record your response.	The learner will click submit after answering the question. No incorrect or correct responses will be shown. The learner will be taken to question #2.

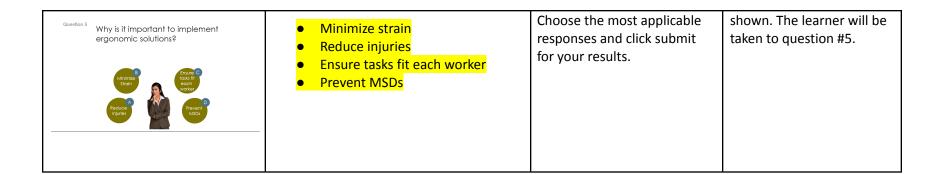
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Ryan avatar is standing and facing front smiling. Plain background behind him. Guestion 2 What is one of the most important things Ryan can do to prevent carpal turnel syndrome and other MSDs? Geop a neutral keyboard position white hybrid. O Set forward with shouldes hunched. Pleas his with a gainst the edge of the desik while he types.	Multiple Choice Question #2 What is one of the most important things Ryan can do to prevent carpal tunnel syndrome and other MSDs? • Keep a neutral keyboard position while typing. • Extend his arms out repetitively • Sit forward with shoulders hunched. • Press his wrists against the edge of the desk while he types.	Question #2 Multiple Choice Choose the best answer and then once again, click submit.	The learner will click submit after answering the question. No incorrect or correct responses will be shown. The learner will be taken to question #3.

Slide [3.4]/ Menu Title: [Hidden from Menu: Assessment Question 3]			Objective: [3]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Drag and drop interaction Drag Each Risk Factor to the Correct Image Or Repolition Authority pointings Or Authority pointin	Question #3 Drag and Drop Interaction Drag each risk factor to the correct image. 1. Repetition 2. Awkward postures 3. Contact stress 4. Force and vibration Images shown: 1. female office worker massaging neck 2. person holding wrist over a keyboard 3. lifting of heavy files / or office supplies	Question #3 Drag each risk factor to the correct image, then click submit.	The learner will click submit after answering the question. No incorrect or correct responses or feedback will be shown. The learner will be taken to question #4.

	4. leaning against a counter	
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Slide [3.5]/ Menu Title: [Hidden from	Menu: Assessment Question 4]		Objective: [2]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
What are MSDs? Slip and fall accidents that occur at work. Work related disorders that cannot be prevented. Disorders that involve the skeletal system. Disorders caused by stress and strain due to activities performed on the job.	 Question #4 What are MSDs? Slip and fall accidents that occur at work. Work related disorders that cannot be prevented. Disorders that involve the skeletal system. Disorders caused by stress and strain due to activities performed on the job. 	Question #4 Multiple Response Choose the most applicable response(s)and click submit for the final question.	The learner will click submit after answering the question. No incorrect or correct responses will be shown. The learner will be taken to the results slide.

Slide [3.6]/ Menu Title: [Hidden from Menu: Assessment Question 5]			Objective: [1]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
	Question #5 Why is it important to implement ergonomic solutions?	Question #5 Multiple Response	The learner will click submit after answering the question. No incorrect or correct responses will be



Slide [3.7a and b]/ Menu Title: [Hida	len from the main menu: Results]		Objective: [NA]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation /
			Interaction:
	Results Slide	Success Layer: [Thank you for completing the quiz.	Review Quiz button and Continue button are
Results	Your Score	Congratulations, you passed. You can	side by side and
Your Score:	Passing Score%	review your results by clicking on the review results button. If you are satisfied with your results, please click the continue button to finish the module.]	available from the beginning of the slide layer.
	Success Layer:		
	Congratulations, you passed!		
	The Review Results button and		
	Continue buttons are		
	underneath.		
	Failure layer:		
	Sorry, you did not pass.		
	Score percentage in the middle.		
	Review Results and Retry Quiz		
	buttons at the bottom	Egilura layar: Thank you for completing	
		Failure layer: Thank you for completing the quiz. Unfortunately, you did not pass.	
		the quiz. Onjoitunately, you did not pass.	

the review quiz b	your results by clicking on button. When you are in, please click on the on.
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Slide [3.8]/ Menu Title: [Congratulations]			Objective: [NA]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Original image: New image:	Office Ergonomics Congratulations! You completed the course.	Congratulations on completing the Office Ergonomics course. Now you have the knowledge you need to perform tasks safely, and avoid work related musculoskeletal injuries	All words will be on the slide the entire time. Exit button will appear
CITES RECORDANCS Ergonomic Evaluations Available Ergonomic evaluations are available upon request. submit a facilities ticket via eCurrent.	Ergonomic evaluations are available upon request.	and illness. Ergonomic evaluations are available upon request. Submit a facilities ticket via eCurrent	timed with VO.
Contact: Joelle Moore Safety Specialist (916) 608-5912	Submit a facilities ticket via eCurrent by clicking this link: SpaceView Work Requests (caiso.com)	using the link underline in blue or contact: Joelle Moore, Safety Specialist at area code 916 608-5912. You may now click the Exit button to leave the	
You completed the course. Ergonomic evolutions are concluded upon request. Submit a facilities fictive Via ecCurrent by clicking the late. Exercised by clicking the late.	Contact: Joelle Moore Safety Specialist	course or the restart button to review the course again.	
Contact: Jose Moore Sarlay Specialst (P16) 609-5912 West Insurer Fail	(916) 608-5912		
Restart and Exit buttons bottom right	Restart Course Exit Course		

Link to facilities ticket with		
screenshot		
SpaceView Work Requests		
(caiso.com)		