

Storyboard

A. Summary

Course Title	Protecting Your Back: Understanding Body Mechanics and Ergonomics
Instructional Strategy	<p>This course has components</p> <ol style="list-style-type: none"> 1. Backpain and its impact 2. Proper lifting technique 3. Ergonomic furniture for the workspace <p>Instructional strategies used in this course to make it meaningful, memorable, and motivational:</p> <ul style="list-style-type: none"> • Relevant content • Branching-learner chooses path, chunked content, practice with feedback • Visually stimulating • Interactive content for engagement and to avoid cognitive overload • Assessment
Target Audience	Newly hired employees working at a desk space in office or remote that are required to use technology (laptops, computer monitor, telephones, etc)
Objectives	<p>By the end of the course, the learner will be able to:</p> <ul style="list-style-type: none"> • Recognize how body mechanics play an important role in the workplace • Identify ergonomic equipment that can support your office space • Apply ergonomics to your workspace
Media Used	Graphics, animations, royalty-free images, voice-over narration
Assessment Type	2 Knowledge checks with feedback, graded assessment at the end of the course
Course Duration	10-15 minutes

Storyboard

B. Instructional Design Storyboard

Notes:

OST = On Screen Text; *Text that is written in italics* = directions written on the screen. If Interaction is n/a, there is not a required interaction on the slide.

Slide # & Title	Visual: On Screen Text and Images	Audio Script (Unless indicated, in woman voice)	Interaction	Notes (Client, SME)
1.1 Welcome	<p><i>OST:</i> Protecting Your Back; Understanding Body Mechanics and Ergonomics</p> <p>Speaker marker text: Enable Sound-this course include audio. Click on the notes tab for the audio script. Navigation Tutorial (button) Start (button)</p> <p><i>Images:</i> Individual sitting a desk, [1] navigation tutorial button, [2] start button, speaker marker</p>	<p>Welcome to the protecting your back, understanding body mechanics and ergonomics training. [1] To learn how to navigate this course, select the Navigation Tutorial button. [2] If you are ready to begin the training select start.</p>	<p>Learner may select the Navigation to go to the navigation of the course slide (1.2) or select Start to begin the course by going to the objectives (1.3).</p>	
1.2 Navigation	<p><i>OST:</i> Navigation</p> <p>Select each icon to learn more, select next when ready to begin the course [1] Menu and Notes icon text: The menu tab allows you to see progress through the course. Select the notes tab to view the audio script. [2] Seek Bar icon text: Shows progress through the slide. You can pause or replay the slide if needed.</p>	<p>Take a moment to become familiar with the navigation tools you will use during this course. Select next to continue.</p>	<p>Learner selects each icon to learn more about the navigation features.</p>	


Storyboard

	<p>[3] Volume icon text: Control the volume of the course here.</p> <p>[4] Navigating the course icon text: Select the next or previous buttons to progress through the course.</p> <p>[5] Resources icon text: Here you will locate additional resources to accompany the course.</p> <p><i>Images:</i> screenshot of title slide with player skin, pulsating “I” markers placed at appropriate spot to correspond to the label.</p> <p>[1] Menu and Notes [2] Seek Bar [3] Volume [4] Navigating the course [5] Resources</p>			
1.3 Objectives	<p><i>OST:</i></p> <p>Learning Objectives</p> <p>[1] At the end of the course, you will be able to</p> <p>[2] Recognize how body mechanics play an important role in the workplace</p> <p>[3] Identify ergonomic equipment that can support your office space</p> <p>[4] Apply ergonomics to your workspace</p> <p>Select next to continue</p> <p><i>Images:</i> individual sitting at a home office working, icons that align to each objective</p>	<p>During this past year working from home there have been times that our bodies have not enjoyed being placed at a desk all day, maybe your shoulders or back ached or you just needed to get up and move. [1] In this course we will focus on enhancing the time spent working [2] as you will recognize how body mechanics play an important role in the workplace, [3] identify ergonomic equipment that can support your office space [4] and apply ergonomics to your workspace to practice good body</p>	n/a	

Storyboard

	<p><i>Note:</i> Each numbered item flies in from bottom synced with audio.</p>	<p>mechanics.</p>		
<p>1.4 Intro to Body Mechanics</p>	<p><i>OST:</i> What is Body Mechanics? [2] Body mechanics refers to the way you position your body during an activity or task. [3] Workplace (tab) Importance (tab) Back Pain (tab) [3] Select each tab above to learn more. Select the x to return to this screen.</p> <p><i>Images:</i> [1] someone balancing a book on their head, 3 tabs with label and directions (when a tab is clicked it takes learner to an additional layer) [3] Workplace [3] Importance [3] Back Pain,</p> <p><i>Note:</i> Each numbered item is animated and synced to the timeline/audio</p> <p><i>Workplace Layer:</i> <i>OST:</i> How does this apply to the workplace? Good body mechanics prevents injuries in the workplace.</p> <p><i>Images:</i> Office workspace</p> <p><i>Importance Layer:</i> <i>OST:</i></p>	<p>“Stand up straight and tall” and [1] “Don’t pick that up with your back” are things we have all heard before. Did you know this is all due to body mechanics? [2] Body mechanics refers to the way you position your body during an activity or task. [3] Select the tabs to continue and learn more.</p> <p><i>Workplace Layer:</i> You might be asking how does this apply to me? Well, whether you are working in an office or a home office, good body mechanics prevents injuries in the workplace.</p> <p><i>Importance Layer:</i> Practicing good body mechanics is important when you are standing for long periods of time, moving things, or sitting and working at a desk.</p> <p><i>Back Pain Layer:</i> Think about times your back has hurt, why were you experiencing the pain? Select all the images that</p>	<p>Learner selects each tab to learn more, click “X” to return to the base layer or can select on additional tabs from each tab.</p> <p><i>Back Pain Layer:</i> Learner will select any images that have caused back pain and select the submit button where a feedback popup layer appears.</p> <p><i>Feedback Layer:</i> The learner will select ‘continue’ on this layer to take them to the branching slide 1.5.</p>	


Storyboard

	<p>Why is this important?</p> <ul style="list-style-type: none"> • standing for long periods of time • moving things • sitting and working at a desk. <p><i>Images: spine</i></p>  <p><i>Back Pain Layer:</i> <i>OST:</i></p> <p>What can cause back pain? Select all the images that have caused you back pain, select submit when finished. Submit (button)</p> <p><i>Images:</i> Note: each image will a hover state with the label and a selected state Yoga position: Loss of Flexibility Learning over desk: Poor Posture Hurt back picking up boxes: Lifting with your back Hunched over phone: Hunched Over Laying on ground: Fall or Injury Bed: Poor Mattress Weights: Lack of exercise Office: Office Furniture Submit Button that leads to the feedback layer</p> <p><i>Feedback Layer:</i> <i>OST:</i> Back Pain can affect anyone at any time and can drastically impact your daily life. Let's look at</p>	<p>have caused you back pain before. Select submit when finished.</p>		
--	---	---	--	--

Storyboard

	<p>how we can prevent it while working. Select the continue button to learn more. Continue (button)</p>			
<p>1.5 Preventing Back Pain</p>	<p><i>OST:</i> What can I do to prevent my back pain? <i>Marker:</i> Ready to Begin? If you are ready to begin, choose the box to learn more about how to properly lift a heavy item. Select the chair to learn more about ergonomic furniture.</p> <p><i>Images:</i> Small marker, Two boxes one with an image of a box, the other with an image of a desk and chair. -Add state changes for hover and visited</p> <p><i>All Done, Go to Quiz Layer!</i> <i>OST:</i> Way to go! Your body will thank you as you now have the skills to better take care of it while working. You are ready to put your knowledge to the test. Select the Begin Quiz button to head to the quiz. Begin Quiz (button)</p> <p><i>Images:</i> Begin Quiz Button</p>	<p>This course has two parts to complete: the lifting technique and ergonomic furniture. Both will need to be completed prior to progressing to the course assessment. Select the image for the box or chair to learn more, when finished select the other to continue with the course.</p>	<p>This is the beginning of a branching situation.</p> <p>The learner will select the box image to be taken to slide 1.6, where they learn more about the heavy lift technique. Upon completion the box image will appear as visited.</p> <p>The learner will select the desk and chair image to be taken to slide 1.8, where they will learn about ergonomic furniture. Upon completion the chair/desk image will appear as visited.</p>	

Storyboard

			<p>When both have been visited a new layer will appear. The learner selects the button to be taken to the end of course assessment, slide 1.14</p>	
<p>1.6 Proper Lift</p>	<p><i>OST:</i> Protecting Your Back Through Proper Lifting Select each step to learn the proper lifting technique. Select next to continue.</p> <p>[1] Step 1 [2] Step 2 [3] Step 3 [4] Step 4 [5] Step 5</p>  <p><i>Images:</i> Someone carrying boxes that looks like they are going to tip over with a semi-transparent accordion interaction over top, each tab of the accordion decreasing in transparency from tabs 1-5</p> <p><i>[1] Step 1 Layer:</i> <i>OST:</i> Plan Your Move</p> <ul style="list-style-type: none"> • Size up the load 	<p>When preparing to lift something heavy, it is important to maintain good body mechanics to help prevent back injuries from occurring. Select each step to learn the proper lifting technique.</p> <p><i>[1] Step 1 Layer:</i> Size up the load and make sure your path is clear. If the load is too heavy or awkward, do not attempt to lift the load alone, get help!</p> <p><i>[2] Step 2 Layer:</i> Get ready by bringing the load close to your body. Have your feet shoulder width apart with the load between them.</p> <p><i>[3] Step 3 Layer:</i></p>	<p>Using an accordion interaction, the learner will select each tab. The tab will open to the right and reveal directions for that step. The learner navigates through all 5 steps prior to continuing to the next slide</p>	

Storyboard

	<ul style="list-style-type: none"> • Make sure your path is clear • Get help if the load is too heavy or awkward <p><i>Images:</i> Two people carrying a box</p> <p><i>[2] Step 2 Layer:</i> <i>OST:</i> Get Ready Bring the load close to your body. Have your feet shoulder width apart with the load between them.</p> <p><i>Images:</i> Someone preparing to lift a box</p> <p><i>[3] Step 3 Layer:</i> <i>OST</i> Use Your Legs Use your leg and thigh muscles, not your back, to bend and get a firm grip on the load.</p> <p><i>Images:</i> Someone bending their knees to pick up a box</p> <p><i>[4] Step 4 Layer:</i> <i>OST:</i> Arms In Keep your arms and elbows close to your side.</p> <p><i>Images:</i> Someone picking up the box with proper arms.</p>	<p>Use your leg and thigh muscles, not your back, to bend and get a firm grip on the load.</p> <p><i>[4] Step 4 Layer:</i> Keep your arms and elbows close to your side.</p> <p><i>[5] Step 5 Layer:</i> Bend your knees and hips, keeping your back straight to lift the load.</p>		
--	---	---	--	--

Storyboard

	<p><i>[5] Step 5 Layer:</i> <i>OST:</i> Keep the back straight Bend your knees and hips, keeping your back straight to lift the load.</p> <p><i>Images:</i> Someone lifting a box with their back straight</p>			
<p>1.7 Knowledge Check</p>	<p><i>OST:</i> Someone has just delivered office supplies and you need to place the box on the shelf in the supply. How should do it, so you don't hurt your back? Drag and drop the steps in the appropriate order to lift the box safely.</p> <ol style="list-style-type: none"> 1. Plan your move-size up the load, clear path, get help if needed. 2. Get ready-bring the load close and have your feet shoulder width apart. 3. Use your legs-not your back, to bend and get a firm grip. 4. Arms in-keep your arms and elbows close to your side. 5. Keep your back straight-bend your knees and hips as you lift. <p><i>Note:</i> The order listed above is the correct order</p> <p><i>Images:</i> A mail service person delivering packages</p>	<p>Someone has just delivered office supplies and you need to place the box on the shelf in the supply closet. How should you do it, so you don't hurt your back? Drag and drop the steps in the appropriate order to lift the box safely. Select submit when finished.</p>	<p>The learner will drag and drop the steps into the correct order. They will select submit to receive feedback.</p> <p>When the learner selects continue it will return them to 1.5 to select the other branch of the course or move onto the end of course assessment.</p>	

Storyboard

	<p><i>Try Again Layer:</i> <i>OST:</i> Incorrect That is incorrect. Please try again. Try Again (button)</p> <p><i>Incorrect Layer:</i> <i>OST:</i> Incorrect You did not select the correct response. Continue (button)</p> <p><i>Images:</i> An image of the drag and drop in the correct order</p> <p><i>Correct Layer:</i> <i>OST:</i> Correct That's right! Be sure to practice proper lifting techniques when picking up or moving heavy items. Continue (button)</p>			
1.8 Ergonomics	<p><i>OST:</i> What is ergonomics? the science of designing the job to fit the worker, rather than forcing the worker's body to fit the job.</p> <p><i>Images:</i></p>	<p>Ergonomics is the study of work, and the science of designing the job to fit the worker, rather than forcing the worker's body to fit the job. Adaptive tasks, workstation tools and equipment to fit the worker can help reduce the physical stress on the body.</p>	<p>n/a Slide automatically advances to 1.9.</p>	

Storyboard

	4 images of ergonomic office furniture fade in and out while the speaker talks (gaming chair, standing desk, monitor stand, etc.)			
1.9 Body Mechanics _Ergonomics	<p><i>OST:</i> The relationship between body mechanics and ergonomics “An ounce of prevention is worth a pound of cure” -Benjamin Franklin Select the image to learn more</p> <p><i>Images:</i> Person sitting in a chair at work, arrow that points to the image.</p> <p><i>3 Things to maintain layer:</i> <i>OST:</i> Spine-Maintain the three natural curves of the spine. Chair-Slide your chair under your desk, do not lean over your work. Stretch-Take stretch breaks every 30-60 minutes to get out of your chair and move your body.</p> <p><i>Images:</i> a spine, a chair at a desk, someone stretching</p>	If you are sitting and working at a desk or table, it is essential to keep body mechanics in mind. Select the image to learn more about what to do when you are working in a seated position for an extended period of time.	The Learner selects the image to view the layer. The Learner will select x to close the layer.	
1.10 Sitting	<p><i>OST:</i> Considerations for the workstation-Sitting Select each box for considerations when sitting in the workplace.</p> <p>[1] Desk card ost: easily reach frequently used items</p>	<p>Select each box for considerations when sitting in the workplace.</p> <p>[1] Desk-arrange your workstation so that you can easily reach all frequently used items without</p>	The learner will select each box, the box will change colors and show the OST, the audio will play for that card and the	


Storyboard

	<p>[2] Phone card ost: telephone to the left of right of the monitor [3] Headset card ost: consider a headset [4] Stretch card ost: get up, stretch, and move often</p> <p><i>Images:</i> 4 boxes with an icon for each card-desk, phone, headset, stretch, an image in the center that corresponds to each icon (a headset image to match the headset card).</p>	<p>twisting, bending or excessive reaching.</p> <p>[2] Phone-Place the telephone on either the left or the right side of the monitor.</p> <p>[3] Headset-Use a headset if you frequently use the telephone in combination with computer use or writing.</p> <p>[4] Stretch-Remember to perform occasional exercises or stretches at your workstation to reduce stress and improve circulation.</p>	<p>image in the center will change to match as well.</p>	
<p>1.11 Standing</p>	<p><i>OST:</i> Considerations for the workstation-Standing Select each box for considerations when standing in the workplace.</p> <p>[1] Desk card ost: tables or desks should be adjustable [2] Footrest card ost: built-in foot rails or portable footrests [3] Elbows card ost: elbow support [4] Seat card ost: add a seat for breaks</p> <p><i>Images:</i> 4 boxes with an icon for each card-desk, footrest, elbows, seat, an image in the center that</p>	<p>Select each box for considerations when standing in the workplace.</p> <p>[1] Desk-Working tables, desks and benches should be adjustable. Controls and tools should be positioned so you can reach them easily without twisting or bending.</p> <p>[2] Footrest-Use standing workstations that have built-in foot rails or portable footrests to allow you to shift body weight from one leg to another.</p>	<p>The learner will select each box, the box will change colors and show the OST, the audio will play for that card and the image in the center will change to match as well.</p>	

Storyboard

	<p>corresponds to each icon information (a footrest image to match the footrest card)</p>	<p>[3] Elbows-Elbow supports for precision work help reduce tension in the upper arms and neck.</p> <p>[4] Seat-A seat should be provided to allow you to occasionally sit. Taking breaks to sit will expand the variety of body positions and flexibility.</p>		
<p>1.12 Office Furniture</p>	<p><i>OST:</i> Considerations for Office Furniture Select the circles around the room to learn more about how to apply ergonomics to the workspace to maintain good body mechanics.</p> <p><i>Light marker-</i> Lights -Make sure there is adequate lighting for the space. -Position the light to keep the monitor free from glare.</p> <p><i>Monitor marker-</i> Monitor -The monitor should be positioned directly in front of you when you are seated. -Make sure the top of the monitor is level of slightly below your horizontal eye level. -The monitor should be at an arm's length distance when sitting back in your chair.</p>	<p>Select the circles around the room to learn more about how to apply ergonomics to the workspace to maintain good body mechanics.</p>	<p>Learner will select each marker. The Marker will present information to consider about that piece of furniture.</p>	

Storyboard

	<p><i>Mouse marker-</i> Mouse -The mouse should be positioned at the same height and near the keyboard.</p> <p><i>Chair marker-</i> Chair -Adjust the chair for correct height and lumbar support. -Make sure the chair provides adequate back support. -Position the chair directly under the workstation. -Make sure the chair height is positioned so that your arms form a 90-degree angle at the elbow when placed on the work surface. -There should be an adequate base of support for feet to be placed flat.</p> <p><i>Images:</i> Picture of an office that includes a light, monitor, mouse, and ergonomic chair. Transparent marker (thicker border and pulsating) placed on each of these items.</p> 			
<p>1.13 Knowledge Check</p>	<p><i>OST:</i> Essential Office Furniture Prepare this desk space for work! Drag the office furniture that can help your body to desk. If not,</p>	<p>Prepare this desk space for work! Drag the office furniture that can help your body to the desk. If not,</p>	<p>Learner will drag and drop items to either the desk or the box. They will</p>	

Storyboard

	<p>place it in the box to use later. Click submit when finished.</p> <p><i>Images:</i> <i>drop images (a place for other items to be moved to):</i> a desk, a box <i>drag images:</i> mouse, laptop, goldfish bowl, framed art, rug, chair, desk lamp</p> <p><i>Try Again Layer:</i> <i>OST:</i> Incorrect That is incorrect. Please try again. Try Again (button)</p> <p><i>Incorrect Layer:</i> <i>OST:</i> Incorrect The laptop, chair, mouse and light should all be part of the ergonomic office furniture. Continue (button)</p> <p><i>Correct Layer:</i> <i>OST:</i> Correct That's right! Are you using these in your workstation? Continue (button)</p>	<p>place it in the box to use later. Click submit when finished.</p>	<p>place the picture, rug and goldfish bowl in the box and will place the chair, laptop, lamp, and mouse at the desk (they can arrange them at the desk as well).</p> <p>They will select submit to receive feedback.</p> <p>When the learner selects continue it will return them to 1.5 to select the other branch of the course or move onto the end of course assessment.</p>	
<p>1.14 End of Course Quiz</p>	<p><i>OST:</i> Preparing for the end of course quiz To complete the course,</p> <ul style="list-style-type: none"> • 4 questions [1] 	<p>To complete the course, there will be a [1] 4-question quiz checking your understanding of the content.</p>	<p>n/a</p>	

Storyboard

	<ul style="list-style-type: none"> • 75% to pass [2] <p>If ready to begin, please select next. [3]</p> <p><i>Note:</i> Each numbered item flies in from bottom synced with audio.</p> <p><i>Images:</i> someone appearing to study (laptop open, notepad, etc.)</p>	<p>[2] You will need to earn at least a 75% to pass.</p> <p>Before beginning, you can select previous and review any necessary parts of the course.</p> <p>If ready to begin, please select next.</p>		
1.15 Quiz Question 1-select one	<p><i>OST:</i> Select the correct way to sit at your desk to maintain the natural curves of the spine.</p> <p><i>Images:</i> an image of someone hunched over their desk working at a computer, an image of someone sitting with the natural curves of the spine working at a computer</p>		Learner selects an answer and submit to progress to the next question.	
1.15 Quiz Question 1-multiple choice	<p><i>OST:</i> Maria has been sitting at her desk working for over three hours and is noticing her back is starting to ache. What can she do to help and prevent this from happening again in the future?</p> <p><i>Choice 1:</i> Take a stretch break every 60 minutes while working (correct answer)</p> <p><i>Choice 2:</i> Put a heating pad on her lower back and keep working</p> <p><i>Choice 3:</i> Kick her feet up and sign off for today, she needed to use some PTO anyway</p> <p><i>Choice 4:</i> Buy a headset to use when answering her phone</p>		Learner selects an answer and submit to progress to the next question.	

Storyboard

	<p><i>Images:</i> picture of an office or someone sitting at a desk faded into the background</p>			
1.16 Question 2- pick many hotspot	<p><i>OST:</i> What workstation tools and equipment can help reduce physical stress on your body while working? Select 3 that apply.</p> <p><i>Images:</i> Desk that has a monitor on a tall stand, a laptop on a stand, a mouse and keyboard and other items/tools Transparent boxes around 5 items to be selected with state changes</p>		Learner selects an answer and submit to progress to the next question.	
1.17 Question 3- multiple choice	<p><i>OST:</i> When Davion got to work today, he found a larger box that need to be moved to the conference room. When he was assessing how to lift it properly, he noticed a sticker on the box showing two people carrying an item. What should he do next? <i>Choice 1:</i> Bring the box close to his body and prepare to lift it <i>Choice 2:</i> Bend down with his knees and get a firm grip on the box <i>Choice 3:</i> Get help from someone to help him in carrying the heavy box (correct answer)</p> <p><i>Images:</i> box with a label for a two-person lift</p>		Learner selects an answer and submit to progress to the next question.	

Storyboard

<p>1.19 Results</p>	<p><i>OST:</i> Results Your Score: Passing Score: Result: <i>(Feedback layer for failure or success)</i> Retry Quiz (button) Review Quiz (button)</p> <p><i>Images:</i></p> <p><i>Success Layer:</i> <i>OST: Congratulations, you passed!</i> Continue (button)</p> <p><i>Images: Green check mark</i></p> <p><i>Failure Layer:</i> <i>OST: You did not pass. Please try again.</i></p> <p><i>Images: Red X</i></p>		<p>Learner will see their results displayed along with a feedback layer showing if they passed or failed the assessment.</p> <p>Learner will select 'Retry Quiz', 'Review Quiz' or 'Continue'. Continue will take them to slide 1.20.</p>	
<p>1.20 Congratulations</p>	<p><i>OST:</i> Congratulations! You can now recognize how body mechanics play an important role in the workplace, identify proper lifting techniques and apply ergonomics to the workspace to practice good body mechanics. Exit Course (button) Restart (button)</p>	<p>Congratulations you have completed the course! Be sure to practice good body mechanics to prevent stress on your body. Select the resources for reminders that can help support you.</p>	<p>Learner selects "Exit Course" or "Restart"</p>	

Storyboard

	<i>Images:</i> a workspace with proper ergonomic furniture (laptop stand, lamp, mouse, etc.), arrow that points to the resources tab on the player			
--	--	--	--	--

C. Proposal and Specifications Sign-off

Client Signature	
Date	