

## MATERIAL HANDLING

## INSTRUCTOR'S GUIDE

### MODULE OVERVIEW

This module provides an overview of the ergonomics risk factors and explains how improper workplace set-up and material handling techniques contribute to back and shoulder injuries. Students learn about engineering and administrative control methods. The SMART lifting technique is discussed in detail, as well as the use of mechanical lifting devices. Students learn which specific items in the shop exceed the 50 pounds and need to be moved with assistance.

### OBJECTIVES

When students have completed this module, they will be able to:

- Explain what the role of ergonomics is
- Identify ergonomic risk factors using a checklist
- List types of controls and work practices that can be implemented to reduce exposure to ergonomic risk factors.
- Demonstrate proper lifting technique for a one and two-person lift.

### CLASSROOM (15 min)

PowerPoint presentations: **Material Handling.pptx**

Handout: **Material Handling – Handout.pdf**

Instructor Tool Kit: **none**

### LAB (10 min)

**Material Handling - Lab Activities.pdf** – Identify the ergonomic risk factors associated with changing chucks or dies. Explain how students can identify the weight and an object before lifting and carrying it.

### HOMEWORK

- **Material Handling – Homework.pdf** – Students read about the usefulness of using back belts to prevent back injuries.
- **Quiz**

### ADDITIONAL RESOURCES

**“I want to know more” folder** – information on manual material handling and tool selection guidelines

