# **SECTION HEADING**

# **ELWT 1170: Wind Energy OSHA Standards & Climb Lab**

## Description

Wind Energy OSHA Standards & Climb Lab introduces students to turbine designs, types models and sizes offered by existing companies. Basic safety principles in the wind energy industry and a brief overview of the Occupational Safety and Health Administration (OSHA) pertaining to the climbing of wind turbines will be covered. Students will learn how to properly inspect equipment before climbing and properly store climbing equipment after each use.

#### **Credits**

3

### **Topics to be Covered**

- 1. Types of wind energy turbines
- 2. Systems of wind energy
- 3. Wind turbine parts
- 4. OSHA standards according to the wind industry
- 5. Personal Protective Equipment
- 6. Climbing gear inspection
- 7. Ladder safety
- 8. Working heights
- 9. Climbing a wind turbine properly and safely

## **Learning Outcomes**

- 1. Inspect the full body harness.
- 2. Inspect the Lad Safe cable sleeve.
- 3. Inspect the lanyard.
- 4. Demonstrate how to fit the harness.
- 5. Demonstrate how to attach the Lad Safe cable sleeve to the cable.
- 6. Demonstrate how to safely attach the lanyard to a tie off point.
- 7. Develop a technique on how to climb a 200 to 300-foot ladder.
- 8. Describe PPE and other safety gear.
- 9. Explain OSHA rules about ladder safety.
- 10. Identify and locate wind turbine parts
- 11. Discuss safety issues in the wind energy industry

### **Credit Details**

Lecture: 1

Lab: 2

OJT: 0