EASTERN ARIZONA COLLEGE
Rigging
Course Design
2016-2017

Course Information
Division: Industrial Technology Education
Course Number: TEC 116
Title: Rigging
Credits: 1
Developed by: M. Crockett/Revised by Brian Coppola
Lecture/Lab Ratio: 0.5 Lecture/1 Lab
Transfer Status:

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Activity Course: No
CIP Code: 47.0303
Assessment Mode: Pre/Post Test (35 Questions/105 Points)
Semester Taught: Upon Request
GE Category: None
Separate Lab: No
Awareness Course: No
Intensive Writing Course: No

Prerequisites
None

Educational Value
A. To general education: N/A
B. To other courses or curricula: Curriculum requirement in the Diesel Technology, Electrical and Instrumentation Technology, and Industrial Plant Technology AAS degrees.

Description
Provides instruction in the use of slings and common rigging hardware. Emphasizes basic rigging techniques, hitch configurations, safe loading practices, and load inspection, as well as the use of American National Standards Institute (ANSI) hand signals.

Supplies
None
Competencies and Performance Standards

1. Identify and describe the use of slings and common rigging hardware.

   Learning objectives
   What you will learn as you master the competency:
   a. Select appropriate slings for a lift from among synthetic slings, alloy steel chain slings, and wire rope slings.
   b. Given various loads, determine the proper hitch to be used from among vertical, choker, and basket hitches.

   Performance Standards
   Competence will be demonstrated:
   o in group discussion
   o in lab setting
   o in written tests
   Criteria - Performance will be satisfactory when:
   o learner applies rigging practices to accomplish a specific task
   o learner correctly identifies rigging hardware

2. Describe basic inspection techniques and rejection criteria used for slings and hardware.

   Learning objectives
   What you will learn as you master the competency:
   a. Identify the characteristics of sound and unsound rigging equipment such as slings, shackles, eyebolts, lifting clamps, and rigging hooks.
   b. Identify correct load-handling configurations.

   Performance Standards
   Competence will be demonstrated:
   o in class discussion
   o in lab setting
   Criteria - Performance will be satisfactory when:
   o learner correctly identifies unsound equipment due to wear or damage
   o learner correctly identifies appropriate hardware for a given lifting task

3. Demonstrate configuration of basic hitches and their proper connections.

   Learning objectives
   What you will learn as you master the competency:
   a. Identify basic hitch configurations: vertical, choker, and basket hitches.
   b. Identify proper connections.

   Performance Standards
   Competence will be demonstrated:
   o in class discussion
   o in lab setting
   o in individual application project
Criteria - Performance will be satisfactory when:
   o learner demonstrates proper techniques for connecting hitches
   o learner demonstrates proper configuration of basic hitches

4. Describe basic load-handling safety practices.

Learning objectives
What you will learn as you master the competency:
   a. Describe pre-lift safety checks.
   b. Identify capacity ratings.
   c. Simulate level load-lifting.
   d. Describe loading and disconnecting safety precautions.

Performance Standards
Competence will be demonstrated:
   o in class discussion
   o in lab setting
   o in written tests
   o in individual and group demonstration

Criteria - Performance will be satisfactory when:
   o learner correctly follows safe load procedures
   o learner performs loading and disconnecting procedures to industry standards

5. Demonstrate the proper use of ANSI hand signals.

Learning objectives
What you will learn as you master the competency:
   a. Interpret ANSI hand signals.
   b. Perform ANSI hand signals.

Performance Standards
Competence will be demonstrated:
   o in group exercises
   o in group and individual demonstrations

Criteria - Performance will be satisfactory when:
   o learner identifies intended significance of ANSI hand signals
   o learner demonstrates proper use of ANSI hand signals

Types of Instruction
Lecture
Lab demonstrations
Individual projects
Group projects
**Grading Information**

**Grading Rationale**
Quizzes and tests—up to 400 pts.
Lab demonstrations, group and individual projects—up to 400 pts.
Post-test—100 pts.

**Grading Scale**
A  90%-100%
B  80%-89%
C  70%-79%
D  60%-69%
F  0-59%