

ATMW-1330: PRINT READING FOR MILLWRIGHTS

Cuyahoga Community College

Viewing: ATMW-1330 : Print Reading for Millwrights

Board of Trustees:

2007-05-24

Academic Term:

Spring 2019

Subject Code

ATMW - Appld Ind Tech - Millwrighting

Course Number:

1330

Title:

Print Reading for Millwrights

Catalog Description:

Study of print reading as applied to activities of millwrights. Topics include related math concepts, machine print components including orthographic views, line types, scale, exploded views, installation prints, revision information, optical tooling, and specifications.

Credit Hour(s):

2

Lecture Hour(s):

2

Requisites

Prerequisite and Corequisite

Acceptance to any Applied Industrial Technology program, and ATCT-1301 Introduction to Carpentry or concurrent enrollment; or departmental approval.

Outcomes

Course Outcome(s):

Work effectively and efficiently with prints on a job site where millwright activities take place.

Objective(s):

1. 1. Apply math concepts needed for millwright print reading.
2. 2. Identify and explain various components of machine prints.
3. 3. Identify and explain views and symbols of prints.
4. 4. Demonstrate knowledge of print reading by interpreting a print of kiln installation through active learning.
5. 5. Interpret a set of pile drawings.
6. 6. Use optical tooling for laying out a pile configuration.
7. 7. Identify and explain significance of all sections of the specifications that accompany prints.

Methods of Evaluation:

1. Quizzes
2. Exams
3. Classroom participation
4. Demonstration of assigned projects

Course Content Outline:

A. Concepts

1. Trigonometry for print reading

2. Geometry for print reading
 3. Algebra for print reading
 4. Machine print component: orthographic views
 5. Machine print component: scale
 6. Machine print component: exploded views
 7. Machine print component: line types
 8. Machine print component: symbols and conventions
 9. Machine print component: revisions
 10. Views and symbols of prints
 11. Pile drawings
 12. Interpreting pile drawings
 13. Optical tooling
 14. Pile configuration layout
 15. Kiln installation prints
 16. Sections and detail
 17. General elevations
 18. Orthographic views
 19. Performance specifications
 20. Descriptive specifications
 21. Reference specifications
 22. Proprietary specifications
 23. Base-bid specifications
 24. Construction specifications
 25. Construction Specification Institute (CSI) format
- B. Skills
1. Applying math concepts to print reading
 2. Identifying, explaining, and applying knowledge of various components of machine prints
 3. Identifying, explaining, and applying knowledge of views and symbols of prints
 4. Interpreting a set of pile drawings
 5. Using optical tooling for laying out a pile configuration
 6. Interpreting kiln installation prints
 7. Interpreting sections and detail
 8. Applying knowledge of general elevations to print reading
 9. Applying knowledge of orthographic views to print reading
 10. Applying knowledge of scale to print reading
 11. Identifying, explaining, and applying knowledge of all sections of the specifications that accompany prints
- C. Issues
1. Applying math concepts to print reading
 2. Professional demeanor to promote credibility of the trade
 3. Communication skills to promote effective interpersonal skills

Resources

Sundberg, Elmer W. *Building Trades Blueprint Reading*. 4th ed. Chicago, IL: American Technical Society, 1967.

United Brotherhood of Carpenters. *Instructional Materials for Blueprint Reading*. Washington: United Brotherhood of Carpenters, 1972.

USA Training. *Mechanical Print Reading*. Herndon, VA: USA Training, 1981.
