



Course Outcome Summary

31442308 Welding-Blueprint Reading 1

Course Information:

Description: This course is designed to develop the student's skill in reading working drawings of weldments

Instruction Level: Technical Diploma

Total Credits: 1.00

Total Hours 36.00

Textbooks: *Blueprint Reading for Welders -With 6 Sheets. 9th Edition. Copyright 2014. Bennett, A. E. and Louis J. Siy. Publisher: Cengage Learning. ISBN-13:978-1-133-60578-2. Required.*

- Core Abilities:**
1. Apply mathematical concepts.
 2. Demonstrate ability to think critically.
 3. Demonstrate ability to value self and work ethically with others in a diverse population.
 4. Make decisions that incorporate the importance of sustainability.
 5. Transfer social and natural science theories into practical applications.
 6. Use effective communication skills.
 7. Use technology effectively.

Program Outcomes: 1. Interpret welding drawing

Course Competencies:

1. **Discover the purpose of blueprints**

<i>Domain</i>	<i>Cognitive</i>	<i>Level</i>	<i>Applying</i>	<i>Status</i>	<i>Active</i>
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Linked Core Abilities

Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 1.1. Written Product
- 1.2. Written Objective Test

Criteria

You will know you are successful when:

- 1.1. -Listen attentively

- 1.2. -Pass written exam at level as determined by the instructor
- 1.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 1.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 1.a. Identify personal assignment
- 1.b. Describe various types of information found on a blueprint
- 1.c. Recognize the purpose of various types of information found on a blueprint

2. Distinguish the various views that can be found on a blueprint

Domain Cognitive Level Analyzing Status Active

Linked Core Abilities

Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Transfer social and natural science theories into practical applications. Use effective communication skills.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 2.1. Written product
- 2.2. Written objective exam

Criteria

You will know you are successful when:

- 2.1. -Listen attentively
- 2.2. -Pass written exam at level as determined by the instructor
- 2.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 2.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 2.a. Explore front, right side, left side, top, front, and back views
- 2.b. Determine spatial relationship between various views
- 2.c. Construct a simple 3 dimensional model
- 2.d. Describe commonality of size information between views (length, height, width)

3. Distinguish various line types found on a blueprint

Domain Cognitive Level Analyzing Status Active

Linked Core Abilities

Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Transfer social and natural science theories into practical applications. Use effective communication skills.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 3.1. Written product
- 3.2. Written objective exam

Criteria

You will know you are successful when:

- 3.1. -Listen attentively
- 3.2. -Pass written exam at level as determined by the instructor
- 3.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 3.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 3.a. Examine the designs of the lines
- 3.b. Examine the purpose of the lines

4. Discover various pictorial views

Domain Cognitive Level Applying Status Active

Linked Core Abilities

Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Transfer social and natural science theories into practical applications. Use effective communication skills.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 4.1. Written product
- 4.2. Written objective exam

Criteria

You will know you are successful when:

- 4.1. -Listen attentively
- 4.2. -Pass written exam at level as determined by the instructor
- 4.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 4.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 4.a. Examine the various pictorial views (isometric and oblique)
- 4.b. Distinguish the various pictorial views
- 4.c. Interpret the various pictorial views

5. Explore Notes and Specifications

Domain Cognitive Level Applying Status Active

Linked Core Abilities

Apply mathematical concepts. Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Make decisions that incorporate the importance of sustainability. Transfer social and natural science theories into practical applications. Use effective communication skills.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 5.1. Written product
- 5.2. Written objective exam

Criteria

You will know you are successful when:

- 5.1. -Listen attentively
- 5.2. -Pass written exam at level as determined by the instructor
- 5.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 5.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 5.a. Examine various forms and locations of notes and specifications (general and local, in body and in bill of material)
- 5.b. Interpret the meaning of various notes and specifications
- 5.c. Manage information that is called out in the notes and specifications

6. Explore dimensions

Domain Cognitive Level Applying Status Active

Linked Core Abilities

Apply mathematical concepts. Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Make decisions that incorporate the importance of sustainability. Use effective communication skills. Use technology effectively.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 6.1. Written product
- 6.2. Written objective exam

Criteria

You will know you are successful when:

- 6.1. -Listen attentively
- 6.2. -Pass written exam at level as determined by the instructor
- 6.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 6.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 6.a. Examine the purpose of dimensions
- 6.b. Examine the various ways that dimensional information is expressed
- 6.c. Interpret feature sizes based on stated and unstated dimensions
- 6.d. compute size and/or location dimensions based on stated tolerances
- 6.e. Correctly manage dimensional information

7. Examine Structural Shapes

Domain Cognitive Level Applying Status Active

Linked Core Abilities

Apply mathematical concepts. Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Make decisions that incorporate the importance of sustainability. Transfer social and natural science theories into practical applications. Use effective communication skills. Use technology effectively.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 7.1. Written product
- 7.2. Written objective exam

Criteria

You will know you are successful when:

- 7.1. -Listen attentively
- 7.2. -Pass written exam at level as determined by the instructor
- 7.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 7.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 7.a. Explore the concept of structural shapes
- 7.b. Examine various structural shapes and how they are specified
- 7.c. Identify a structural shape by its specification
- 7.d. Write a specification of a given structural shape

8. Explore title block*Domain Cognitive Level Applying Status Active***Linked Core Abilities**

Apply mathematical concepts. Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Make decisions that incorporate the importance of sustainability. Transfer social and natural science theories into practical applications. Use effective communication skills. Use technology effectively.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 8.1. Written product
- 8.2. Written objective exam

Criteria

You will know you are successful when:

- 8.1. -Listen attentively
- 8.2. -Pass written exam at level as determined by the instructor
- 8.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 8.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 8.a. Examine parts of a title block
- 8.b. Examine meaning of information on a title block
- 8.c. Correctly manage information specified on a title block

9. Explore Bill of Materials*Domain Cognitive Level Applying Status Active***Linked Core Abilities**

Apply mathematical concepts. Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Make decisions that incorporate the importance of sustainability. Transfer social and natural science theories into practical applications. Use effective communication skills. Use technology effectively.

Linked Program Outcomes

Interpret welding drawings

Assessment Strategies

- 9.1. Written product
- 9.2. Written objective exam

Criteria

You will know you are successful when:

- 9.1. -Listen attentively
- 9.2. -Pass written exam at level as determined by the instructor
- 9.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 9.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 9.a. Examine the parts of a bill of materials
- 9.b. Examine the meaning of information on a bill of material
- 9.c. Correctly manage information specified on the bill of material

10. Explore Section Views*Domain Cognitive Level Applying Status Active***Linked Core Abilities**

Apply mathematical concepts. Demonstrate ability to think critically. Demonstrate ability to value self and work ethically with others in a diverse population. Make decisions that incorporate the importance of sustainability. Transfer social and natural science theories into practical applications. Use effective communication skills. Use technology effectively.

Assessment Strategies

- 10.1. Written product
- 10.2. Written objective exam

Criteria

You will know you are successful when:

- 10.1. -Listen attentively
- 10.2. -Pass written exam at level as determined by the instructor
- 10.3. -Follow the criteria as outlined on all products as outlined by the instructor
- 10.4. -Provide accurate feedback to questions/ scenarios

Learning Objectives

- 10.a. Examine the purpose of section views
- 10.b. Explore the various types of section views
- 10.c. Effectively use information provided by section views

