

Course Outcome Summary

Standard Course

MDTC 109 Mechanical Blueprint Reading

Course InformationDivisionASETContact Hours30Theory30

Prerequisites RDG 090 or qualifying scores on accepted placement tests

Course Description

Total Credits

This course covers the basic principles essential for interpretation of blueprints and engineering drawings. Fundamental symbols, signs and techniques, as well as size and shape description are emphasized.

Course Outcomes

In order to evidence success in this course, students will be able to:

2

- 1. Identify/recognize prints, how prints are produced, care of prints, and the importance of prints.
- 2. Identify/recognize the different types and requirements of various lines.
- 3. Identify/recognize materials needed for sketching.
- 4. Identify/recognize visualization rules of an orthographic projection drawing.
- 5. Identify/recognize different types and placement of dimensions.
- 6. Identify/recognize the need for an auxiliary view.
- 7. Identify/recognize the major components of working drawings.
- 8. Identify/recognize terms used in dimensioning and tolerancing.
- 9. Identify/recognize different types of sectional and pictorial views.
- 10. Identify/recognize elements of a title block, list of materials, and drawing notes.
- 11. Identify/recognize parts of a drawing change system.
- 12. Identify/recognize the basics of geometric dimensioning and tolerancing.
- 13. Identify/recognize the different thread representations and specifications.
- 14. Identify/recognize specifications and callouts for machining processes.
- 15. Demonstrate how to read the steel rule and drafting scale in various units (fractional, decimal & metric).
- 16. Demonstrate the ability to sketch a given object.
- 17. Demonstrate the ability to select best views to describe an object.
- 18. Demonstrate the ability to produce the Gothic style of technical lettering.
- 19. Demonstrate the ability to solve mathematical problems commonly found in the shop setting.
- 20. Demonstrate the ability to solve problems associated with each of the major units.
- 21. Believe, feel, think the importance of the universal language (prints).
- 22. Believe, feel, think the significance of the established standards (ANSI).

Date Updated: 4-14-19 By: Dean R. Kerste