

**WLDG 1313**  
**Intro to Blueprint Reading for Welders (3-2-4)**

**Western Texas College**

- I. Basic Course Information
  - A. Course Description: A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production.
  - B. Any required prerequisites: None, Introductory
  - C. Required Grade for Enrolling in the Next Course in this Sequence: Satisfactory Completion
- II. Student Learning Outcomes
  - A. Define terms and abbreviations
  - B. Identify and explain object views, lines, and dimensions
  - C. Identify, explain, and interpret weld symbols
  - D. Identify structural shapes
  - E. Demonstrate the proper use of measuring devices
  - F. Read and interpret blueprints
  - G. Read welding detail drawings
  - H. Calculate dimensions and material
- III. Testing Requirements
  - A. The final exam will take place in the welding classroom.
  - B. Students are NOT allowed to use their book or notes of any kind while taking their tests and exams.
  - C. Students are allowed to use a calculator.
- IV. Major Course Requirements
  - A. Attendance 10%
  - B. Homework/Quizzes 10%
  - C. Final Exam 20%
  - D. Welding Fabrication Projects – 60%
- V. Information on Books and Other Course Materials
  - A. Required Book: Blueprint Reading for Welders Book ISBN-13: 978-1-133-60578-2
  - B. Required Access Code: None
  - C. Calculators: Students must have a calculator that provides them with the trig function keys. A TI-30XA or its equivalent is strongly recommended.
- VI. Other Policies, Procedures and important dates. Please refer to the WTC [Catalog](#) for the following:
  - A. Campus Calendar
  - B. Final exam schedule
  - C. How to drop a class
  - D. Withdrawal information
  - E. Student Conduct/Academic Integrity

- F. Class Attendance
  - G. Students with disabilities
- VII. Course Content

Units 1 – 3	Basic Lines and Views Sketching Notes and Specifications
Units 4	Dimensions
Units 5 - 6	Bills of Materials Structural Shapes Lab Projects
Units 7 – 9	Other Views Sections Details, Assembly, Subassembly Prints Lab Projects
Units 10 - 12	Welding Symbols and Abbreviations Basic Joints for Welding Fabrication Fillet Welds Lab Projects
Units 13 -15	Groove Welds Back or Backing Melt-Thru Welds Plug and Spot Welds Lab Projects
Units 16 - 21	Surfacing Welds Edge Welds Spot Welds Projection Welds Seam Welds Stud Welds Lab Projects
Units 22- 24	Applied Metrics for Welding Pipe-Welding Symbols Dual Dimensioning
Units 25 – 28	Inspection and Testing International Standard Symbols for Welding Introduction to Computer Aided Drafting Introduction to GDT

Last Modified: August 19, 2015