WLD 105 Welding Fundamentals

Course Description: A course on interpreting various types of prints used in the welding industry. Topics include: print reading, measurements, types of welds and joints, welding symbols, technical math, and metric conversions.

Prerequisites(s): None **Corequisite(s):** No corequisite

Lecture Hours: 2	Lab Hours: 2	Credit Hours: 3
Lab Fee: $100	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: □ Web	□ Hybrid	x Classroom
Semesters Offered: x Fall	x Spring	x Summer

Course Primary Text:

Title: Blueprint Reading for Welders	Edition: 9th
Author(s): Bennet/Siy	
Publisher: Cengage	

Supplemental Materials:

Instructor supplied

Course Outcomes:

1	Students will have the ability to read and interpret welding blueprints
2	Students will have the ability to perform metal layout using blueprints
3	Students will have the ability to understand the proper welding technique based on blueprints

Course Topics:

Week	Chapter	Topic	Lab/Project
1	1	Basic Lines and Views	
2	2	Sketching	
3	3 & 4	Dimensions, Notes and Specifications	*Lab #1*
4	5	Bill of Materials	*Lab #2*
5	6	Structural Shapes	*Lab #3*
6	7 & 8	Sections & Other Views	*Lab #4*
7	9	Detail, Assembly, & Sub-Assembly Prints	*Lab #5*
8	10	Welding Symbols and Abbreviations	*Lab #6*
9	11	Basic Joints for Welding Fabrications	*Lab #7*
10	12 & 13	Fillet Welds & Groove Welds	*Lab #8*

11	14 & 15	Back/Backing & Melt Thru Welds, Plug & Slot Welds	*Lab #9*
12	16 & 17	Surface Welds & Edge Welds	*Lab #10*
13	18	Spot Welds	*Lab #11*
14	19	Projection Welds	*Lab #12*
15	20 & 21	Seam Welds & Stud Welds	*Lab #13*

Methods of Evaluation/Assessment

Grading:
AWS Written Exams – 40%

Chapter Written Exams – 40%

Lab Assignments – 20%

Course Keeper: Mark Willis

Date Completed: 12/15/18