

4/14/2024

DATE

REQUIRED COURSE

ELECTIVE COURSE

TEC DIVISION

 NEW COURSE REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	WLD-053		TITLE (30 Characters Max):			Shielded Metal Arc Welding III							
SEM CR HRS:	2.5	Lecture:		0.5	Lab:	4.0	ICCB Lab:	4.0	ECH:	4.5			
Course Level:	<input type="checkbox"/> Gen Ed / IAI <input type="checkbox"/> Baccalaureate /Non-IAI		<input checked="" type="checkbox"/> Career/Technical <input type="checkbox"/> Dev Ed/ Not in Degree Audit		Clinical Practicum:	0.0	Work-based Learning:	0.0	WBL ECH:	0.0			
Course PCS & CIP:	12 - 48.0508		IAI Code		N/A			Contact Hours (Minutes/Week)					
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:		Max:		16 Wks	225	8 Wks	450
Prerequisites:	WLD-040 or WLDC-040, WLD-041 or WLDC-041 and WLD-052 or WLDC-052												
Corequisites:	None												
Catalog Description: (40 Word Limit)	In this course students are required to weld in all positions using shielded metal arc welding equipment in all positions. These welds must pass a guided bend test.												

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work Based Learning
Weld SMAW groove plates flat position	1.5	10		
Weld SMAW groove plates horizontal position	1.5	12		
Weld SMAW groove plates vertical position	1.5	17		
Weld SMAW groove plates overhead position	1.5	18		
Guided bend testing	1.5	3		
TOTAL	7.5	60	0	0

EVALUATION

QUIZZES <input checked="" type="checkbox"/>	EXAMS <input checked="" type="checkbox"/>	ORAL PRES <input type="checkbox"/>	PAPERS <input type="checkbox"/>
LAB WORK <input checked="" type="checkbox"/>	PROJECTS <input checked="" type="checkbox"/>	COMP FINAL <input type="checkbox"/>	OTHER <input type="checkbox"/>

COURSE MATERIALS

TITLE:	Welding: Principles and Practices
AUTHOR:	Edward Bohnart
PUBLISHER:	McGraw Hill
VOLUME/EDITION/URL:	6th edition
COPYRIGHT DATE:	2024

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
Weld SMAW groove plates flat position	11.5	1. Demonstrate SMAW v-groove plates in flat position using E7018 electrode for root pass, intermediate and cover passes.
Weld SMAW groove plates horizontal position	13.5	1. Demonstrate SMAW v-groove plates in flat position using E7018 electrode for root pass, intermediate, and cover passes.
Weld SMAW groove plates vertical position	18.5	1. Demonstrate SMAW v-groove plates in vertical position using E7018 electrode for root pass, intermediate, and cover passes.
Weld SMAW groove plates overhead position	19.5	1. Demonstrate SMAW v-groove plates in overhead position using E7018 electrode for root pass, intermediate, and cover passes.
Guided bend testing	4.5	1. Demonstrate guided bend tests on metal 3/8 in (10mm) thick. Two specimens are prepared and tested one root bend.
	67.5	

Outcomes*	At the successful completion of this course, students will be able to:
Course Outcome 1	Demonstrate acceptable SMAW beads in the flat 1G position and pass guided bend test.
Course Outcome 2	Demonstrate acceptable SMAW beads in the horizontal 2G position and pass guided bend test.
Course Outcome 3	Demonstrate acceptable SMAW beads in the vertical 3G position and pass guided bend test.
Primary Laker Learning Competency	Creative Thinking & Problem Solving: Students think creatively to solve problems.
Secondary Laker Learning Competency	Information & Technology Literacy: Students evaluate information effectively using the appropriate technological tools.

**Course and program outcomes will be used in the software for outcomes assessment and should include at least 1 primary and 1 secondary Laker Learning Competency. Limit to 3-5.*