

2/27/2023

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DIVISION

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REQUIRED COURSE

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NEW COURSE

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ELECTIVE COURSE

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REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	WEL-048		TITLE: (30 Characters Max)		Shielded Metal Arc Welding II						
SEM CR HRS:	3	Lecture:	0.5		Lab:	5	ECH:		5.5		
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	Work-based Learning:	0	WBL ECH:	0	
COURSE PCS #	12.480508		IAI Code		Contact Hours (Minutes/Week)						
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:	Max:	16 Wks	275	8 Wks	550
Prerequisites:	WEL-057 and WEL-047										
Corequisites:	None										
Catalog Description: (40 Word Limit)	In this course, students learn to perform single and multiple pass welds with shielded metal arc welding equipment in all positions.										

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
Horizontal Single Pass	1	10		
Horizontal Multiple Pass	1.5	15		
Vertical Single Pass	1	10		
Vertical Multiple Pass	1.5	15		
Overhead Single Pass	1	10		
Overhead Multiple Pass	1.5	15		
TOTAL	7.5	75	0	0

EVALUATION

QUIZZES <input 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 Skills
AUTHOR:	B. J. Moniz
PUBLISHER:	American Technical Publishers
VOLUME/EDITION/URL:	5th
COPYRIGHT DATE:	2015

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
Horizontal Single Pass	11	Identify and complete acceptable SMAW beads in the horizontal position using a single pass on square butt, lap, and "T" welds with E6010 or E6011 rod on steel plate.
Horizontal Multiple Pass	16.5	Identify and complete acceptable SMAW beads in the horizontal position using multiple passes for square butt, lap, and "T" welds with E6010 and E6011 rod on steel plate.
Vertical Single Pass	11	Identify and complete acceptable SMAW beads in the vertical up position using a single pass on square butt, lap, and "T" welds with E7018 rod on steel plate.
Vertical Multiple Pass	16.5	Identify and complete acceptable SMAW beads in the vertical up position using multiple passes for square butt, lap and "T" welds with E7018 rod on steel plate.
Overhead Single Pass	11	Identify and complete acceptable SMAW beads in the overhead position using single pass for square butt, lap, and "T" welds with E7018 rod on steel plate.
Overhead Multiple Pass	16.5	Identify and complete acceptable SMAW beads in the overhead position using multiple passes for square butt, lap, and "T" welds using E7018 rod on steel plate.
	82.5	

COURSE OUTCOMES*

At the successful completion of this course, students will be able to:

Demonstrate SMAW beads in the horizontal position on steel plate.
Demonstrate SMAW beads in the vertical up position on steel plate.
Demonstrate SMAW beads in the overhead position on steel plate.
Pass visual and bend test of vertical up v-groove weld on steel plate.

** Course Outcomes will be used in the Assessment Software for Outcomes Assessment. Limit to 3 - 5.*