

2/27/2023

DATE

DOC

DIVISION

☒

REQUIRED COURSE

☐

ELECTIVE COURSE

☐

NEW COURSE

☒

REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	WEL-058		TITLE: (30 Characters Max)		Gas Metal Arc Welding I						
SEM CR HRS:	2	Lecture:	0.5		Lab:	3			ECH:	3.5	
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	175	8 wks	350
Prerequisites:	WEL-057										
Corequisites:	None										
Catalog Description: (40 Word Limit)	This course introduces gas metal arc welding procedures and equipment. Students learn to perform single and multiple pass welds in the flat position with gas metal arc welding equipment.										

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
GMAW Safety Practices	2	1		
GMAW Equipment	2	1		
GMAW Set Up	1.5	3		
GMAW Maintenance	2	3		
Single Pass Beads		12		
Multiple Pass Beads		15		
Plug Welds		10		
TOTAL	7.5	45	0	0

EVALUTION			
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:	Gas Metal Arc Welding Handbook
AUTHOR:	William H. Minnick
PUBLISHER:	Goodheart-Wilcox Company Inc.
VOLUME/EDITION/URL:	5th edition
COPYRIGHT DATE:	2008

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
GMAW Safety Practices	3	Identify GMAW safety practices.
GMAW Equipment	3	Identify GMAW equipment and accessories.
GMAW Set Up	4.5	Identify and set up GMAW equipment.
GMAW Maintenance	5	Identify and report GMAW equipments problems.
Single Pass Beads	12	Identify and complete acceptable GMAW beads in the flat position with single pass for square butt, lap, and "T" pad welds.
Multiple Pass Beads	15	Identify and complete acceptable GMAW beads in the flat position with multiple passes for butt, lap and "T" welds.
Plug Welds	10	Identify and complete acceptable GMAW plug welds in the flat position.
	52.5	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
Demonstrate GMAW beads in the flat position with single pass for square butt, lap, and "T" welds.	
Demonstrate GMAW beads in the flat position with multiple passes for butt, lap and "T" welds.	
Demonstrate GMAW plug welds in the flat position.	

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