5/2/2025 DATE
☑ REQUIRED COURSE
☐ ELECTIVE COURSE

TEC DIVISION
☐ NEW COURSE
☑ REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	WLD-063			TITLE: *(30 Characters Max)*		Gas Metal Arc Welding III					
SEM CR HRS:	3.0	Lecture:	0.5		Lab:	5.0	ICCB Lab:	5.0	ECH:	5.5	
Course Level:	☐ Gen Ed / IAI ☐ Baccalaureate /Non-IAI		☑ Career/Technical ☐ 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	275	8 Wks	550
Prerequisites:	WLD-040 or WLDC-040, WLD-041 or WLDC-041 and WLD-062 or WLDC-062										
Corequisites:	None										
Catalog Description: (40 Word Limit)	Students in this course must prepare gas metal arc and flux core welds which pass guided bend tests.										

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
GMAW weld on v-groove plate flat	0.5	5		
GMAW weld on v-groove plate horizontal	1.5	15		
GMAW weld on v-groove plate vertical	1.5	15		
FCAW weld on v-groove plate flat	1	10		
FCAW weld on v-groove plate horizontal	1.5	15		
FCAW weld on v-groove plate vertical	1.5	15		
TOTAL	7.5	75	0	0

EVALUTION							
QUIZZES	☐	EXAMS	☑	ORAL PRES	☐	PAPERS	☐
LAB WORK	☑	PROJECTS	☑	COMP FINAL	☐	OTHER	☐

COURSE MATERIALS		
TITLE:	Welding: Principles and Practices	
AUTHOR:	Larry Jeffus	
PUBLISHER:	Cengage Learning	
VOLUME/EDITION/URL:	8th edition	
COPYRIGHT DATE:	2017	

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
GMAW weld on v-groove plate flat position	5.5	1. Identify, complete and examine acceptable GMAW weld on V-groove plates in the flat position with multiple passes and perform guided bend test. 2. Make groove welds in all positions on carbon steel. 3. Interpret basic elements of a drawing or sketch. 4. Interpret welding symbol information. 5. Fabricate parts from a drawing or sketch.
GMAW weld on v-groove plate horizontal position	16.5	1. Identify, complete and examine acceptable GMAW weld on v-groove plates in the horizontal position with multiple passes and perform guided bend test. 2. Make groove welds in all positions on carbon steel. 3. Interpret basic elements of a drawing or sketch. 4. Interpret welding symbol information. 5. Fabricate parts from a drawing or sketch.

GMAW weld on v-groove plate vertical position	16.5	1. Identify, complete and examine acceptable GMAW weld on V-groove plates in the vertical position with multiple passes and perform a guided bend test. 2. Make groove welds in all positions on carbon steel. 3. Interpret basic elements of a drawing or sketch. 4. Interpret welding symbol information. 5. Fabricate parts from a drawing or sketch.
FCAW weld on v-groove plate flat position	11	1. Identify, complete and examine acceptable FCAW weld on v-groove plates in the flat position with multiple passes and perform guided bend test. 2. Set up for FCAW operations on carbon steel. 3. Operate FCAW equipment on carbon. 4. Make and examine groove welds in flat position on carbon steel. 5. Interpret basic elements of a drawing or sketch. 6. Interpret welding symbol information. 7. Fabricate parts from a drawing or sketch.
FCAW weld on v-groove plate horizontal position	16.5	1. Identify, complete and examine acceptable FCAW weld on v-groove plates in the horizontal position with multiple passes and perform guided bend test. 2. Set up for FCAW operations on carbon steel. 3. Operate FCAW equipment on carbon. 4. Make groove welds in horizontal position on carbon steel. 5. Interpret basic elements of a drawing or sketch. 6. Interpret welding symbol information. 7. Fabricate parts from a drawing or sketch.
FCAW weld on v-groove plate vertical position	16.5	1. Identify, complete and examine acceptable FCAW weld on v-groove plates in the vertical position with multiple passes and perform guided bend test. 2. Set up for FCAW operations on carbon steel. 3. Operate FCAW equipment on carbon. 4. Make groove welds in vertical position on carbon steel. 5. Interpret basic elements of a drawing or sketch. 6. Interpret welding symbol information. 7. Fabricate parts from a drawing or sketch.
	82.5	

Outcomes*	At the successful completion of this course, students will be able to:
Course Outcome 1	Demonstrate acceptable GMAW weld on v-groove plates in the flat position with multiple passes and perform guided bend test.
Course Outcome 2	Demonstrate acceptable GMAW weld on v-groove plates in the horizontal position with multiple passes and perform guided bend test.
Course Outcome 3	Demonstrate acceptable GMAW weld on v-groove plates in the vertical position with multiple passes and perform guided bend test.
Course Outcome 4	Demonstrate acceptable FCAW weld on v-groove plates in the flat position with multiple passes and perform guided bend test.
Course Outcome 5	Demonstrate acceptable FCAW weld on v-groove plates in the horizontal position with multiple passes and perform guided bend test.
Course Outcome 6	Demonstrate acceptable FCAW weld on v-groove plates in the vertical position with multiple passes and perform guided bend test.
Primary Laker Learning Competency	Professional Skills & Ethics: Students demonstrate professional skills and ethical accountability.
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.*