

2/27/2023

DATE



REQUIRED COURSE



ELECTIVE COURSE

DOC

DIVISION



NEW COURSE



REVISION

# Lake Land College

## Course Information Form

COURSE NUMBER:		WEL-054		TITLE: (30 Characters Max)		Gas Tungsten Arc Welding/Stainless Steel											
SEM CR HRS:		2		Lecture:		1		Lab:		2		ECH:		3			
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 150 8 wks 300	
Prerequisites:		WEL-057 and WEL-061															
Corequisites:		None															
Catalog Description: (40 Word Limit)		Prepares students with necessary knowledge and skills for employment in industry. Emphasis is placed on gas tungsten arc welding processes for stainless steel. Prepare welding joints of stainless steel in the flat, horizontal, and vertical positions.															

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
Gas Tungsten Arc Welding Safety	1			
Equipment Set-Up and Operation	2	5		
Each position is demonstrated with butt, lap and tee joints on stainless steel				
Flat Position	3	6		
Horizontal Position	3	6		
Vertical Position	3	6		
Perform Factory and Construction Tests on Butt Joints, All positions	3	7		
<b>TOTAL</b>	<b>15</b>	<b>30</b>	<b>0</b>	<b>0</b>

## EVALUATION

QUIZZES	<input checked="" type="checkbox"/>	EXAMS	<input 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 Tungsten Arc Welding Handbook
AUTHOR:	William H. Minnick
PUBLISHER:	Goodheart-Wilcox
VOLUME/EDITION/URL:	6th
COPYRIGHT DATE:	2013

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
GTAW Safety Procedures	2	Identify and follow GTAW Safety practices
GTAW Equipment	3.5	Identify GTAW equipment and accessories
GTAW Set Up and Maintenance	2	Identify and report GTAW equipment problems and set up GTAW equipment
GTAW Beads Flat Position on Stainless Steel	10.5	Identify and complete GTAW beads in the flat position on Stainless Steel metal for butt, lap and "T" welds.
GTAW Beads Horizontal Position on Stainless Steel	12.5	Identify and complete GTAW beads in the horizontal position on Stainless Steel metal for but, lap and "T" welds.
GTAW Beads Vertical Position on Stainless Steel	14.5	Identify and complete GTAW beads in the vertical position on Stainless Steel metal for but, lap and "T" welds.
	<b>45</b>	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
Demonstrate GTAW beads in the flat position on butt, lap and "T" welds.	
Demonstrate GTAW beads in the horizontal position on butt, lap and "T" welds.	

Demonstrate GTAW beads in the vertical position on butt, lap and "T" welds.

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