



Program: Welding Technology CIP: 48.0508								2020-2021	
LIST ALL COURSES REQUIRED AND IDENTIFIED COMPETENCIES									
Competencies								Course Number	Course Title
1	2	3	4	5	6	7	8		
X	X	X	X	X	X	X	X	WLDG 1412	Intro- Flux Cored Arc Welding
X	X	X	X	X	X	X	X	WLDG 1413	Blueprint Reading for Welders
X	X	X	X	X	X	X	X	WLDG 1428	Intro- Shielded Metal Arc Welding
X	X	X	X	X	X	X	X	WLDG 1457	Intermediate Shielded Metal Arc Welding
X	X	X	X	X	X	X	X	WLDG 1435	Intro to Pipe Welding (SMAW)
X	X	X	X	X	X	X	X	WLDG 1434	Intro to Gas Tungsten Arc Welding (GTAW)
X	X	X	X	X	X	X	X	WLDG 1417	Intro-Layout and Fabrication
X	X	X	X	X	X	X	X	WLDG 2453	Advanced Pipe Welding
X	X	X	X	X	X	X	X	WLDG 2451	Advanced Gas Tungsten Arc Welding
X	X	X	X	X	X	X	X	WLDG 2452	Advanced Flux Cored Arc Welding
								COMPETENCY REFERENCES	
								8 Basic use of computers	
								7 Workplace Competencies: resources; interpersonal skills; information; systems; and technology.	
								6 Personal Qualities: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.	
								5 Thinking Skills: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively.	
								4 Speaking and Listening: Organize ideas and communicate orally; receive, attend to, interpret, and respond to verbal messages and other cues.	
								3 Arithmetic or Mathematics: Perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.	
								2 Writing: Communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.	
								1 Reading: Locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.	



SCANS COMPETENCIES FOR PROGRAM Welding Certificate			
ACADEMIC YEAR 2021-2022			
Competency	Course where Competency is Assessed	Method of Assessment	Findings and Plans for Improvements
1 READING: Locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.	WLDG 1412, 1413, 1428, 1417, 1434, 1435, 1457, 2451, 2453, 2452	All 12 certificate courses online hosted by the AWS. All courses must be passed to pass the course at 100%	100% of the students must use the American Welding Society's online library to become certified in each course. Reading skills are used all course long. We will be shooting to maintain 100% success rate.
2 WRITING: Communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.	WLDG 1412, 1413, 1428, 1417, 1434, 1435, 1457, 2451, 2453, 2452	Practical welding positions. 33 total. Must Pass with 70% 3 of them Tested by 3 rd party CWI They are pass or fail.	Students must be able to trouble shoot any problems associated with performing these welds. Students are encouraged to draw it out before they are initiated. This could be encouraged more. Findings: At Intro and intermediate levels Process for beginner level is easier than others. Improvement higher than 90% would be challenging because that is significant already. ADV students working at a high level at this point. The amount of defects is minimal with success rates at 90% . Plans for Improvements: We will push to maintain these high numbers hopefully exceeding them.
3 ARITHMETIC OR MATHEMATICS: Perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.	WLDG 1412, 1413, 1428, 1417, 1434, 1435, 1457, 2451, 2453, 2452	All 12 certificate courses online hosted by the AWS. All courses must be passed to pass the course at 100%	Basic Math is used for every course. Additionally 2 certificates are earned in Math. Fabrication Math I and Fabrication Math II . We will be working with the students to maintain 100% success rate.
4 SPEAKING AND LISTENING: Organize ideas and communicate orally; receive, attend to, interpret, and respond to verbal messages and other cues.	WLDG 1412, 1413, 1428, 1417, 1434, 1435, 1457, 2451, 2453, 2452	Classroom and Lab exercises, Examination questions, Quizzes	100% of the students must verbally communicate with Certified Welding Inspector while they are being tested for certification. Each semester this takes place. We will be working in the Lab to maintain 100% compliance in encouraging the student body in communication which makes a student employable.

<p>5 THINKING SKILLS: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively.</p>	<p>WLDG 1412, 1413, 1428, 1417, 1434, 1435, 1457, 2451, 2453, 2452</p>	<p>Practical welding positions. 33 total. Must Pass with 70% 3 of them Tested by 3rd party CWI. They are pass or fail.</p>	<p>Students must perform over 33 weld positions proficiently in order to successfully graduate. Use of weld Performance evaluation sheets can encourage a reduced level of defect in students weld samples. Findings: At Intro and intermediate levels Process for beginner level is easier than others. Improvement higher than 90% would be challenging because that is significant already. ADV students working at a high level at this point. The amount of defects is minimal. Success rates are 90%. Plan: We will work with the students in the Lab to maintain these high numbers and possibly exceeding them.</p>
<p>6 PERSONAL QUALITIES: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.</p>	<p>WLDG 1412, 1413, 1428, 1417, 1434, 1435, 1457, 2451, 2453, 2452</p>	<p>Welding Technology Program rules and regulations with Student expectations. Maintaining a high level of compliance with what expected from the student.</p>	<p>100% of students must display these 6 personal qualities Encouragement from the instructor will aid in developing these characteristics even more. We will work with the students to maintain 100% compliance in encouraging the student body in displaying the personal qualities which make a excellent employees.</p>
<p>7 WORKPLACE COMPETENCIES: resources; interpersonal skills; information; systems; and technology</p>	<p>WLDG 1412, 1413, 1428, 1417, 1434, 1435, 1457, 2451, 2453, 2452</p>	<p>Classroom and Lab exercises, Examination questions, Quizzes</p>	<p>100% of the students verbally communicate with Certified Welding Inspector while they are being tested for certification. Welding Inspection occurs each semester for a total of 3 different times in the program. We will be work with the students to maintain 100% of these work place competencies.</p>
<p>8 BASIC USE OF COMPUTERS</p>	<p>WLDG 1412, 1413, 1428, 1417, 1434, 1435, 1457, 2451, 2453, 2452</p>	<p>All 12 certificate courses online hosted by the AWS. All courses must be passed to pass the course at 100%</p>	<p>100% of the students use the American Welding Society's online library to become certified in each course. Computer basics are used all course long. We will be work with the students on their computer skills to maintain 100% success rate.</p>