Lane Community College
Fabrication/WeldingTechnology Unit Plan 2004 - 2005

Program Learning Outcomes Assessment Matrix

	PROGRAM COURSES							SUPPORT COURSES					GENERAL EDUCATION				
Fabrication and Welding	WLD 112 Fabrication/Welding 1	WLD 113 Fabrication/Welding 2	WLD 114 Fabrication/Welding 3	WLD 215 Fabrication/Welding 4	WLD 216 Fabrication/Welding 5	WLD 217 Fabrication/Welding 6		HE 125 Workplace Safety	MFG 197 Manufacturing Technology	Welding Elective	Cooperative Education		MTH 076 Applied Geometry for Techs	CG 203 Human Relations at Work	WR 115 W Intro to College Writing: Workplace	Arts and Letters and/or Social Science	Science/Math/Computer Science
Associate Degree Credit Hours (100 Total Credits)	12	12	12	12	12	12		3	3	3			4	3	3	6	3
One-Year Certificate Credit Hours (46 Total Credits)	12	12	12										4	3	3		
Program Learning Outcomes																	
Demonstrate employability skills required for initial employment and advancement in the industry that include: attendance, proper attire, customer relations, following directions, working in teams, and understanding work rules and ethics.	P	P	P	P	P	P		S	P	P	P			P			
Demonstrate safe work practices and tool usage while performing operations in a shop environment.	P	P	P	P	P	P		P	P	P	P						
Demonstrate advanced fabrication techniques and welding processes and applications including GTAW, programmable, plasma cutting, structural and pipe fitting, metallurgy, quality control procedures and business operations.	P	P	P	P	P	P			S	S	S						
Develop manufacturing plans for commercially viable metal products.	P	P	P	P	P	P			S	S							
Use appropriate library and information resources to research professional issues and support lifelong learning.	S	S	S	S	S	S		S	S					S	P	P	
Use blueprint reading skills, cost estimating, applied science of materials and mathematics necessary to the profession.	P	P	P	P	P	P			S				S				
Core Abilities																	
Communicate effectively.	P	P	P	P	P	P		P	P	P	P			S	P	S	
Think critically and solve problems effectively.	P	P	P	P	P	P			S	S			P	S	P	P	
Increase understanding of the relationship between self and community, including self-awareness and personal responsibility.	S	S	S	S	S	S		S	S	S	P			P			
Explore academic disciplines of liberal arts, social sciences, and physical sciences.								S	P				P	P	P	P	
Learning College Principles																	
Learners are active partners in the learning process.	P	P	P	P	P	P											
Learners are self-directed.	P	P	P	P	P	P											
Multiple learning options for diverse learners.	P	P	P	P	P	P											
Learning is promoted across organizational boundaries.								P	P		S		S	S	S	S	
Learning is substantive and documented.	P	P	P	P	P	P			P	P	S		P	S	P	S	
Assessment Methods																	
Technical Skill Performance Observation/Evaluation	P	P	P	P	P	P			P	P	P						
Employability Skills Evaluation	P	P	P	P	P	P			P	P	P						
Group Project																	
Journaling																	
Library Research														P	P	P	
Oral Report/Presentation																	
Peer Assessment																	
Portfolio																	
Pre and Post Test																	
Project Evaluation	S	S	S	S	S	S			S	S							
Quizzes																	
Self Assessment											P						
Written Report																	
Written Tests/Examinations	P	P	P	P	P	P			P								

P = this is a primary course for meeting the program learning outcome, core ability, learning college principle, or assessment method.

S = this course meets some of the program learning outcome, core ability, learning college principle or assessment method.

Advanced Technology Division – Assessment Plans 9/22/05

Fabrication and Welding

Program Learning Outcomes/Goals	Assessment Indicators
1) Demonstrate employability skills required for initial employment and advancement in the industry that include: attendance, proper attire, customer relations, following directions, working in teams, and understanding work rules and ethics.	80% of the first year students will qualify for the "select student" status by receiving a recommendation from a full-time contracted faculty member. 90% percent of the second year students will complete their programs in the "entry level employee" status. Criteria to qualify for the "select" status will be determined and published by the faculty prior to the start of the academic year.
2) Demonstrate safe work practices and tool usage while performing operations in a shop environment.	95% of all students will pass a shop safety written and demonstration test.
3) Demonstrate advanced fabrication techniques and welding processes and applications including GTAW, programmable, plasma cutting, structural and pipe fitting, metallurgy, quality control procedures and business operations.	All students will be assessed for mastery of these skills. 80% of all first year students will complete the courses with a C- or better. 90% of the second year students will have obtained industry employment within one year of their completion of the program.
4) Develop manufacturing plans for commercially viable metal products.	All students will design and present to a peer committee a manufacturing plan prior to completing the program.
5) Use appropriate library and information resources to research professional issues and support lifelong learning.	All students will conduct research with citations in a written report in both the first and second year of the program.
6) Use blueprint reading skills, cost estimating, applied science of materials and mathematics necessary to the profession.	All second year students will prepare a blueprint project that includes cost estimating and materials management.

Dave, here's welding's outcome from this morning's Div. meeting.

Program Learning Goal: Demonstrate attendance that would meet employer expectations for industry entry-level and advancement in the trade.

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