FLORIDA STATE COLLEGE AT JACKSONVILLE

NON-COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	PMT 0171
COURSE TITLE:	Gas Tungsten Arc Pipe and Tubing
PREREQUISITE(S):	PMT 0135
COREQUISITE(S):	None
TOTAL CONTACT HOURS:	135
(For Office Use Only: Vocational Credits __4.5__)	
FACULTY WORKLOAD POINTS:	4.5
STANDARDIZED CLASS SIZE ALLOCATION:	20

COURSE DESCRIPTION:

This course is designed to teach entry-level job skills in the welding field. Topics include gas tungsten arc welding fundamentals, preparation for welding pipe and pipe welding defects.

SUGGESTED TEXT(S):	Gas Tungsten Arc Welding Pipe/Hobart
IMPLEMENTATION DATE:	Reviewed/Confirmed Winter Term, 1989 (892)
REVIEW OR MODIFICATION DATE:	Fall Term, 1998 (991) Fall Term, 2002 (20031) Fall Term 2008 (20091) – Outline Review 2007 Summer Term, 2010 (20103) – Proposal 2010-09

COURSE TOPICS	CONTACT HOURS PER TOPIC
I. Introduction	20
A. Safety and Health of Welders	
B. Set-up, Operation and Shut-down Procedures	
II. Preparation and Assembly of Pipe Workpiece	66
A. Single Vee Groove Weld, But Joint, Vertical Fixed Position (2G)	
B. Single Vee Groove Weld, But Joint, Horizontal Fixed Position (5G)	
III. Single Vee Groove Weld	49
A. 2G and 5G Position, Visual and Guided Bend Test	
B. Single Vee Groove Weld, But Joint, 45 Degree Fixed Position (6G)	
C. Pipe Weld Quality	

COURSE TITLE: Gas Tungsten Arc Pipe and Tubing

PROGRAM TITLE: Applied Welding Technologies

CIP NUMBER: 0648.050802

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

01.0 APPLY BASIC SHOP SKILLS -- The student will be able to be:

01.02 Apply safety and health practices.

02.0 APPLY BASIC OXYFUEL GAS CUTTING PRINCIPLES AND PRACTICES -- The student will be able to:
02.04 Operate manual oxyfuel cutting equipment.
02.05 Perform straight cutting operations using manual oxyfuel cutting process on plain carbon steel.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

04.07 Identify acceptable work habits.
04.09 Demonstrate acceptable employee health habits.
04.10 Demonstrate knowledge of the "Right-to-Know Law".

05.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS--The student will be able to:

05.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupational area.
05.03 Read and follow written and oral instructions.

20.0 FABRICATE AND WELD PIPE JOINTS--The student will be able to:

20.01 Cut and prepare schedule 40 or 80 pipe for welding using current AWS specifications.
20.02 Tack and weld carbon steel pipe in the 1G position.
20.03 Tack and weld carbon steel pipe 2G position.
20.04 Tack and weld carbon steel pipe 5G position.
20.05 Tack and weld carbon steel pipe 6G position.

21.0 PERFORM FABRICATION USING WELDING SKILLS--The student will be able to:

21.01 Repair products of ferrous and non-ferrous metals.
21.02 Fabricate products of ferrous and non-ferrous metals using working drawings and/or blueprints.

Florida State College
At Jacksonville

Course Learning Outcomes
& Assessment

NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

Section 1	
COURSE PREFIX AND NUMBER: PMT0171	**SEMESTER CREDIT HOURS (CC):** _____ CONTACT HOURS (NCC): 135
COURSE TITLE: Gas Tungsten Arc Pipe and Tubing	

Section 2

TYPE OF COURSE: (Click on the box to check all that apply)

☐ AA Elective	☐ AS Required Professional Course	☐ College Prep
☐ AS Professional Elective	☐ AAS Required Professional Course	☐ Technical Certificate
☐ Other _____	☒ PSAV	☐ Apprenticeship
☐ General Education: (For General Education courses, you must also complete Section 3 and Section 7)		

Section 3 (If applicable)

INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

☐ Communications	☐ Social & Behavioral Sciences	☐ Mathematics
☐ Natural Sciences	☐ Humanities	

Section 4

INTELLECTUAL COMPETENCIES:

☐ Reading	☐ Speaking	☐ Critical Analysis	☐ Quantitative Skills	☐ Scientific Method of Inquiry
☐ Writing	☐ Listening	☐ Information Literacy	☐ Ethical Judgment	☐ Working Collaboratively

Section 5 **LEARNING OUTCOMES**		**METHOD OF ASSESSMENT**
•	Be able to prepare and weld pipe and tubing in multiple positions utilizing the GTAW process	Test scores 70% or better.
•		Lab projects pass or fail per instructor evaluation on Weld Bend tests.
•		
•		
•		
•		
•		
•		
•		
•		

Section 6

Name of Person Completing This Form: Gary Krupa Date: 11/2009