#### WELD 125 Course Outline as of Summer 2007

## **CATALOG INFORMATION**

Dept and Nbr: WELD 125 Title: INNERSHIELD WELDING Full Title: Innershield/Flux Core Wire Welding Last Reviewed: 11/20/2006

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	0.50	Lecture Scheduled	0.50	8	Lecture Scheduled	4.00
Minimum	0.50	Lab Scheduled	1.50	8	Lab Scheduled	12.00
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	16.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 8.00

Total Student Learning Hours: 24.00

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	

#### **Catalog Description:**

This course provides the latest information about and uses of flux cored wires. Topics will include A.W.S. (American Welding Society) qualification of the most commonly used wires for retrofit, re-bar, structural steel welding and fabrication. Certification testing will be available for qualified welders.

#### **Prerequisites/Corequisites:**

Completion of WELD 70A or equivalent.

## **Recommended Preparation:**

## Limits on Enrollment:

## Schedule of Classes Information:

Description: This course provides the latest information about and uses of flux cored wires. Topics will include A.W.S. (American Welding Society) qualification of the most commonly used wires for retrofit, re-bar, structural steel welding and fabrication. Certification testing will be available for qualified welders. (Grade or P/NP) Prerequisites/Corequisites: Completion of WELD 70A or equivalent.

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: CSU GE:	Area Transfer Area	Effective: Effective:	Inactive: Inactive:
<b>IGETC:</b>	Transfer Area	Effective:	Inactive:
CSU Transfer	: Effective:	Inactive:	
UC Transfer:	Effective:	Inactive:	

CID:

#### **Certificate/Major Applicable:**

Certificate Applicable Course

# **COURSE CONTENT**

#### **Outcomes and Objectives:**

Upon completion of this course, the student will be able to:

- 1. Demonstrate proper welding safety.
- 2. Set up various welding machines.
- 3. Recognize ferrous and non-ferrous metals.
- 4. Produce samples of welds using the flux cored wires covered in the course with the MIG process.

## **Topics and Scope:**

- I. MIG (Metal Inert Gas) Welding
  - A. Safety
  - B. Machines
  - C. Consumables
- II. Metals
  - A. Ferrous
  - B. Non-ferrous
  - C. Compatibility
  - D. Joining processes
- III. Fabrication
  - A. Interpreting plans
  - B. Job set up
- C. Techniques using flux cored wires D. Quality Control IV. A.W.S. Qualification
- - A. Retrofit
  - B. Rebar
  - C. Structural Steel

#### Assignment:

- 1. Practical welding exercises based on the weekly topic.
- 2. Group and individual projects producing test samples of joining process
- and accomplishing fabrication techniques.
- 3. Notebook of class notes and handouts.
- 4. Safety, equipment, and tool identification quiz.
- 5. Performance exam.

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because skill demonstrations are more appropriate for this course.

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams, Exercises and projects

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Completion

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Notebook

#### **Representative Textbooks and Materials:**

Instructor prepared materials.

Writing 0 - 0%	

Problem solving

0 - 0%

Skill Demonstrations 70 - 80%

Exams 5 - 10%

Other Category 10 - 20%