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 | Course Hours Total | |
|---------|------|------------------------------|------|--------------|---------------------------|-------|
| 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: |
|-----------------------|-----------------------|--------------------------|------------------------|
| IGETC: | 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%