

Course Outline

COURSE: DRLT 230 **DIVISION:** 50 **ALSO LISTED AS:**

TERM EFFECTIVE: Fall 2016 **Inactive Course**

SHORT TITLE: WELDING HEAVY GAUGE

LONG TITLE: Welding Heavy Gauge

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
1.5	1	Lecture:	6	6
		Lab:	30	30
		Other:	0	0
		Total:	36	36

COURSE DESCRIPTION:

This course covers welding and welding concepts for construction job sites. Topics include welding safety, basic welding terms, definitions, positions, and cutting operations. This course has the option of a letter grade or pass/no pass.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: C - Credit - Degree Non Applicable

GRADING MODES

- L - Standard Letter Grade
- P - Pass/No Pass

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:

- 02 - Lecture and/or discussion
- 03 - Lecture/Laboratory
- 04 - Laboratory/Studio/Activity

STUDENT LEARNING OUTCOMES:

1. Explain basic theory in safety and welding techniques used for each welding process

Measure: research paper, exams and performance testing

PLO: 7, 1, 2, 3, 6

ILO:

GE-LO:

Year assessed or anticipated year of assessment: 2014

2. Demonstrate proper setup and operation of arc welding equipment

Measure: research paper, exams and performance testing

PLO: 7, 1, 2, 3, 6

ILO:

GE-LO:

Year assessed or anticipated year of assessment: 2014

PROGRAM LEARNING OUTCOMES:

Is this course part of a program (degree or certificate)? If yes, copy and paste the appropriate Program Learning Outcomes and number them. Enter the PLOs by number in the Student Learning Outcomes below.

Yes,

1. Attain journey level skills needed to be successful in residential and commercial construction.

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Inactive Course: 11/28/2016

Out-of-class assignments: For each topic, the student will read chapters and do the homework assignments at the end of the those chapters.

6 lec/4 lab Hours Welding safety and safety equipment

Welding polarities

Setting up welding machines

SLO: The student will set up and demonstrate safe procedures for welding.

Assignments: Read the chapters covered in the lecture and answer the study guide question on the assigned subject. Locate and read in the text or online regarding welding setup, safe procedures for welding, and welding polarities.

6 lec/4 lab Hours Welding processes

Welding classifications

Terms and definitions

SLO: The student will evaluate and use welding processes. The student will demonstrate and explain welding terms, definitions, and classifications. The student will analyze different welding materials used on job-sites.

Assignments: Read the chapters covered in the lecture and answer the study guide question on the assigned subject. Locate and read in the text or online regarding welding terms, definitions, and classifications.

3.5 lec/3.5 lab Hours Weld joints and joint positions

Positions and travel directions

SLO: The student will evaluate and demonstrate use of weld joints, joint positions, and travel directions. The student will research different welding techniques used on job-sites.

Assignments: Read the chapters covered in the lecture and answer the study guide question on the assigned subject. Demonstrate the use of weld joints, joint positions, and travel directions.

4 lec/5 lab Hours Basic light gauge welding

Oxygen and acetylene cutting operations

SLO: The student will evaluate and demonstrate the ability to do basic light gauge welding, and oxygen and acetylene cutting operations.

Assignments: Read the chapters covered in the lecture and answer the study guide question on the assigned subject. Locate and read in the text or online regarding basic light gauge welding, and oxygen and acetylene cutting operations. Do basic light gauge welding, and oxygen and acetylene cutting operations.

1.5 lec/1.5 lab Hours Final examination and term project

METHODS OF INSTRUCTION:

- A. Lecture and discussion
- B. Visual aids
- C. Demonstrations
- D. Group hands-on exercise
- E. Individual hands-on exercise
- F. One-on-one hands-on instruction

METHODS OF EVALUATION:

CATEGORY 1 - The types of writing assignments required:

Percent range of total grade: 10 % to 30 %

Written Homework

Reading Reports

Lab Reports

Essay Exams

Term or Other Papers

If this is a degree applicable course, but substantial writing assignments are NOT appropriate, indicate reason:

Course primarily involves skill demonstration or problem solving

CATEGORY 2 - The problem-solving assignments required:

Percent range of total grade: 10 % to 40 %

Homework Problems

Field Work

Lab Reports

Quizzes

Exams

CATEGORY 3 - The types of skill demonstrations required:

Percent range of total grade: 20 % to 70 %

Class Performance/s

Field Work

Performance Exams

CATEGORY 4 - The types of objective examinations used in the course:

Percent range of total grade: 10 % to 30 %

Multiple Choice

True/False

Matching Items

Completion

CATEGORY 5 - Any other methods of evaluation:

Percent range of total grade: 0%

REPRESENTATIVE TEXTBOOKS:

Required:

UBC International. Welding and Cutting. U.S.A. , UBC International. This is a standard textbook used in the industry. Or other appropriate college level text.

Reading level of text, Grade: 10 Verified by: dvt

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Not Transferable

UC TRANSFER:

Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department:

CSU Crosswalk Course Number:

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: A

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000507785

Sports/Physical Education Course: N

Taxonomy of Program: 095280