Course Outline

COURSE: DRLT 231  DIVISION: 50  ALSO LISTED AS:

TERM EFFECTIVE: Fall 2016  Inactive Course

SHORT TITLE: WELDING LIGHT GAUGE

LONG TITLE: Welding Light Gauge

<table>
<thead>
<tr>
<th>Units</th>
<th>Number of Weeks</th>
<th>Type</th>
<th>Contact Hours/Week</th>
<th>Total Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>1</td>
<td>Lecture: 6</td>
<td>6</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Lab: 30</td>
<td></td>
<td>30</td>
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<tr>
<td></td>
<td></td>
<td>Other: 0</td>
<td></td>
<td>0</td>
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<tr>
<td></td>
<td></td>
<td>Total: 36</td>
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<td>36</td>
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COURSE DESCRIPTION:

This course is a continuation of Welding I (DRLT 230). Topics include welding safety, concepts, process, symbols, and certification performance. This course has the option of a letter grade or pass/no pass.

PREREQUISITES:

Completion of DRLT 230, as UG, with a grade of C or better.

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
PROGRAM LEARNING OUTCOMES:
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/5 lab Hours  Welding safety and safety equipment
6 lec/5 lab Hours  Welding polarities
6 lec/5 lab Hours  Light gauge welding
SLO: The student will set up and demonstrate safe procedures for welding and do light gauge welding. The student will analyze different horizontal welding positions 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 setup, safe procedures for welding, and welding polarities. Do light gauge welding.

4 lec/4 lab Hours  SMAW process
4 lec/4 lab Hours  FCAW process
SLO: The student will safely setup and perform SMAW process welding. The student will safely setup and perform FCAW process welding.
Assignments: Read the chapters covered in the lecture and answer the study guide question on the assigned subject. Safely perform SMAW process welding and FCAW process welding. Identify different uses of SMAW and FCAW methods used on job-sites.

4 lec/4 lab Hours  Electrode identification
Prepares joints
SLO: The student will identify and evaluate electrodes and prepare joints.
Assignments: Read the chapters covered in the lecture and answer the study guide question on the assigned subject. Produce neat, strong welds on joints.

5 lec/4 lab Hours  Weld symbols
Welding certification
SLO: The student will identify weld symbols and perform welding tasks to obtain welding certification.
Assignments: Read the chapters covered in the lecture and answer the study guide question on the assigned subject. Identify weld symbols and perform welding tasks to obtain welding certification.

2 lec/1 lab Hours  Final examination and term project

METHODS OF INSTRUCTION:

12/5/2016
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: CCC000507786
Sports/Physical Education Course: N
Taxonomy of Program: 095280