

EICC COURSE DEVELOPMENT MODEL (CDM)

CATALOG COURSE NUMBER: WEL-123

COURSE TITLE: Welding Symbols

Originating College: ☐CCC ☐MCC ☒SCC

Effective Term/Year: Fall 2015

Initiating Faculty Member: Bruce Baldwin

Initiating Department Coordinator: Ben Kettering

Reason for submission: Check all that apply

☒New Course If yes, type of course:

☐A&S

To be considered for General Education? ☐ Yes ☐ No Category:

To be part of an A & S Concentration? ☐ Yes ☐ No Concentration:

☒CTE Program Title: Welding ☒Required ☐Elective

☐General Education or Program Review ☐Reactivation of an inactive course ☐Making course inactive

☐Changing course; please explain:

☐Other; please explain:

Contact Hours/Distribution of Contact Hours

Lecture Hours

Lab Hours

Clinical Hours

Coop Hours

Hours per Week: 1.00

Hours per Week:

Hours per Week:

Hours per Week:

Number of Weeks: 16.50

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****Note:** If offering a course for the full fall or spring semester, the number of weeks is 16.5

Total Lecture Hrs: 19.80

Total Lab Hrs:

Total Clinical Hrs:

Total Coop Hrs:

Semester Hours Credit: 1.00 if variable credit, give range:

Allow repeat* for credit: ☐Yes ☒No

If yes, total course repeats allowed: If yes, total credits:

*Note that repeat for credit means a student can pass the course and then repeat it for additional credit. An internship course is an example of a course that could be set up as repeatable for additional credit

Course or courses this CDM replaces, if any:

CATALOG COURSE DESCRIPTION: In this course students will learn the various symbols used in welding.

RECOMMENDED ENTRY LEVEL SKILLS/KNOWLEDGE:

PRE-REQUISITE COURSES

CCN#	COURSE TITLE

CO-REQUISITE COURSES

CCN#	COURSE TITLE

PUBLISHED MATERIAL(S) USED FOR CDM DEVELOPMENT: Hobart Institute of Welding Technology Symbols for Welding

In general it is expected that source material will be dated within 5 years of this CDM date. If all materials/ textbooks cited above are older than this, please explain:

GENERAL COURSE GOALS

Upon successful completion of this course the student should be able to:

Acquire an understanding of the American Welding Society Symbols for Welding.

TOPICAL OUTLINE

1. Symbols for Welding, Course Overview
2. Introduction to Symbols for Welding
3. Fillet Welding Symbols
4. Weld Symbols for Length and Arrangement
5. Supplementary Symbols
6. Plug and Slot Welds
7. Spot Welds, Stud Welds, and Seam Welds
8. Groove Welding Symbols
9. Melt-through, back and backing weld symbols, backing strip, and spacer symbols and consumable inserts
10. Edge Welds and Combination Welds

COURSE OBJECTIVES

Upon successful completion of the course, a student should be able to:

1. Symbols for Welding, Course Overview.
 - a. Interpret standard symbols used in welding.
2. Introduction to Symbols for Welding.
 - a. Recognize the weld symbol as a means of communication.
3. Fillet Welding Symbols.
 - a. Explain the basic parts of the welding symbol system as related to fillet welds.
4. Weld Symbols for Length and Arrangement.
 - a. Define the method for indicating weld length and arrangement for continuous and intermittent welding.
5. Supplementary Symbols.
 - a. Identify the supplementary weld symbols used in conjunction with all types of weld symbols.
6. Plug and Slot Welds.
 - a. Interpret the symbol system for plug and slot welds
7. Spot Welds, Stud Welds, and Seam Welds.
 - a. Define the weld symbols used for spot, stud, and seam welds.
8. Groove Welding Symbols.
 - a. Explain the various symbols used to depict groove welds.
9. Melt-through, back and backing weld symbols, backing strip, and spacer symbols and consumable inserts.
 - a. Explain the symbols used in combination with groove weld symbols.
 - b. Identify additional welding operations and joint preparations.
10. Edge Welds and Combination Welds.
 - a. Recognize welding symbols and dimensions used in edge and combination welds.

RECOMMENDED METHODS OF INSTRUCTION: *Check all appropriate methods of instruction to facilitate student learning of course objectives.*

<input type="checkbox"/> Case Studies	<input checked="" type="checkbox"/> Class Discussions
<input type="checkbox"/> Computer lab work	<input type="checkbox"/> Computer-assisted tools
<input type="checkbox"/> Computer-assisted writing	<input type="checkbox"/> Conducting experiments
<input checked="" type="checkbox"/> Demonstration or modeling	<input type="checkbox"/> Electronic interaction
<input type="checkbox"/> Field observation	<input type="checkbox"/> Field trips
<input type="checkbox"/> Guest speaker	<input checked="" type="checkbox"/> Guided practice
<input type="checkbox"/> In-class writing or editing workshops	<input type="checkbox"/> Journals
<input type="checkbox"/> Lecture	<input type="checkbox"/> Library instruction and resources
<input type="checkbox"/> Model building	<input type="checkbox"/> Peer review
<input type="checkbox"/> Readings	<input type="checkbox"/> Role play
<input type="checkbox"/> Service learning	<input checked="" type="checkbox"/> Simulation
<input type="checkbox"/> Student and instructor conferences	<input type="checkbox"/> Student collaborative learning
<input type="checkbox"/> Student presentation	<input checked="" type="checkbox"/> Student projects

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Tests or quizzes | | <input type="checkbox"/> Worksheets/surveys |
| <input type="checkbox"/> Writing assignments/exercises (graded or not) | | |
| <input type="checkbox"/> Other (please list specifics): | | |

RECOMMENDED EVALUATION METHODS: Check all appropriate methods of evaluation to assess student achievement of course objectives.

- | | | |
|---|--|---|
| <input type="checkbox"/> Class workshops | | <input checked="" type="checkbox"/> Classroom discussions/participation |
| <input type="checkbox"/> Collaborative work | | <input checked="" type="checkbox"/> Demonstration of skill(s) |
| <input type="checkbox"/> Individual conferences | | <input type="checkbox"/> Journals |
| <input type="checkbox"/> Laboratory reports | | <input type="checkbox"/> Oral presentations |
| <input type="checkbox"/> Portfolios | | <input type="checkbox"/> Pretest/Posttest |
| <input checked="" type="checkbox"/> Quizzes | | <input type="checkbox"/> Reading responses |
| <input type="checkbox"/> Student presentations | | <input checked="" type="checkbox"/> Student projects |
| <input checked="" type="checkbox"/> Tests | | <input type="checkbox"/> Writing Assignments |
| <input type="checkbox"/> Other (please list specifics): | | |

ATTENDANCE: Policies on attendance will be formulated by the instructor and communicated to the students on the course syllabus.

ACADEMIC DISHONESTY: Policies on academic dishonesty can be found in the EICC student code of conduct published in the student handbook.

CDM CREATION/REVIEW/REVISION INFORMATION

Originally Written by:	Date:
Department Chair, Comments, & Date:	
Does similar curriculum exist at other EICC Colleges? <input type="checkbox"/> CCC <input type="checkbox"/> MCC <input type="checkbox"/> SCC <input type="checkbox"/> No	
If yes, Counterparts Consulted, College, Comments & Date:	

CDM Review or Revision Date:

Faculty member(s) & College:
Does similar curriculum exist at other EICC Colleges? <input type="checkbox"/> CCC <input type="checkbox"/> MCC <input type="checkbox"/> SCC <input type="checkbox"/> No
Changes made to course which will require further review steps:
<input type="checkbox"/> Making course inactive <input type="checkbox"/> Credit hours <input type="checkbox"/> Contact hours <input type="checkbox"/> Course Description
<input type="checkbox"/> 25% or more of course objectives <input type="checkbox"/> Other minor revisions or no revisions
Dean Review, Comments & Date:

If changes made require further review and approval:

College Curriculum Committee Sign-off & Date:
IC Review Subcommittee Sign-off & Date:
Instructional Council Approval: