



MASTER COURSE OUTLINE

A. AUTO 1207 Automotive Welding

B. COURSE DESCRIPTION:

This course provides the entry level automotive welding knowledge and skills needed by a professional automotive technician. The student's ability to follow instructions and interpret measurements, will be developed. The course emphasizes following safe practices, including the safe use of welding equipment and the proper selection and use of suitable personal protective equipment.

(2 Cr – 1 lect, 1 lab)

C. Core Theme: Critical Thinking

D. RIVERLAND INSTITUTIONAL LEARNING OUTCOMES:

This course addresses following Riverland Institutional Learning Outcome(s):

- ILO 1: critical thinking (*Core Theme Goal 2*)
- ILO 2: awareness of the larger global community (*Core Theme Goal 7 or 8*)
- ILO 3: ethical, engaged citizenship (*Core Theme Goal 9 or Goal 10*)
- ILO 4: communication and collaboration (*Discipline Goal 1 and by any learning outcome(s) involving communication or collaboration*)

E. MAJOR CONTENT AREAS:

- Tool, equipment and welding safety
- Basic metallurgy
- Introduction to welding
- Common welding processes, Mig, Stick and Oxy Acetylene

F. GOAL TYPE, OBJECTIVES, AND OUTCOMES:

<u>GOAL TYPE</u>	<u>OBJECTIVES</u> Students will be able to	<u>OUTCOMES</u> The student will successfully
**Critical Thinking	gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.	1. perform various different welding joints to make different components.
<u>CS</u>	gain a fundamental understanding of welding equipment use and techniques.	1. weld various joint configurations using different welding processes.
<u>CS</u>	identify power sources and gas pressures for the different processes.	1. repair an alternator and starter.

<u>CS</u>	identify safety guidelines.	1. complete a process from start to finish using various types of equipment.
-----------	-----------------------------	------------------------------------------------------------------------------

G. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact Accessibility Services at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request. The students will need welding gloves, welding jacket and an auto-darkening helmet.

H. COURSE CODING INFORMATION:

Course Code S/Class Maximum 25; Letter Grade

Revision date: 10/23/23

AASC Approval date: 12/12/17; 12/11/23

*Riverland Community College Disciplines	MnTC Goal Number
Communication (CM)	1
Natural Sciences (NS)	3
Mathematics/Logical Reasoning (MA)	4
History and the Social & Behavioral Sciences (SS)	5
Humanities and Fine Arts (HU)	6

**Riverland Community College Core Themes	MnTC Goal Number
Critical Thinking (CT)	2
Human Diversity (HD)	7
Global Perspective (GP)	8
Ethical and Civic Responsibility (EC)	9
People and the Environment (PE)	10

*These five MnTC Goals have been identified as Riverland Community College Disciplines.

** These five MnTC Goals have been identified as Riverland Community College Core Themes.

NOTE: The Minnesota Transfer Curriculum “10 Goal Areas of Emphasis” are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.