



## MASTER COURSE OUTLINE

A. AUTO 1322 Wheel Alignment

B. COURSE DESCRIPTION:

This course covers the theory and practice of alignment and adjustments used in various front and rear suspension systems to properly perform wheel alignments. This course, along with other program courses, satisfies the task requirements set forth in Section I of the ASEEF (Automotive Service Excellence Education Foundation).

**(3 Cr – 1 lect, 2 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:

- Pre-alignment inspection
- Suspension dynamics and alignments angles
- Alignment adjustments
- Alignment problem diagnosis

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
<u>**Critical Thinking</u>	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. determine what repairs and adjustments are necessary using alignment readings.
<u>CS</u>	identify ways to exercise the rights and responsibilities of citizenship.	1. describe the ethical responsibility involved in performing vehicle repair.
<u>CS</u>	demonstrate the procedures needed to perform four-wheel alignments on cars and light trucks.	1. perform a complete and thorough safety and wear inspection. 2. identify tire tread wear patterns. 3. define alignment angles.

		4. perform four-wheel computer alignment check.
<u>CS</u>	demonstrate the procedures needed to ensure that the car tracks straight, does not wear the tires, and is safe for the road.	1. identify alignment repair and/or adjustment needs. 2. adjust alignment angles. 3. test drive vehicle to verify repair.

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 student will need access to and use of a laptop computer capable of running required software.

H. COURSE CODING INFORMATION:

Course Code S/Class Maximum 25; Letter Grade

Revision date: 03/09/11; 11/29/17; 10/23/23

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

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

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

\*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.

Riverland