

# Northwest Technical College

## AMST 1130: Automotive Electrical II

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 1

Lab Hours/Week: 3

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course teaches diagnosis and repair of charging and starting systems, interior and exterior lighting, safety devices, body electrical systems, comfort systems, and door, window, & seat control systems. The learner will use wiring diagrams to pinpoint body electrical problems and troubles. Window, door, and seat control service will also be performed. Common vehicle accessories will also be addressed.

Prerequisite(s): None

Co-Requisites: None

**B. COURSE EFFECTIVE DATES:** 08/24/2015 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Starting System Diagnosis and Repair.
2. Charging System Diagnosis and Repair.
3. Lighting System Diagnosis and Repair.
4. Instrument Cluster and Driver Information Systems diagnosis and Repair.
5. Body Electrical Systems Diagnosis and Repair.

### D. LEARNING OUTCOMES (General)

1. Demonstrate professionalism.
2. Describe automotive body electrical and mechanical safety procedures .
3. Demonstrate automotive body electrical and mechanical safety procedures.
4. Describe automotive lighting systems operation.
5. Demonstrate automotive lighting system diagnosis and repair.
6. Describe automotive gauge operation.
7. Demonstrate automotive gauge diagnosis and repair.
8. Describe automotive electrical accessory systems and their operation.
9. Demonstrate automotive electrical accessory system diagnosis and repair.
10. Diagnosis Driver Information Systems.
11. Describe starting system theory and operation.
12. Demonstrate starting system diagnosis and repair.
13. Describe charging system theory and operation.
14. Demonstrate charging system diagnosis and repair.
15. Demonstrate critical thinking/active learning skills.
16. Demonstrate technology skills.

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted