HIBBING COMMUNITY COLLEGE
COURSE OUTLINE

COURSE TITLE & NUMBER: Electronics/Electrical Systems 3: DSL 2533
CREDITS: 4 (Lec 2 /Lab 2)
PREREQUISITES: Electronics/Electrical Systems 2: DSL 1538 with a minimum grade of “C”

CATALOG DESCRIPTION:
Electronics/Electrical Systems 3 will focus on lighting, accessory and control systems, electrical schematics/diagrams, diagnostics, and troubleshooting.

OUTLINE OF MAJOR CONTENT AREAS:
1. Lighting, accessory and control systems
2. Electrical schematics/diagrams
3. SAE computer CAN-bus standards
4. Diagnostics, systems troubleshooting

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will identify components and demonstrate the sequence of operation of the components that affect the systems overall operation.
2. Students will demonstrate the ability to properly disassemble, test, reassemble replace or repair components according to manufactures service publications.
3. Students will demonstrate the ability to reason with regard to a specific malfunction in the system.
4. Students will demonstrate the knowledge of the different systems (SAE J1587 & J1939) used to communicate on computer-controlled machinery.
5. Students will demonstrate logic and critical thinking in identifying, evaluating, and diagnosing a customer complaint.

MNTC GOALS AND COMPETENCIES MET:
N/A

HCC COMPETENCIES MET:
Working Productively and Cooperatively
Thinking Creatively and Critically

STUDENT CONTRIBUTIONS:
Students are expected to prepare for class, attend class, attend all lectures and labs, participate in all class activities, complete work on time and request assistance if needed.

STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.

Curriculum Committee Approval Date: May 7, 2019

AASC APPROVAL DATE: July 24, 2019
REVIEW DATE: July 2024