COURSE TITLE & NUMBER: Mechanical Systems 3: IST 2650  
CREDITS: 3 (2 Lec / 1 Lab)  
PREREQUISITES: IST 2550 Mechanical Systems 2

CATALOG DESCRIPTION:
Mechanical Systems 3 advances the study of mechanical systems with applications in troubleshooting and predictive/proactive maintenance. Students will explore the principles of lubrication systems, alignment, and drive components.

OUTLINE OF MAJOR CONTENT AREAS:
1. Mechanical Systems troubleshooting
2. Automatic lubricant systems
   A. Lincoln
   B. Trabon
   C. Farval
3. Drive components and mechanical alignment
   A. Couplings
   B. Sheaves
   C. Roller chain
   D. V-belts
   E. Gears

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will demonstrate appropriate attitude and behavior: honesty, responsibility, respect and initiative.
2. Students will identify occupational safety hazards and follow appropriate safety precautions.
3. Students will exhibit safe housekeeping procedures in the lab.
4. Students will work cooperatively and understand the roles of leadership and supervision.
5. Students will use techniques and information learned in class to critically and logically complete projects.
6. Students will perform necessary math functions.
7. Students will troubleshoot basic mechanical systems.
8. Students will operate and adjust automatic lube systems.
9. Students will identify single line vs. dual line systems.
10. Students will align power transmission components.
11. Students will identify backlash adjustments.
MNTC GOALS AND COMPETENCIES MET:
N/A

HCC COMPETENCIES MET:
Working Productively and Cooperatively

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

Curriculum Committee Approval Date: March 13, 2018

AASC APPROVAL DATE: March 21, 2018
REVIEW DATE: March 2023