COURSE TITLE & NUMBER: DSL 1519: Heavy Equipment Hydraulics 2
CREDITS:  2 (Lec 1 /Lab 1)
PREREQUISITES: Student must pass hydraulics 1530 with a C.

CATALOG DESCRIPTION:
Heavy Equipment Hydraulics 2 covers the fundamentals of hydraulics including the application of Hydrostatic Theory and the operation, construction, troubleshooting, and repair of various system components.

OUTLINE OF MAJOR CONTENT AREAS:
1. Theory of Hydrostatic Theory
2. Variable displacement pump identification
3. Hydraulic motor identification
4. Electro-hydraulics
5. Hydraulic fluid transfer
6. Diagnosis and testing of hydraulic systems
7. Hydraulic schematics

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will explain hydrostatic theory.
2. Students will explain hydraulic motors.
3. Students will identify variable type pumps.
4. Students will identify hydraulic fluid transfer systems.
5. Students will diagnose faulty hydraulic system.
6. Students will complete assigned tasks on hydraulic trainer.

HCC COMPETENCIES MET:
Working Productively & Cooperatively
Communicating Clearly & Effectively
Thinking Creatively & Critically
Social Responsibility

STUDENT CONTRIBUTIONS:
The student is expected to
1. attend all lectures and working sessions.
2. participate in class activities.
3. participate in class discussions.
4. hand in outside assignments when due.
5. ask questions if he/she does not understand any part of the instructions or procedures.
METHODS FOR EVALUATING STUDENT LEARNING:
Student learning is evaluated through exams, lab work, assignments, class participation, projects, lab reports and logs.

ADDITIONAL INFORMATION:
Mid-States Hydraulics manuals and references with trainer.
Amtrol hydraulic trainer and task sheets
CDX Equipment and Heavy Duty Text Book

Curriculum Committee Approval Date: March 5, 2019

AASC APPROVAL DATE: March 20, 2019
REVIEW DATE: March 2024