

# Dakota County Technical College

## HCEM 2256: Steering Systems

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 1

Lab Hours/Week: 1

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course provides students with basic understanding of steering systems used on heavy equipment. The course begins with mechanical systems followed by intensive overview of hydraulic-assisted systems used on crawlers, articulated loaders, motor graders, and backhoes. Students study principles of operation, components, repair procedures, and adjustments.

**B. COURSE EFFECTIVE DATES:** 01/10/2011 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. demonstrate shop safety
2. explain various types of steering systems used in heavy equipment
3. perform testing and adjusting procedures
4. identify steering components
5. check to adjust caster/camber and toe-in
6. explain steering booster valve operation
7. explain abnormal tire wear
8. use specialized tooling

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted