

# Dakota County Technical College

## ETSA 1541: Mechanical Fundamentals

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 1

Lab Hours/Week: 2

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course teaches students the basic knowledge and skills required to install, and maintain pumps, compressors, hoists, rigging and power transmission systems.

**B. COURSE EFFECTIVE DATES:** 09/08/2010 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. assemble and disassemble mechanical mechanisms
2. check and adjust belt and chain drive tensions
3. identify basic mechanical drive components
4. perform coupling and shaft alignment
5. perform routine maintenance of mechanical mechanisms
6. perform vibration analysis
7. troubleshoot mechanical systems

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted