Course Title: Mobile Equipment Fundamentals

Semester Course Prefix and Number: MEST 1245
Old Quarter Course Prefix and Number:

Number of Credits: 3
Number of Lecture Credits: 1
Number of Lab Credits: 2
Number of Lab Hours: 4
Number of Studio/Demonstration/Internship Credits: 0

Semester(s) Offered: Fall
Class Size: 24

Negotiated by AASC on: (date) November 2008

Course Purpose Code:

- 0 – Developmental Courses
- 1 – Non-transferable, General Education
- X 2 – Technical course related to career programs
- 3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
- 4 – Other college course not considered a part of general education (MNTC) (e.g. computer science, health, physical education)
- 5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements or intended for transfer.
- 9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Catalog Description:

This course covers mobile equipment servicing and related operations. Students will learn proper hand and power tool usage, fastener types, shop safety, general shop tasks, fluid and lubrication principles, and preventive maintenance of mobile equipment.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): None
Reading Prerequisite: None
Composition Prerequisite: None
Mathematics Prerequisite: None

Career Programs and Transfer Majors Accessing this Course:

Mobile Equipment Service Technician

Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:

(Notes: No more than two goals may be met by any one course. Curriculum Committee review and the Chief Academic Officer’s approval are required.)
0. X None
1. Communications
2. Critical Thinking
3. Natural Sciences
4. Mathematical/Logical Reasoning
5. History and the Social and Behavioral Sciences
6. The Humanities and Fine Arts
7. Human Diversity
8. Global Perspectives
9. Ethical and Civic Responsibility
10. People and the Environment
**Learning Outcomes:** (including any relevant competencies listed in the Minnesota Transfer Curriculum)

Upon completion of this course, the student will be able to:

1.) Exhibit professionalism.
2.) Demonstrate proper safety procedures.
3.) Demonstrate proper use of hand and power tools.
4.) Demonstrate proper use of precision measuring tools.
5.) Identify UNC, UNF, and, Metric fasteners.
6.) Explain proper fastener usage.
7.) Perform routine shop tasks.
8.) Define preventive maintenance.
9.) Perform preventive maintenance tasks.
10.) Explain the importance of preventive maintenance.
11.) Define lubrication.
12.) Identify oil types and their applications.
13.) Identify semi-solid lubricants.
14.) Identify lubricant filtration devices.
15.) Perform tasks cooperatively.

**Student Assessment Methods:**

Homework, Lab Assignments, Hands-on Tests, Written Tests

**Use of Instructional Technology:** (includes software, interactive video and other instructional technologies):

PowerPoint Presentations, Video Presentations, Personal Computers, Internet

**Outline or Statement of Major Course Content:**

See Course Description above

**Additional Special Information:** (special fees, directives on hazardous materials, etc.)

None

**Transfer Information:** (Please list colleges/majors that accept this course in transfer.)

**Approvals:**

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**Distribution:** Original – Administrative Office

**Copies:** Curriculum Committee Chair, AASC Chair, Transfer Specialist, Originating Faculty Member, Scheduler, Records, Student Services, Learning Center, Library

**Revised:** October 2006