

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: Mobile Equipment Fundamentals
Semester Course Prefix and Number: MEST 1245
Old Quarter Course Prefix and Number:

Submitted By: Andy White
Approval Date: Nov. 2008
Revision Date:

Number of Credits: 3
Semester(s) Offered: Fall
Class Size: 24

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

Negotiated by AASC on:
(date) November 2008

Course Purpose Code:

- 0 – Developmental Courses
- 1 – Non-transferable, General Education
- 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. <input checked="" type="checkbox"/> None | 6. <input type="checkbox"/> The Humanities and Fine Arts |
| 1. <input type="checkbox"/> Communications | 7. <input type="checkbox"/> Human Diversity |
| 2. <input type="checkbox"/> Critical Thinking | 8. <input type="checkbox"/> Global Perspectives |
| 3. <input type="checkbox"/> Natural Sciences | 9. <input type="checkbox"/> Ethical and Civic Responsibility |
| 4. <input type="checkbox"/> Mathematical/Logical Reasoning | 10. <input type="checkbox"/> People and the Environment |
| 5. <input type="checkbox"/> History and the Social and Behavioral Sciences | |

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:

Body	Representative Signatures	Date
Curriculum Committee		
Faculty Association		
Academic Affairs Standards Committee		
Chief Academic Officer		

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