Course Title: Mobile Equipment Safety and Rigging
Submitted By: Andy White
Semester Course Prefix and Number: MEST 1246
Approval Date: December 2008
Old Quarter Course Prefix and Number:
Revision Date:

Number of Credits: 2
Number of Lecture Credits: 1
Number of Lab Credits: 1
Number of Lab Hours: 2
Class Size: 24
Number of Studio/Demonstration/Internship Credits:

Negotiated by AASC on: (date)

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:
The purpose of this course is to introduce the student to the rigging, lifting, and industrial safety practices required of a Mobile Equipment Service Technician. The main course content will incorporate industrial safety with proper rigging and lifting techniques. Students will learn to make safety a part of their daily lives.

Prerequisites and/or recommended entry skills/knowledge:
Course Prerequisite(s): None
Reading Prerequisite:
Composition Prerequisite:
Mathematics Prerequisite:

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. 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.) Identify safety and safety responsibility.
2.) Develop good safety communications.
3.) Explain the need for good housekeeping.
4.) Explain lock-out / tag-out procedures.
5.) Identify hazards and unsafe conditions.
6.) Identify accident types.
7.) Demonstrate proper personal lifting procedures.
8.) Explain the fire pyramid.
9.) Identify fire extinguisher types.
10.) Explain proper fire extinguisher selection and usage.
11.) Define hazardous material.
12.) Define flammable material.
13.) Define reportable quantity.
14.) Explain Employee Right to Know.
15.) Interpret an MSDS – Material Safety Data Sheets.
16.) Demonstrate proper use of PPE – Personal Protective Equipment.
17.) Inspect PPE for defects.
18.) Identify wire rope terminations and hardware.
19.) Identify sling material and configuration.
20.) Perform inspections of slings and hardware.
21.) Demonstrate proper selection of rigging hardware.
22.) Demonstrate proper use of rigging hardware.
23.) Explain importance of hardware selection and sizing.
24.) Determine load weights.
25.) Explain the importance of the center of gravity in lifting operations.
26.) Demonstrate proper crane hand signals.
27.) Define suspended load.
28.) Explain the hazards of working around a suspended load.
29.) Demonstrate proper lifting techniques.
30.) Demonstrate proper usage of tag lines.
31.) Demonstrate proper cribbing construction and practices.
32.) Develop a lifting plan.
33.) Define OSHA.
34.) Define MSHA.
35.) 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.

**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