

MESABI RANGE COLLEGE

Course Outline

Course Title: Electrical Safety Submitted By: Robert Stevens
Semester Course Prefix and Number: ECM 1260 Approval Date:
Old Quarter Course Prefix and Number: Revision Date: 9/6/16
Number of Credits: 1 Number of Lecture Credits: 1
Semester(s) Offered: Spr Number of Lab Credits: 0 Number of Lab Hours: 0
Class Size: 24 Number of Studio/Demonstration/Internship Credits:
Negotiated by AASC on:
(date)

Course Purpose Code:

- 0 - Developmental Courses
1 - Non-transferable
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 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 course is a "Hybrid" or "Blended" course with the majority of the learning environment traditional in-class lectures and hands-on lab work which also includes Web-based learning activities to complement face-to-face work. This course is designed to familiarize the student with the safety practices and procedures applied in the installation and maintenance of electrical systems and equipment. Instruction includes the identification of the hazards associated with working on electrical equipment and distribution systems, identification and use of Personal Protection Equipment (PPE) and safe and proper use of test equipment. In addition, the course presents information on general industrial safety practices such as lock-out-tag-out, material safety data sheets(MSDS) and confined space identification.

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:

Electrical Controls and Maintenance Diploma
Electrical Controls and Maintenance AAS

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. AASC 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:

- Identify the hazards related to working with electrical equipment and systems.
- Identify Personal Protection Equipment (PPE) and the application requirements of PPE usage
- Demonstrate the proper and safe use of electrical test equipment.
- Follow proper Lock-out Tag-out procedures.

Student Assessment Methods:

Assessment made of lab assignments, worksheets, and papers using rubrics and check lists. Tests and quizzes of technical knowledge to be given at regular intervals during semester.

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

ECM Laptop Computer Lease with Industrial Software

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

Laptop Computer Lease and Required Tool List

Lab Fee – Adult CPR & AED / Child CPR & AED / Infant CPR Certification

Assigned instructors are qualified and have successfully completed the *NFPA 70E Electrical Safety in the Workplace Certificate Program* presented by the National Fire Protection Association.

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

Affiliated Mesabi Range College Courses and Programs:

Approvals:

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

Distribution: Original – Instructional Services
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Revised: December 2012