

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: Electrical Safety
Semester Course Prefix and Number: PAS 1260
Old Quarter Course Prefix and Number:

Submitted By: Scott Norcia
Approval Date:
Revision Date: 4/2/13

Number of Credits: 1
Semester(s) Offered: Spring
Class Size: 24
Number of Lecture Credits: 1
Number of Lab Credits: 0
Number of Studio/Demonstration/Internship Credits:
Negotiated by AASC on: (date)

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 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:

Process Automation Systems Diploma
Process Automation Systems AAS
Wind Energy Technology 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. 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)

Following the completion of this course the student will be able to demonstrate the ability to:

1. Identify the hazards related to working with electrical equipment and systems.
2. Identify Personal Protection Equipment (PPE) and the application requirements of PPE usage.
3. Identify categories of electrical circuit and source dangers.
4. Demonstrate the proper and safe use of electrical test equipment.
5. Follow proper Lockout Tagout procedures.
6. Identify hazardous area categories and precautions taken when working in those areas.
7. Identify confined spaces and precautions taken when working in those areas.

**Student Assessment Methods:**

Lab practices, worksheets, observation of student's safe lab practices, and tests

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

Web research, videos, interactive PC based learning modules, Online learning supplement

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

Laptop Computer Lease

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.)

None

**Affiliated Mesabi Range College Courses and Programs:**

Process Automation Systems Diploma

Process Automation Systems AAS

Wind Energy Technology AAS

**Approvals:**

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

**Distribution:** Original – Instructional Services

**Copies:** Transfer Specialist, Originating Faculty Member, Records

**Revised:** December 2012