

**Eastern WV Community & Technical College
Master Course Record**

Course Prefix and Number: ELM 217
Course Title: Industrial Maintenance Fundamentals
Recommended Transcript Title: Industrial Maintenance Fundamentals
Date Approved/Revised: 11/2/07; 9/21/15; 11/6/17
Credit Hours: 3 Contact hours per week (Based on 15 week term): Lecture: 2 Lab: 3
Prerequisite: None Corequisite: None Pre/Corequisite: None
Grading Mode: Letter Grade
Catalog Description: This course introduces the student to the needs of mechanics and technicians working with industrial mechanical and power transmission systems. Terminology and use of basic tools and devices associated with millwright and industrial maintenance will be studied. Hand tools, fasteners, lubrication, bearings, seals and gaskets; belt and chain drives; gears, couplings, clutches and brakes will be covered.
Course Outcomes: Students will learn: <ol style="list-style-type: none"> 1. Demonstrate proper use and care of common hand tools in industrial maintenance 2. Operate mechanical machines 3. Understand system maintenance procedures 4. Use belts, chain drives, bearings, and gear drives 5. Use machinery alignment tools employ procedures 6. Care, use, and design of shaft coupling devices 7. Operate and use electrical test equipment 8. Understand electrical motor operation and its maintenance 9. Illustrate OSHA definitions, purpose, and safety procedures
Implementation Cycle: Spring
Role in College Curriculum: (Check all that apply) <input type="checkbox"/> General Education Core (Specify category) <input checked="" type="checkbox"/> Technical Core (Specify Program): Electromechanical and Wind Energy Technology Programs <input checked="" type="checkbox"/> Restricted Elective: Electromechanical and Wind Energy Technology Programs <input type="checkbox"/> General Elective <input type="checkbox"/> Workforce Education <input type="checkbox"/> Other (Please specify)
Course Fee: Yes

Course Number & Title: ELM 217 – Industrial Maintenance Fundamentals

Date Prepared/Revised: 10/16/07; 5/25/15; 11/6/17

Date Course Approved by Curriculum Committee: 11/6/17

Date Course Approved by LCC: 11/02/07; 09/21/15; 11/20/17

Instructor's Qualifications: Bachelors of Science in Engineering/Technology or related discipline and/or expertise and experience in the field.

Expanded Course Description:

This course introduces the student to maintenance technologies and the needs of mechanics and technicians working with industrial mechanical and power transmission systems. Terminology and use of basic tools and devices associated with millwright and industrial maintenance will be studied. Hand tools, fasteners, lubrication, bearings, seals and gaskets; belt and chain drives; gears, couplings, clutches and brakes will be covered. Mechanical and electrical maintenance practices, safety procedures, and other technical methods of performing industrial maintenance will be discussed. Students will also have the knowledge to obtain PMMI (The Association for Packaging and Processing Technologies) certificates of completion and be registered in the PMMI National Database.

Prepared by: Skip Landes, Faculty, 05/25/15

Eric Putze, Advanced Technology/Wind Energy Faculty, 11/6/17

Approved Per LOT Minutes

Dean of Teaching and Learning

Date