

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

Course Prefix and Number: ELM 100
Course Title: Occupational Safety & Health
Recommended Transcript Title: Occupational Safety & Health
Date Approved/Revised: November 2, 2007; November 18, 2013
Credit Hours: 3 Contact hours per week (Based on 15 week term): Lecture: 3 Lab: None
Prerequisite: Corequisite: None Pre/Corequisite: None
Grading Mode: Letter grade
Catalog Description: This course introduces the student to occupational safety and health. It develops the student's understanding and competence in occupational safety and health by introducing safety practices applicable to the industrial workplace. It provides analysis of various Occupational Safety and Health Administration (OSHA) regulations including: hazard identification, confined spaces, electrical safety, lockout/tag-out, personal protective equipment, disaster preparedness and emergency response, materials handling and storage, means of egress and fire prevention, and machine guarding. Other topics relating to occupational safety and health will be investigated during the course.
Course Outcomes: <ol style="list-style-type: none"> 1. Analyze the cost of accidents in the workplace. 2. Describe the effects of accidents to workplace performance and productivity. 3. State OSHA's mission and purpose. 4. Review OSHA's standards and policies. 5. Explain workers compensation. 6. Define ergonomics 7. Identify ergonomic problems. 8. Recognize factors associated with physical stress. 9. Define workplace stress. 10. Identify sources of workplace stress. 11. State how to reduce workplace stress. 12. Define types of machine safeguarding. 13. Recognize mechanical hazards. 14. Identify causes of falls. 15. Identify types of fails. 16. Identify lifting hazards. 17. Examine the body's response to heat stress. 18. Identify the effects of burns. 19. Examine the body's response to cold stress.

<ol style="list-style-type: none">20. Identify pressure hazards and their sources.21. Identify electrical hazards and their sources.22. Review OSHA's electrical standards.23. Identify fire hazards and their sources.24. Review OSHA's fire standards.25. Define toxic substances.26. Examine the effects of toxic substances.27. Define airborne contaminants.28. Examine the effects of airborne contaminants.29. Examine the effects of carcinogens.30. Review OSHA's standards for toxic and hazardous materials.31. Identify radiation hazards.32. Identify hazardous noise conditions.33. Assess hazardous noise conditions.34. Identify vibration hazards.35. Examine the safety and health problems associated with automation.36. Recognize the effects of AIDS in the workplace.37. Recognize the effects of Hepatitis B in the workplace.38. Define International Organization for Standardization (ISO)39. Review the standards for ISO 1400040. Discuss the effects of violence in the workplace.41. Explain emergency preparation in the workplace.42. Perform an accident investigation.43. Be able to complete an accident report.44. Be able to develop safety rules and regulations.45. Be able to develop a safety program.
Implementation Cycle: Fall
Role in College Curriculum: (Check all that apply) <input type="checkbox"/> General Education Core (Specify category) <input checked="" type="checkbox"/> Technical Core (Specify Program) <input type="checkbox"/> Restricted Elective (Specify Program) <input type="checkbox"/> General Elective <input type="checkbox"/> Workforce Education <input type="checkbox"/> Other (Please specify)
Course Fee: None
Instructor's Qualifications: BS Industrial Safety or related discipline and/or expertise and experience in the field.
Expanded Course Description: Introduction and overview of safety and health practices in the area of industrial maintenance technology including electrical safety, hazard identification and avoidance, lockout/tag-out procedures, personal protective equipment and machine guarding. Additional instruction will also be provided on OSHA's training requirements for general industrial safety. The target audience is for students entering the Electromechanical Technology program and technicians, engineers and maintenance personnel that encounter safety and health issues in the workplace.

Prepared by:

Ward Malcolm, Dean for Career & Technical

03/16/15

Approved Per LOT Minutes:

Dean, Academic and Student Services

Date