UNIVERSITI TEKNOLOGI MARA

EVT648: OCCUPATIONAL SAFETY AND HEALTH : INDUSTRIAL SAFETY

Course Name (English)	OCCUPATIONAL SAFETY AND HEALTH : INDUSTRIAL SAFETY APPROVED
Course Code	EVT648
MQF Credit	3
Course Description	This course will interactively engage students cognitively and scientifically in areas of occupational and industrial safety. This course introduces the student with the aspects of occupational safety at workplace, which include machinery, tools and equipment and working in confined spaces. Hazards in working environments are identified and discussed in detail with the requirement of controls and prevention methods as required by the law. Students will also be introduced to Emergency Response Preparedness planning (ERP). The outcomes shall be assessed through a variety of tools which include the traditional paper examination, tests, written assignment, oral presentation , blended-learning and classroom engagement.
Transferable Skills	Communication skills, Analytically skills, Team work skills
Teaching Methodologies	Lectures, Blended Learning, Discussion, Presentation
CLO	CLO1 Identify the basic knowledge of occupational and industrial safety concepts and related regulation in various working environment CLO2 Explain the workplace hazards and its' control measures to solving occupational concern at workplace. CLO3 Demonstrate information management skills in preparing industrial safety programs at workplace CLO4 Display effective communication skill based on current issues related to occupational and industrial safety
Pre-Requisite Courses	No course recommendations

Topics
1. Review of the FMA Safety Regulations and OSH Major Industrial Acci 1.1) 1.1 The machinery regulations. 1.2) 1.2 The health, safety and welfare regulation. 1.3) 1.3 The health regulations.
2. Types of Hazards in Workplace. 2.1) 2.1 Physical hazards. 2.2) 2.2 Chemical hazards. 2.3) 2.3 Biological hazard. 2.4) 2.4 Machinery hazard. 2.5) 2.4.1 Safe guarding of machinery. 2.6) 2.4.2 Safe machine operation. 2.7) 2.4.3 Hand tools and portable power tools. 2.8) 2.4.4 Maintenance of machine guards and tools. 2.9) 2.4.5 General area fencing.
3. PPE for Safety and Health. 3.1) 3.1 Introduction to PPE. 3.2) 3.2 Body protection. 3.3) 3.3 Respiratory protection. 3.4) 3.4 Special work clothing. 3.5) 3.5 Introducing PPE to workplace.

4. Emergency Response Preparedness and Recovery Planning 4.1) 4.1 Recognising an emergency. 4.2) 4.2 Emergency management. 4.3) 4.3 Emergency planning. 4.4) 4.4 Emergency mitigation and resources. 4.5) 4.5 Procedures. 4.6) 4.6 Incident control and facilities. 4.7) 4.7 Training & exercises.
5. House Keeping and Physical Arrangement. 5.1) 5.1 Definition and regulatory requirements. 5.2) 5.2 Physical and safe house keeping arrangement. 5.3) 5.3 Type and cause of accidents. 5.4) 5.4 Types of cause of diseases. 5.5) 5.5 Planning, scheduling of physical and safe house keeping arrangement. 5.6) 5.6 Factors to reduce accident and disease. 5.7) 5.7 Steps for a better house keeping.
6. Pressurised Equipment. 6.1) 6.1 Definitions. 6.2) 6.2 Classification and the use. 6.3) 6.3 Dangerous occurrence. 6.4) 6.4 Factors causing dangerous occurrence. 6.5) 6.5 Control measures and the use of regulations.
7. Mechanical Handling 7.1) 7.1 Definition, types and requirement on mechanical handling. 7.2) 7.2 Advantages and limits in mechanical handling. 7.3) 7.3 Main components in mechanical handling. 7.4) 7.4 Hazard and accident related to mechanical handling. 7.5) 7.5 Hazard and safety planning and control measures.
8. Manual Handling 8.1) 8.1 Definition and law requirement. 8.2) 8.2 Type of accidents associated to manual handling. 8.3) 8.3 Factors, strategy and technique in manual handling. 8.4) 8.4 Hazard and safety planning and control measures.
9. Working in Confined Space 9.1) 9.1 Definition and examples of confined space. 9.2) 9.2 Law requirement. 9.3) 9.3 Hazard and accident associated to working in confined space. 9.4) 9.4 Hazard and safety planning and control measures.
10. Safety at Work Place 10.1) 10.1 Transport safety defensive driving (forklift). 10.2) 10.2 Welding safety. 10.3) 10.3 Office safety. 10.4) 10.4 Electrical Safety. 10.5) 10.5 Construction safety. 10.6) 10.6 Fire safety.

Assessment Breakdown	%
Continuous Assessment	60.00%
Final Assessment	40.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	Cumulative one assignment	20%	CLO3
Presentation	Cumulative one presentation	10%	CLO4
Test	Cumulative one test	30%	CLO1

Reading List

Recommended Text

- **Goetsch, David L. 2005, *Occupational Safety and Health for Technologists, Engineers and Managers*, 8th Ed., Prentice Hall New Jersey [ISBN: 0133484173]**
- **Malaysia 2006, *Occupational Safety and Health Act 1994 (Act 514) & Regulations and Orders* [ISBN: 9678915022]**

Reference Book Resources

- **Malaysia,International Law Book Services. Legal Research Board 1991, *Factories and Machinery Act 1967 (Act 139) & Regulations and Rules* [ISBN: 9678904128]**

Article/Paper List: This Course does not have any article/paper resources

Other References: This Course does not have any other resources