



**UNIVERSITI TEKNOLOGI MARA**

**EVT471: OCCUPATIONAL SAFETY AND HEALTH**

<b>Course Name (English)</b>	OCCUPATIONAL SAFETY AND HEALTH <b>APPROVED</b>
<b>Course Code</b>	EVT471
<b>MQF Credit</b>	3
<b>Course Description</b>	This course will interactively engage students cognitively and scientifically in areas of occupational safety and health. This is the first of a three parts on Occupational Safety and Health. This part introduces the students to the historical development of occupational safety until the development of the modern occupational safety and health management system. Theories on accidents, accident prevention and investigation and HIRARC are briefly explained. All Malaysian laws and regulations related to the occupational safety and health are described in detail. Several Factories and Machineries Act 1967 Regulations related to the management of safety will also be highlighted. The outcomes shall be assessed through a variety of tools which include examination, tests, assignments, presentation and classroom engagement.
<b>Transferable Skills</b>	Able to apply the knowledge and understanding of law, theories and principle of environmental technology in solving authentic problems. Able to demonstrate practical skills in investigating any environmental related issues Able to suggest possible solution by applying critical thinking and scientific skills in environmental technology. Able to verbally communicate information and ideas effectively. Able to work effectively in a multidisciplinary team. Able to apply values, ethics, morality and professionalism in pursuit of their career advancement. Able to manage information and engage in lifelong learning. Able to apply managerial and entrepreneurial skills Able to demonstrate leadership skills.
<b>Teaching Methodologies</b>	Lectures, Blended Learning, Discussion, Presentation
<b>CLO</b>	CLO1 Explain the important elements of occupational safety and health in the management of hazards and risks in workplace. CLO2 Ascertain with certainty the occupational safety and health law requirements in managing safety, health and welfare at workplace. CLO3 Demonstrate responsibilities skill while presenting the hazard identification, risk assessment and risk controls in a workplace and FMA requirements.
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. 1.0 Introduction:</b> 1.1) 1.1 Historical perspective 1.2) 1.2 OSH before and during the industrial revolution 1.3) 1.3 Development in OSH management between the 1930's and 1970's 1.4) 1.4 Development of self-regulation legislation 1.5) 1.5 Modern OSH management	
<b>2. 2.0 Hazard Identification and Risk Assessment</b> 2.1) 2.1 Job Safety Analysis 2.2) 2.2 Multiple Risk entry Forms	
<b>3. 3.0 Incident Prevention</b> 3.1) 3.1 Theories of accident causation and prevention: 3.2) 3.1.1 Domino Theory 3.3) 3.1.2 Loss Control Theory 3.4) 3.1.3 Human Factor Theory 3.5) 3.1.4 Behavioral Based Safety Theory 3.6) 3.2 Basic causes of accidents 3.7) 3.3 Principles and approach of loss prevention 3.8) 3.3.1 Job Safety Analysis	

3.9) 3.3.2 Multiple Risk Entry Forms
3.10) 3.4 Accidents and productivity
<b>4. 4.0 OSH Incident Investigation and Corrective Action</b>
4.1) 4.1 Overview of an incident / accident investigation
4.2) 4.2 Principles of accident investigation
4.3) 4.3 Pre-planning and strategy of an investigation
4.4) 4.4 Corrective action
<b>5. 5.0 OSH Management System (OSH-MS)</b>
5.1) 5.1 Introduction to concept of “system”
5.2) 5.2 Application of management system to occupational safety and health
5.3) 5.3 Review of existing occupational safety and health management systems
5.4) 5.3.1 PPDCA (Policy, Plan, Do, Check and Act)
5.5) 5.3.2 OSHAS 18000 series
5.6) 5.3.3 ILO OSH 2001 series
5.7) 5.4 Elements of occupational safety and health management systems:
5.8) 5.4.1 Policy organisation and arrangement
5.9) 5.4.2 Osh programme
5.10) 5.4.3 Performance measure and monitoring
5.11) 5.4.4 Osh promotion and communication
5.12) 5.4.5 Procurement and contract management
5.13) 5.4.6 Documentation
5.14) 5.4.7 Auditing
5.15) 5.4.8 Management review
<b>6. 6.0 Factories and Machineries Act 1967</b>
6.1) 6.1 The main definition and parts of the Act
6.2) 6.1.1 FMA Safety Regulations
6.3) 6.1.2 FMA Safety, Health and Welfare Regulation
6.4) 6.1.3 FMA Health Regulations
6.5) 6.2 Other acts related to safety and health
6.6) 6.2.1 Petroleum and Gas
6.7) 6.2.2 Employment Act/SOCSO
6.8) 6.2.3 Fire Services Act
<b>7. 7.0 The Occupational Safety and Health Legislations in Malaysia</b>
7.1) 7.1 The OSH Act 1994
7.2) 7.1.1 The main definition and parts of the Act
7.3) 7.1.2 The Safety and Health Management Regulations
7.4) 7.1.3 Safety and Health Policy
7.5) 7.1.4 Safety and Health Officer
7.6) 7.1.5 Safety and Health Committee
7.7) 7.2 The safety and health hazardous chemical management regulations
7.8) 7.2.1 Chemical Industrial Major Accident Hazard Regulation, 1996
7.9) 7.2.2 Classification, Labelling and Safety Data Sheet of Hazardous Chemicals Regulations 2013
7.10) 7.2.3 Use and Standard of Exposure of Chemical Hazardous to Health Regulation, 2000
7.11) 7.2.4 Notification of Accident, Dangerous Occurrence, Occupational Poisoning and Occupational Disease, Regulation

Assessment Breakdown	%
Continuous Assessment	60.00%
Final Assessment	40.00%

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

Reading List	Recommended Text	<ul style="list-style-type: none"> <li>Goetsch, David L. 2015, <i>Occupational Safety and Health for Technologists, Engineers and Managers</i>, 8 Ed., Pearson Prentice Hall. New Jersey [ISBN: 978-013700916]</li> </ul>
	Reference Book Resources	<ul style="list-style-type: none"> <li>MDC Publishers Sdn Bhd 2015, <i>Occupational Safety and Health Act and Regulations / Akta Keselamatan dan Kesihatan Pekerjaan dan Peraturan-peraturan</i> 22 Ed., MDC Publishers Kuala Lumpur [ISBN: 9789677014560]</li> <li>MDC Publishers Sdn Bhd 2015, <i>Factories and Machinery Act with Regulations</i>, 26 Ed., MDC Publishers Kuala Lumpur [ISBN: 9789677014439]</li> </ul>
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	