UNIVERSITI TEKNOLOGI MARA

BCM452: CONSTRUCTION HEALTH AND SAFETY

Course Name (English)	CONSTRUCTION HEALTH AND SAFETY APPROVED
Course Code	BCM452
MQF Credit	2
Course Description	The course develops an awareness of the paramount importance of health, safety and protection of environment in construction. It covers the understanding of development of construction health and safety policy, plans and procedures. The course includes identifying the health hazards and understanding the risk assessment and control
Transferable Skills	Planning & Control Skill Managerial Skill Communication skill Teamwork Skill
Teaching Methodologies	Lectures, Blended Learning, Tutorial
CLO	CLO1 Apply the principles of health and safety in construction project. CLO2 Distinguish health and safety policy, plan and procedures in construction project. CLO3 Adhere to ethical principles of health and safety in construction industry.
Pre-Requisite Courses	No course recommendations

Topics
1. Introduction to Health and Safety 1.1) Brief history 1.2) Importance of health and safety in construction
2. Legal Requirements 2.1) Occupational Safety and Health Act 1994 2.2) General duties of employers, employees, self- employed, designers, manufacturers, importers and suppliers of plant and substances 2.3) Safety and health committee, notification of accidents, enforcement and liability. 2.4) Factories and Machinery Act 1967 2.5) Site registration 2.6) Installation of machinery, certificate of fitness, EPA and duties of occupiers 2.7) Functions of NIOSH and DOSH
3. Health Hazards and Safety in Construction 3.1) Health hazards; physical, chemical and biological and psychosocial 3.2) Workshop dangers 3.3) Site dangers 3.4) Body protection 3.5) Scaffolds and ladders 3.6) Site transport 3.7) Hand tools; manual and powered 3.8) Cartridge tools 3.9) Compressed air / pneumatic tools 3.10) Posture, fatigue and body damage 3.11) Concreting and bricklaying safety 3.12) Painting and decorating safety 3.13) Welding safety 3.14) First Aid

4. Safety and Health Management
4.1) What is an OSH Management System?
4.2) Global OSH Management System.
4.3) Overview of an OSH Management System
4.4) Developing an OSH Management System
4.5) Reviewing an OSH Management System on Site
4.6) Policy formulation
4.7) Organizing; responsibility and accountability
4.8) Competence and training
4.9) Documentation and records
4.10) Communication

5. Pre-Construction OSH Planning
5.1) Introduction
5.2) Safety Plan:
5.3) Preliminary Assessment
5.4) Developing Safety Plan
5.5) Site Planning/Implementation
5.6) Utilising Preliminary Assessment Output/Site Layout
5.7) Appointment of Safety Personnel/Organisation
5.8) Arrangements with Sub-Contractors
5.9) OSH Budgeting
5.10) Statutory Notification
5.11) Temporary Traffic Management
5.12) PPE Management/ Safety Signages

6. Monitoring Workplace OSH
6.1) Site Management: Site Safety, Health, Welfare Provision & Housekeeping
6.2) Earthwork/Excavation
6.3) Piling
6.4) Underground Services
6.5) Concrete Work
6.6) Steel & Pre-Cast Structure
6.7) Working at Height
6.8) Confined Spaces
6.9) Hand & Power Tools
6.10) Mechanical & Electrical Works
6.11) Post Construction
6.12) Emergency Preparedness

7. Workplace OSH Inspections
7.1) Introduction
7.2) Types of Workplace Inspection
7.3) Objectives of In-House Inspections
7.4) Steps of Workplace Inspection
7.5) Sample of Inspection Checklist Guidance
7.6) Sample of Workplace Inspection Report
7.7) Group Activities

8. Accident Notification & Investigation
8.1) Introduction
8.2) Causes of Accident
8.3) Statutory Notification
8.4) In-House Reporting
8.5) Accident investigation audit

Assessment Breakdown	%
Continuous Assessment	40.00%
Final Assessment	60.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	n/a	40%	CLO2 , CLO3

Reading List

Recommended Text

- **Dester, W.D.B. 1995, *Safety Behaviour and Culture in Construction*, Pearson Education Ltd.**

Reference Book Resources

- **Legal Research Board 2003, *Occupational Safety and Health Act 1994*, International Law Book Service Malaysia**
- **Legal Research Board 2003, *Factories and Machinery Act 1997*, International Law Book Service Malaysia**
- **Cox, S. and Cox, T. 1996, *Safety, Systems and People*, Butterworth**
- **Cooper, D. 1998, *Improving Safety Culture*, John Wiley & Sons**
- **Griffith, A & Howarth, T. 2001, *Construction Health and Safety Management*, Pearson Education Ltd.**

Article/Paper List

Recommended Article/Paper Resources

- **Master Builders 2001, Manual on Occupational Safety and Health, *Master Association of Malaysia***

Reference Article/Paper Resources

- **Check Lee, F. 2001, Effective of Safety Management System – the Malaysian Perspective, *Master Builders Journal***

Other References

This Course does not have any other resources