

## Liverpool John Moores University

Title: MANAGEMENT AND HEALTH - SAFETY PRACTICE IN CONSTRUCTION  
Status: Definitive  
Code: **4505ICBTCE** (126964)  
Version Start Date: 01-08-2021  
Owning School/Faculty: Civil Engineering and Built Environment  
Teaching School/Faculty: ICBT, Colombo

Team	Leader
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**Academic Level:** FHEQ4  
**Credit Value:** 15  
**Total Delivered Hours:** 77  
**Total Learning Hours:** 150  
**Private Study:** 73

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	45
Workshop	30

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Investigative Report - 1500 Words	30	
Exam	AS2	Written Examination (Closed Book)	70	2

### Aims

*This unit provides learners with an opportunity to understand management principles and their application to the construction and built environment sector including an understanding of health, safety and welfare legislation and effective health and safety policies. Learners will develop the skills needed to undertake risk assessments.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Identify the evolution of management principles and their application to the construction and built environment sector.
- 2 Demonstrate the knowledge on construction and built environment sector in terms of structures and activities and apply management techniques used in the construction and built environment sector.
- 3 Apply the methods of procurement and contracting used in the construction and built environment sector and produce a risk assessment in design and construction.
- 4 Identify the main requirements of an effective health and safety policy & assess hazards and solve health safety problems and the health, safety and welfare legislation applicable to the construction and built environment sector.

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Investigative Report	1	4
Written Examination	2	3

## Outline Syllabus

*Principles of management: management pioneers and thinkers, e.g. McGregor, Maslow, Herzberg, Drucker.*

*Definitions, processes, e.g. forecasting, planning, organising, motivating, controlling, coordinating, communicating.*

*Human resources management: individuals and teams (behaviour, motivation, leadership).*

*Structure and activities: sectors, e.g. Construction, civil engineering, building services engineering. Nature of services provided by each sector, general roles and responsibilities of members of project teams, specific roles and responsibilities of professionals within project team.*

*Organisational structures and approaches: direct line. Lateral, functional and staff relationships, chain of command, span of control, concepts of responsibility, e.g. duty, authority, accountability, delegation. Corporate theories, e.g. mission, strategy, planning, policies, objectives, values. Centralised and decentralized organisations. Project-based organisations, job design, team structures, team working.*

*Influence of scale and size of contracts: project and contract procurement, contractual methods, impact of contract on management of organisations, e.g. role of designer, main contractor, sub-contractor, supplier.*

*Planning: project organisation (layout and accommodation, method statements, plans of work, safety plans) coordination, monitoring, control, e.g. Gantt charts, critical path arrow diagrams, precedence diagrams, line of balance. Manual and computer-based techniques.*

*Procurement scheduling and control: materials, plant, supply chain management. Just In Time, recycling and safe disposal of demolished materials, waste management. Scheduling. Resourcing and utilisation of sub -contracted and direct labour, budget and cost control (estimated cost, planned performance cost, actual cost, cash flow).*

*Quality control: audit, inspection, statutory liaison.*

*Risk management: assessment, liabilities, risks, security, insurance requirements.*

*Other considerations: workforce recruitment, training, assessment and legislative, requirements, e.g. Equal opportunities, health and safety. Information verification and control, site meetings, communication and reporting, client liaison, public liaison, government initiatives.*

*Procurement methods: traditional methods of tendering, other methods, e.g. partnering, public private partnerships, Private Finance Initiative (PFI), client and project objectives.*

*Contracts: legal definitions, forms of contract, stages within a contract, contractual obligations of performance.*

*(time, cost, quality, insurance, warranty arrangements), rights of parties to contract.*

*Practice of procurement: construction teams, e.g. multi-disciplinary teams, integrated teams, partnering, government initiatives, e.g. Latham Report, Egan Report, Benchmarking, key performance indicators (KPIs), sustainability and environmental management issues, legislation, corporate values, professional standards.*

*Legislation and approved codes of practice: current relevant legislation to include The Health and Safety at Work etc. Act 1974, The Construction (Design and Management) Regulations 2007, approved codes of practice and guidance notes, The Management of Health and Safety at Work Regulations 1999.*

*Implications of legislation: roles and responsibilities of individual team members, requirement nt for compliance with all relevant legislation, likely results of non-compliance, penalties associated with non- compliance.*

*Health and safety policy statement: sections, e.g. statement of intent, organisation section, arrangements.*

*Health and safety organisation and arrangements: health and safety procedures, legal requirement to report accidents, effectiveness of health and safety procedures, importance of training and competency, e.g. induction training, Construction Skills Certificate Scheme (CSCS), statutory requirements for inspection of plant and equipment, recording of health and safety data to meet legal requirements, communicating procedures, recording findings of health and safety inspections and supporting data.*

*Hazard identification, rating and recording: direct observation, examining records, conducting interviews.*

*Quantitative grading of severity of hazards and risks. Documentation of hazards and risks from a variety of perspectives, e.g. physical, environmental, chemical, biological, psychosocial. Chronic occupational health risks to include asbestos, lead and crystalline silica. Hazards leading to risks in the workplace.*

*Reasons to review, revise and monitor risk assessments: changes to legislation, changes in workplace practice, impact of accidents and ill health, subsequent investigations, feedback from employees and safety representatives (unsafe conditions, dangerous occurrences, near misses), other information and advice.*

*Recording and implementation of reviews, revisions and monitoring: revised risk and other assessments, alerting employees to new policies, procedures and findings, monitoring the effectiveness of new procedures.*

*Types of risk assessment: nature of specialist knowledge required, generic and specific risk assessment requirements, assessment (level of risk, who is at risk, risk outcome from hazards that cannot be eliminated).*

*Assessment of specific risks: effects of hazardous substances (short term, long term), need for manual handling assessments, assessment of possible likelihood and severity of injury, use of quantifiable risk rating systems.*

*Undertaking of risk assessment: standard format, recording risk assessment findings, production of appropriate paperwork.*

*Reviewing preventative and protective measures: workplace precautions and risk control systems, risk control hierarchy, personal protective equipment.*

*Hazards, Legal framework, Management of construction activities.*

## **Learning Activities**

Students will be supported in their learning, to achieve the above learning outcomes, in the following ways:

By a series of lectures and tutorials and through participation within workshop sessions for problem solving.

Self-managed investigative study to analyse cases related to the industry.

In-class participation and case studies are key features of this module.

A recommended resource list - indicating key reading, internet support and physical learning assistance, is provided to help enable students to undertake self-directed study.

## **Notes**

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