

Liverpool John Moores University

Title: RISK MANAGEMENT
Status: Definitive
Code: **6122BEUG** (118070)
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment
Teaching School/Faculty: Civil Engineering and Built Environment

Team	Leader
Joseph Amoako-Attah	Y

Academic Level: FHEQ6
Credit Value: 24
Total Delivered Hours: 75
Total Learning Hours: 240
Private Study: 165

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	48
Tutorial	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Scenario Based	30	
Exam	AS2	Closed Book	70	3

Aims

- 1. To apply knowledge and understanding of the construction management principles, including health, safety, and commercial awareness of the construction production process;*
- 2. To understand the principles and concepts of risk management in construction project environments*
- 3. To consider a framework within which project participants can develop and operate appropriate risk management regimes strategies, in varying situations*

Learning Outcomes

After completing the module the student should be able to:

- 1 Apply management theory and practice to the modern construction production process, including, quality management systems, health and safety and the work environment, schedule and cost management and the like
- 2 Develop financial plans, budgets and cost control/value management strategies for the production process, including the commercial management of the construction business using manual and software systems to optimise resources
- 3 Evaluate alternative methods of human resources management that can be used in the construction production process, and assess the risks that the workforce would be exposed to
- 4 Critically analyse current practices of risk management: what it is; why it is used; how it is applied; when it should be undertaken; and who should be responsible for it, including the deployment of appropriate practices and procedures for the effective management of risk during the project life cycle
- 5 Examine the variability of managers' risk perceptions in practical environments and the reconciliation of this within a practical risk management framework
- 6 Apply the principles of probability theory and Monte Carlo simulation to quantitative risk management models

Learning Outcomes of Assessments

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

SCENARIO BASED	1	6		
CLOSED BOOK	2	3	4	5

Outline Syllabus

Health and safety management

Total quality management

Programming, resource implications, time cost applications and project acceleration

Resource management including human resources

Financial planning, budgets, cost, value, cash flow, capital lock up profit

Supply chain management

Lean construction

Contractual relationships

Risk management strategy: hazard and risk, definitions and interpretation, strategic risks, political and business implications of risks, understanding the management strategy;

Risk perception and identification, risk analysis and assessment, qualitative assessment, quantitative assessment, risk response and mitigation, risk controls, monitoring and audit, risk outcomes;

Responsibility for risk management, role of project manager, client; exception reporting; Role of risk manager, role of statutory bodies and legislation in controlling risk, HSE legislation; Risk and contract strategy, risk transfer, openness with

suppliers, price for transfer of risk; Management of cost, time and quality risks; Safety, health and environmental risks; Statutory and contractual roles and obligations

Learning Activities

1. Keynote lectures and tutorials
2. Discussion groups (online through Blackboard as well as in class)
3. Literature review based tasks
4. Presentations
5. External speakers and guest lecturers (particularly from those outside construction to give a broad view of PM issues)
6. Use of advanced analytical software
7. Assessment and how it ties in with the module learning outcomes

Notes

This module will ultimately require a wide range of cognitive skills including such as

- I. Concentration and Attention
- II. Comprehension and Interpretation
- III. Evaluation and Synthesis
- IV. Application and Analysis
- V. Generalisation and Abstraction

These skills will be enhanced through a variety of learning strategies, which require students to take an active role in the delivery of the module; over and above the detailed consideration of challenges relating to the application of the theory of risk management to simulated scenarios. To achieve this, students would require a good level of critical analysis of research literature, presentation of ideas through seminars and debates as well as conventional approaches to module delivery such as formal keynote lectures and coursework tasks.