Liverpool John Moores University

Title:	WASTE AND RISK MANAGEMENT
Status:	Definitive
Code:	**6129ENG** (117192)
Version Start Date:	01-08-2011
Owning School/Faculty:	Engineering
Teaching School/Faculty:	Engineering

Team	Leader
Stephen Ebbrell	Y
Jun Ren	

Academic Level:	FHEQ6	**Credit Value:**	24.00	**Total Delivered Hours:**	48.00
Total Learning Hours:	240	**Private Study:**	192		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	12.000
Practical	24.000
Tutorial	12.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Rpt		40.0	
Report	Rpt		40.0	
Essay	Essay		20.0	

Aims

To equip students with the skills to commission, appraise, and review risk assessment within the waste management system. To introduce the governance of risk within the waste management system with respect to technical, managerial and human factors.

Learning Outcomes

After completing the module the student should be able to:

LO1	Identify, categorise and quantify waste streams within an organisation
LO2	Assess the risks associated with waste management strategies
LO3	Develop effective waste management systems.
LO4	Critically analyse the role and impact of waste and risk management directives and legislation.

Learning Outcomes of Assessments

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

Waste Management	LO 1	
Risk Management	LO 2	LO 3
Essay	LO 4	

Outline Syllabus

Classification of waste: Controlled; confidential; household; non-controlled; commercial; pharmaceutical; industrial; special; clinical; hazardous; pathology. Waste streams; storage and disposal of waste; waste minimization, re-use and recycle; economics of waste reduction; development and evaluation of waste management strategies; the role and impact of European directives and local legislation; waste management regulations (WMR); licensing and exceptions; waste framework directive.

Classification of risk; drivers for risk management; risk management associated with waste management systems; risk registers, risk treatment plans; risk monitoring; communicating risk; staff education programmes; risk assessment; COSHH assessment; risk analysis tools and techniques.

Learning Activities

A series of lectures, student centred learning activities and case studies to build a depth of knowledge over the module.

References

Course Material	Book

Author	Jon W. Kindschy, Marilyn Kraft, Molly Carpenter
Publishing Year	1997
Title	Guide to Hazardous Materials and Waste Management: Risk, Regulations, Responsibility
Subtitle	
Edition	
Publisher	Solano Press
ISBN	10: 0923956247

Course Material	Book
Author	Howard Kunreuther (Editor), Rajeev M.V. Gowda (Editor)
Publishing Year	1990
Title	Integrating Insurance and Risk Management for Hazardous Wastes
Subtitle	
Edition	
Publisher	Kluwer Academic Publishers
ISBN	10: 0792390091

Course Material	Book
Author	Robert L. Jolley, R.G.M. Wang
Publishing Year	1993
Title	Effective and Safety Waste Management: Interfacing Sciences and Engineering with Monitoring and Risk Analysis
Subtitle	
Edition	
Publisher	CRC Press Inc
ISBN	10: 0873712412

Course Material	Book
Author	Guido Sonnemann
Publishing Year	2003
Title	Integrated Life-Cycle and Risk Assessment for Industrial Processes :Advanced Methods in Resource and Waste Management Series
Subtitle	
Edition	
Publisher	Lewis Publishers,U.S
ISBN	10: 1566706440

Notes

A series of case studies will be employed to illustrate management strategies adopted by industry and local authorities. Visiting industrialists and managers will be invited to talk on this important area of management.