

Subject Code	LGT5073
Subject Title	Risk Management in Operations
Credit Value	3
Level	5
Normal Duration	One Semester
Pre-requisite / Co-requisite/	None, but knowledge of elementary business statistics and probability will be advantageous.
Exclusion	ISE548 Risk and Crisis Management
Role and Purposes	<p>This subject seeks to develop the knowledge and analytical skills necessary in organizations related to logistics, maritime trade or those with a strong emphasis on operations and quality management, for making risk management decisions and ensuring business continuity, through the application of risk management principles.</p> <p>This subject contributes to the following Intended Learning Outcomes for the following programme(s):</p> <p>MSc in Management (Operations Management)</p> <p>#2: Develop the specific operations management knowledge</p>
Subject Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> Analyze risks in operations, by applying basic principles and techniques of risk management. Comprehend risk management assessment, identify appropriate risk management solutions and to effectively implement them. Use risk management concepts to devise appropriate risk management and business continuity (contingency) plans. Be familiar with risk management in operations to a level that is adequate for continued self-enhancement of knowledge and practical applications of the subject.
Subject Synopsis/ Indicative Syllabus	Introduction and Concepts in Risk Management

Definitions of risk, concepts in risk management, identifying assets that need risk management, responsibility for risk management. Identification of positive and negative risks.

Identifying and Managing risks

Business process risks, market risks, organizational risks, socio-economic and environmental risks. Controllable and uncontrollable risks, low-frequency and random risks, management of risks.

Assessing Risks

Perceptions of risks, strategic and tactical approaches to risks, assessing various types of risks, Limitations of qualitative and quantitative risk assessments and the considerations for selection.

Risk reduction strategies

Risk management strategies: risk avoidance, risk reduction, risk acceptance, risk transfer, insurance, identification, evaluation and ranking of risk reduction measures. Overview of risk culture and risk attitude.

Risk mitigation measures / Business continuity planning

Contingency planning, crisis management, responding to disasters and risk events.

Risk management plans

Cost of risk management, perceptions of risk and political factors, regulations and their effects on risk management, Security threats and insurance costs.

Safety and Security risks

Safety and security risks, human factors, security threats to logistics / shipping, piracy, terrorism, impact of disruptions in shipping, resilience and vulnerability of shipping / logistics networks.

International Standards and Regulatory Requirements

	International standards, regulatory requirements and best practices for business continuity.																																																																					
Teaching/Learning Methodology	<p>Lectures introduce and explain key theoretical risk-related concepts. Lectures are followed by class discussions where concepts are linked to real events in the industry through appropriate examples and their analysis.</p> <p>Discussions are highly interactive and include discussions of current / past events, case studies, and student presentations. Students are expected to actively participate in the classes and to share their experience and learn from each other.</p>																																																																					
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Continuous Assessment</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1. Group presentation</td> <td>25 %</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>2. Group written report</td> <td>25 %</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Final Examination</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1. Final examination</td> <td>50 %</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>100 %</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>Since the course focuses on risk management in operations, case analysis and learning from practical, work-based experiences forms an important constituent of student assessment. Further, assignments and class discussions reinforce theoretical concepts learnt during the lectures and enable their applications in real-life operational situations. Final examination is to assess student's familiarity with theoretical concepts and the ability to apply conceptual framework in case analysis.</p> <p>Students would be given regular feedback on their performance, by email or as comments on assignments submitted.</p>								Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d			Continuous Assessment								1. Group presentation	25 %	✓	✓	✓	✓			2. Group written report	25 %	✓	✓	✓	✓			Final Examination								1. Final examination	50 %	✓	✓	✓	✓			Total	100 %						
Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)																																																																				
		a	b	c	d																																																																	
Continuous Assessment																																																																						
1. Group presentation	25 %	✓	✓	✓	✓																																																																	
2. Group written report	25 %	✓	✓	✓	✓																																																																	
Final Examination																																																																						
1. Final examination	50 %	✓	✓	✓	✓																																																																	
Total	100 %																																																																					

	<i>To pass this subject, students are required to obtain Grade D or above in BOTH the Continuous Assessment and Exam components.</i>	
Student Study Effort Expected	Class contact:	
	Lectures / tutorials	39 Hrs.
	Other student study effort:	
	Self study for preparing lectures, tutorials and final examination	45 Hrs.
	Preparation group assignment	42 Hrs.
	Total student study effort	126 Hrs.
Reading List and References	<p><u>Main Reference Books</u></p> <p>Blunden, T & John Thirlwell. (2010). <i>Mastering operational risk</i>. Harlow, England ; New York : Financial Times Prentice Hall</p> <p>Devlin, E.S. (2007) <i>Crisis management planning and execution</i>. Boca Raton, FL: Auerbach Publications, c2007.</p> <p>Haimes, Y. Y. (2004) <i>Risk Modeling, Assessment and Management</i>. New York: Wiley.</p> <p>Handfield, R.B. & Kevin McCormack (ed.) (2008) <i>Supply chain risk management: minimizing disruptions in global sourcing</i>. Boca Raton, Fla.: Auerbach Publications.</p> <p>Hubbard, D.W. (2009) <i>The failure of risk management: why it's broken and how to fix it</i>. Hoboken, N.J.: J. Wiley & Sons.</p> <p>Oliver, E. Clifford. (2011) <i>Catastrophic disaster planning and response [electronic resource]</i>. Boca Raton: CRC Press.</p> <p>Trim, Peter R.J & Jack Caravelli (ed.) (2009). <i>Strategizing resilience and reducing vulnerability</i>. New York: Nova Science Publishers, c2009.</p> <p><u>Main Reference Journals</u></p> <p>Journal of Business Continuity & Emergency Planning</p> <p>Institute of Risk Management (IRM)</p> <p>The Public Risk Management Association, US (PRIMA)</p> <p>The Public Risk Management Association, UK (ALARM)</p>	

	Association of Insurance and Risk Managers
--	--