

Liverpool John Moores University

Title: Risk Analysis
Status: Definitive
Code: **7572RTC** (120405)
Version Start Date: 01-08-2019

Owning School/Faculty: Maritime and Mechanical Engineering
Teaching School/Faculty: Risktec Solutions

Team	Leader
Alan Wall	Y

Academic Level: FHEQ7
Credit Value: 10
Total Delivered Hours: 16.5
Total Learning Hours: 100
Private Study: 83.5

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	8
Online	.5
Tutorial	8

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	An essay question comprising several component parts, based around a case study, up to 4,000 words long.	95	
Test	AS2	Individual and group activities eg. test, discussion.	5	

Aims

To provide a solid foundation of knowledge of risk assessment tools, with an emphasis on the concept of risk and qualitative risk assessment techniques.

Learning Outcomes

After completing the module the student should be able to:

- 1 Logically deduce the most appropriate risk assessment tool / technique to be used, depending on the circumstances
- 2 Apply certain risk assessment techniques
- 3 Critically review example risk assessments, illustrating strengths and weaknesses.

Learning Outcomes of Assessments

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

4000 word essay	2	3
Individual and group work	1	

Outline Syllabus

Introduction to risk assessment

Identifying and recording hazards – registers, schedules, inventories

The risk assessment matrix

Risk analysis and risk reduction through the project/facility lifecycle

Qualitative risk assessment techniques

Significance of environmental aspects – environmental risk assessment

Health Risk Assessment (HRA)

Security risk assessment

Business / commercial risk assessment

Quantitative risk assessment techniques

Safety Integrity Level (SIL) assessment

Layers of Protection Analysis (LOPA)

External hazards

Good practice in risk analysis

Learning Activities

A combination of lectures, exercises and supported self study.

Notes

The aim of this module is to provide risk assessment definitions and deliver a critical review of certain well established and recognised qualitative risk assessment tools. It also introduces some quantitative techniques (which are the subject of separate, more detailed analysis in dedicated modules).

Assessment is in the form of an essay combined with activities (e.g. exercises,

discussions, etc.). The delivery modes for the module elements are explained below.

Lecture (using slides and notes): will be delivered by classroom based teacher (face to face) or online self-study (distance learning) or mixture of the two (blended learning).

Tutorial/Activities (exercises and reviews): will be delivered by classroom based teacher (face to face) or online activities with teacher feedback/virtual classroom (distance learning) or mixture of the two (blended learning).

Tutor supported online: will be delivered by email support prior to assessment submission (face to face) or tutor feedback activities, virtual classrooms and email support (distance learning) or mixture of the two (blended learning).