Liverpool John Moores University

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Title:	RAIL INDUSTRY HAZARDS AND RISKS
Status:	Definitive
Code:	7510ENGRSK (113875)
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:	8
Total Learning Hours:	100	Private Study:	92		

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours	
Lecture	6	
Tutorial	2	

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Coursework Case Study - approximately 2000 – 3000 words and supporting calculations and analysis should be attached as evidence.	100	

Aims

To provide an overview of rail industry infrastructure, operations and activities and the typical hazards associated with this industry.

To provide an understanding of the role of risk management through the rail project lifecycle.

Learning Outcomes

After completing the module the student should be able to:

- 1 Apply knowledge of the principal types of infrastructure, operations and activities which exist within the rail industry
- 2 Evaluate typical rail industry project phases and hazard sources
- 3 Interpret the standard means of avoiding or mitigating those hazards

Learning Outcomes of Assessments

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

Case Study 1 2 3

Outline Syllabus

Rail industry sources of risk:

- •Collisions between trains
- •Collisions of trains with objects
- Derailment
- •Fires
- •Explosion
- •Flood
- •Slips, trips, falls
- •Hit by train
- •Electricity

•Structural

Regulatory regimes

Why include risk management within a project?

Typical phases of a project and opportunities for risk reduction

Overview of Risk Assessment Tools and Techniques (more detail in RSKIAM012 and RSKIAM011)

Risk management objectives and methods for each project phase

Learning Activities

By a combination of lectures and group and individual exercises.

Notes

The purpose of this module is to provide an overview of rail industry infrastructure,

operations and activities and the typical hazards associated with this industry.

The module aims to provide an understanding of the role of risk management through the rail project lifecycle.

This involves studying the different sources of risk in the rail industry, the regulatory regimes of the industry, the typical phases of a project and opportunities for risk reduction within each of the phases.

The assessment for this module is a case study.