

Liverpool John Moores University

Title: Hazard Identification
Status: Definitive
Code: **7521RSKDL** (118782)
Version Start Date: 01-08-2019

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

Team	Leader
Zaili Yang	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: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	8
Online	.5
Tutorial	8

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	Essay		95	
Reflection	Test&refl		5	

Aims

To provide an understanding and awareness of the tools and techniques available for hazard identification, where they can be applied and what limitations may exist.

Learning Outcomes

After completing the module the student should be able to:

- 1 Assess the role of hazard identification in the risk management process
- 2 Critically review the tools and techniques available to carry out effective hazard identification at each lifecycle stage
- 3 Design a fit for purpose hazard identification study

Learning Outcomes of Assessments

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

Essay	1	3
Online test & reflection	2	

Outline Syllabus

1. *Introduction – basic concepts*
2. *Overview of hazard identification techniques, e.g:*
 - Critical examination*
 - Codes and Standards*
 - Hazard indices*
 - Concept Safety Analysis / Preliminary Hazard Review*
 - What If?*
 - Safety Audits*
 - Fault / Event Trees*
 - Sneak Analysis*
 - Human Error / Task Analysis*
3. *Hazard identification through the project lifecycle*
4. *Failure Modes and Effects Analysis*
5. *Hazard and Operability Studies*
6. *HAZID/Checklist approach*
7. *HAZID versus HAZOP*
8. *Making recommendations*

Learning Activities

A combination of slides and notes, exercises, discussions, interactive web activities and supported self study.

Notes

The module aims to provide an understanding and awareness of the tools and techniques available for hazard identification, where they can be applied and what limitations may exist. Students will be introduced to the concept of HAZID, including

the HAZID team and process. Other hazard identification techniques will be introduced, but these are explained in greater detail in related modules. The assessment for this module is an essay combined with online activities (e.g. tests, discussions, etc.).