

## Liverpool John Moores University

Title: RISK REDUCTION AND ALARP  
Status: Definitive  
Code: **7504ENGRSK** (113869)  
Version Start Date: 01-08-2019

Owning School/Faculty: Engineering  
Teaching School/Faculty: Risktec Solutions

Team	Leader
Alan Wall	

**Academic Level:** FHEQ7      **Credit Value:** 10      **Total Delivered Hours:** 16  
**Total Learning Hours:** 100      **Private Study:** 84

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	10
Tutorial	6

**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.	100	

### Aims

*To enable students to assess the driving forces behind different options available for risk reduction and to apply the ALARP concept to evaluating the practicability of additional risk reduction measures*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Identify different options available for risk reduction (control hierarchy)
- 2 Decide on when risk reduction measures can best be used
- 3 Describe the concepts of "tolerability of risk" and "As Low As Reasonably Practicable (ALARP)"
- 4 Apply the ALARP concept and conduct an ALARP assessment to an appropriate level of detail

## **Learning Outcomes of Assessments**

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

An essay question in parts	1	2	3	4
----------------------------	---	---	---	---

## **Outline Syllabus**

1. *Risk Management Summary*
2. *Hierarchy of Risk Reduction Measures*
3. *Risk Reduction Through the Lifecycle*
4. *ALARP Concept*
5. *Demonstrating ALARP*
6. *Qualitative and Semi-Quantitative Approaches*
7. *Cost Benefit Analysis*
8. *Societal Risk*

## **Learning Activities**

A combination of lectures, exercises during the taught session, and supported self study

## **Notes**

The purpose of this module is to enable students to understand the hierarchy of risk reduction measures and the options for risk reduction in the project lifecycle. Students will be introduced to the concept of ALARP and how to demonstrate that risk is reduced to ALARP levels. The assessment for this module is an essay.