

ENM308 Integrity & Reliability Management

Coursework Report 2021

Coursework Setter: Mr Jim Wardhaugh

Coursework Issue Date: 3rd May 2021

Coursework Due Date: 19th July 2021 by 13:00 (UK time)

Coursework Report & Requirements

For your company, or one that you know well, critically scrutinise how well top management and leadership achieve Asset Integrity through the Life Cycle. Choose any four (but only four) of the following areas to scrutinise:

- Asset Integrity Strategy
- Maintenance Management
- Human Factors Relevant to Significant Incidents
- Competences Relevant to Significant Incidents
- Monitoring, Reviewing and Verifying Integrity Performance

Describe your findings in an academic report of about **3,000 words**. Illustrate your analyses with relevant examples; identify root causes of deficiencies (not just the symptoms); and make business driven and practical recommendations for improvement.

Specific Requirements for the Report:

- 1) An Abstract** giving business context, problems found, causes, business impact and proposed solutions. This should be a brief version of the Conclusion and less than one page. **[5 marks]**
- 2) Introduction** about one page long explaining the business and its operating context. **[5 marks]**
- 3) A Methodology Chapter** about one page long, briefly describing your approach to getting facts and identifying solutions and improvement paths. **[5 marks]**
- 4) Make separate Chapters** for each of the **four areas** being scrutinised. **[20 marks for each Chapter]**

In each Chapter:

- Identify how well the needed actions are defined, justified, and delivered. **[4 marks]**
- Identify, describe, and critically analyse **TWO** specific deficiencies giving evidence for your views and its likely business impact. **[4 marks]**
- By 5-why identify the root causes of each of these deficiencies (Do not just describe symptoms); this may need more than 5-whys. Explain why the deficiencies have been allowed to remain. **[4 marks]**
- Identify the “best” choice of improvement path and briefly explain your thinking. Remember that what may seem obvious to you may not be so obvious to a reader without your background knowledge. **[4 marks]**
- Make a roadmap for your chosen improvement path; be specific about the benefits you are trying to achieve, and the actions needed to achieve them. **[4 marks]**

5) Conclusion.

Pull together here the findings from the four areas. You should expand on the Abstract showing issues found, causes, business impact, recommended solutions, and suggestions for further study. Do not give fresh information or opinions here. **[5 marks]**

General Guidance:

- Use “OGP Publication Asset Integrity – the Key to Managing Major Incident Risks” and OGP Publication Asset Integrity Toolkit as your main resources. Do not cite only from OGP. Also use other UK and American guides to identify best practice. Reference these using accurate Harvard conventions at every relevant opportunity to give authority to your assertions. ISO 55000 may also be useful.
- To gain a high mark you will be expected to demonstrate a thorough understanding of Asset Management policies, processes, best practices, and their use. Take all opportunities to demonstrate your capability with techniques and best practices used to drive a high performing safe and sustainable business.
- The Report must be in strict academic format. A high mark will be awarded to a report that is concise, addresses all the points in the assignment specification, is well structured, is argued logically and clearly (grammar, sentence construction and clear layout). Correctly formatted Harvard style citations and references are essential.
- The Report has a word requirement of 3000 words. 10% under or over is acceptable. The word count excludes the executive summary, tables, figures, calculations, references, and content of appendices.
- Report must be produced in Word form not Pdf.
- Submission is via Campusmoodle and Turnitin. Please note that Turnitin has a limit of **100 MB**.
- Submission Deadline: **13:00, Monday 19th July 2021**. Do not wait until the last moment to submit. Give time for system glitches!

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Assessment

Coursework Learning Outcomes

This Coursework aims to assess students on the following Learning Outcomes and their ability to:

1. Describe the (UK) legal and best practice frameworks governing integrity and process safety through the life cycle.
2. Describe & implement the models and structured business processes for Reliability and Integrity needed to achieve safe & sustainable profitability.

RGU Marking Grid

Marking will be done using the Standard RGU Marking Grid given in the Assessment Information area on Moodle.

Note: The marks shown in square brackets in the Specific Requirements section give an indication where to put efforts. The marks in **4)** are per item for each Chapter. They do not imply that no marks are given for Listings, Appendices etc

STANDARD FORMAT OF COURSEWORK

The coursework must be typed and adhere to the following standards:

<i>Font:</i>	Verdana
<i>Font Size:</i>	11
<i>Line Spacing:</i>	1.5
<i>Margins:</i>	Left = 25 mm
	Right = 25 mm
	Top = 25 mm
	Bottom = 25 mm
<i>Colour:</i>	Use colour sparingly - perhaps for emphasis in diagrams

Students are expected to produce a professionally written report in Academic format with an Abstract, List of contents, Introduction, Conclusion, etc. The MSc Handbook gives detailed guidance. Do not submit an essay.

Page numbers, sections and sub-sections should be clearly numbered. Clearly identify any figures and tables with an individual number (Figure 1, Figure 2..., Table 1, Table 2..., etc.) and list these within your Lists of figures and tables.

Tell your "story" clearly and simply without technical jargon. Take care with grammar, spelling, and punctuation. Use Word Review facility.

If helpful with readability put key findings in the main text and details in appendices.

References

Include appropriate references and use them to justify your arguments. You **may wish to use** material from the Internet, books, journals, and other sources - as well as the material taught in the module. Any text which you incorporate within the body of your coursework including figures and tables, which did not originate from within **you as the writer's** own brain **MUST** be referenced. The references must be correctly cited using accurate Harvard conventions. Paraphrased citations are preferred to direct quotations as they show understanding.

There are a number of systems for referencing but the '**Harvard**' System has advantages of flexibility, simplicity, clarity, and ease of use both for author and reader. Also, since '**Harvard**' is stipulated for the MSc Project phase, and in order to gain experience in its application, you should only use the '**Harvard**' referencing system for your coursework.

Reports that are not properly and fully referenced will lose marks.

Plagiarism

Coursework must be written in your own words. It is acceptable to use small amounts of text from reference sources. This should normally be short quotations (perhaps a sentence or two, and up to thirty words). In total these extracts should be limited to about 10% of the report and **MUST be correctly referenced and be clearly identifiable**. The rest of the work should be in your own words and be your own ideas – based on what you have understood from the course material and from the references you have.

All Figures and Tables should also be given a source even if it is yourself. This again removes any doubt. Cite in-text citations to identify yourself as the author.

Self-plagiarism - Students should not take work submitted from their own previous Module coursework and use again within subsequent coursework.

If you are in any doubt or need clarification about any of these matters, ask your Tutor before you submit the report.

Submitted coursework which fails to meet any aspect of the above is liable to lose marks so ensure that you adhere to the requirements.

For more information we strongly recommend that you read the **Technical Report Writing Guidelines** and the **Coursework Guide for Students**. These are in Course Study Area module ENS006 under Section 2 in the 'Coursework'.