

# Health and Safety Essentials

## Lecture 20 – Revision and Assignment Preparation

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**Undergraduate Diploma in  
Occupational Health and Safety**


# Recap last week's topic

Kahoot Quiz:

[https://play.kahoot.it/v2/\\*?quizId=812c2854-e978-443e-b13d-e3c0436e2c5d](https://play.kahoot.it/v2/*?quizId=812c2854-e978-443e-b13d-e3c0436e2c5d)



# Objectives of This Lecture

- Clarify expectations for assignments (MQF Level 5 standard).
- Provide step-by-step guidance on structuring answers.
- Discuss academic writing and referencing.
- Prepare students for their presentations.
-  Question for Students:  
*"What challenges do you foresee in completing your assignment?"*






# Major Themes from the Lecture Series

## Lecture Series:

- 1.OHS Governance & Legislation** – Legal compliance and responsibilities (Lectures 3 & 4).
- 2.Risk Management & Control Measures** – Hazard identification and mitigation (Lectures 8, 9, 10,11, 12,13, 15).
- 3.Leadership & Safety Culture** – Organisational impact on safety (Lectures 6 & 7).
- 4.Emergency Preparedness & Training** – Preventing and responding to incidents (Lectures 14, 16, 17).
- 5.Sustainability & ESG in OHS** – The future of workplace safety (Lecture 19).

 **Discussion Starter:** *Which of these themes will be most useful for your assignment?*

# Understanding the Assignments

-  Each student must submit a 1,700-word academic report, answering one of the three questions:
  - ◆ **Assignment 1:** Industrial Automation & Workplace Safety.
  - ◆ **Assignment 2:** Leadership & Safety Failures.
  - ◆ **Assignment 3:** Designing an OHS Management System.
-  **Key Takeaways for Success:**
  -  Use evidence-based arguments to support your findings.
  -  Balance analysis with real-world application.
  -  Incorporate at least 15 references in Harvard Style.

# Assignment 1 – Industrial Automation & Safety Risks

Industrial robots are increasingly utilised to enhance efficiency and productivity in workplaces. However, the fatal incident at a South Korean distribution centre, where a robot crushed a worker to death, highlights the significant risks associated with automated systems when proper safeguards fail. In a report:

- a) Reflect on the factors that may have contributed to this fatal incident, focusing on the role of human behaviour, organisational culture, and risk assessment processes. (40%)
  - b) Critically discuss the potential benefits of industrial automation in reducing workplace hazards and improving operational efficiency. Balance these against the drawbacks and risks, including those posed by inadequate safety systems, communication, and emergency preparedness. (60%)
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- <https://www.dailymail.co.uk/news/article-12730367/killer-robot-south-korea-worker-crushed-death.html>
  - [https://www.business-standard.com/world-news/industrial-robot-in-south-korea-confuses-man-with-boxes-kills-him-123110801445\\_1.html](https://www.business-standard.com/world-news/industrial-robot-in-south-korea-confuses-man-with-boxes-kills-him-123110801445_1.html)

# Assignment Q1

- ♦ What are the key Focus Areas:
- ☒ **Human Behaviour & Organisational Culture** – How did workplace culture contribute to the accident?
- ☒ **Risk Assessment Failures** – Were hazard controls insufficient?
- ☒ **Automation & Safety Trade-Offs** – Benefits vs risks of industrial robots.
- You can choose other areas but stick to the questions!

# Assignment Q1

## Step-by-Step Approach:

- 1 **Introduction:** Define the issue—how automation impacts workplace safety.
- 2 **Case Study Analysis:**
  - What were the safety failures? What do we know? Is there enough information?
  - Look up reliable sources, if not found then what? Can you assume?
- 3 **Balancing Benefits & Risks:**
  - How does automation reduce workplace hazards?
  - What are the biggest risks if safety systems fail?
- 4 **Potential Solutions:**
  - Try to cover several topics but stick to the questions
  - Lookup standards for the industry
- 5 **Conclusion:** Future recommendations for safer automation.







# Assignment 2 – Leadership & Safety Failures

The Foundation Food Group (FFG) liquid nitrogen release incident of 2021 tragically resulted in six fatalities and several injuries. The investigation revealed critical shortcomings in safety management systems, leadership, and organisational culture, all of which contributed to the severity of the accident.

- a) Reflect on the role of management and leadership in creating and maintaining a robust safety culture. How could stronger leadership and better organisational culture have prevented the identified safety failings in this case? (40%)
  - b) Critically discuss how the implementation of a comprehensive safety management system, including atmospheric monitoring, emergency preparedness, and process safety policies, could have mitigated the risks or prevented the incident altogether. (60%)
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- <https://www.nytimes.com/2021/01/28/us/foundation-food-group-liquid-nitrogen-plant.html>
  - <https://www.csb.gov/foundation-food-group-fatal-chemical-release/>

# Assignment Q2

-  What are the key Focus Areas:
- -  **Leadership & Organisational Culture** – How did leadership failures contribute?
  -  **Emergency Preparedness & Process Safety** – What was missing?
  -  **Role of Safety Management Systems (SMS)** – How could better systems have prevented the accident?
- You can also identify other or different key focus areas but stick to the questions.
- One of the links contains and extensive investigation report!

# Assignment Q2

## Step-by-Step Approach:

- 1 **Introduction:** Argue why strong leadership is critical for workplace safety.
- 2 **Case Study Analysis:**
  - What leadership failures contributed to the disaster?
  - How did **poor safety culture** and **lack of emergency preparedness** make the situation worse?
- 3 **Applying Safety Management Systems (SMS):**
  - How would **process safety controls** have mitigated risks?
  - Importance of **atmospheric monitoring and real-time hazard detection**.
- 4 **Solutions:**
  - Implementing **ISO 45001 safety culture principles**.
  - **Regular emergency drills & leadership engagement**.
- 5 **Conclusion:** The future of leadership in safety-critical industries.

# Assignment 3 – Designing an OHS Management System

You have recently been appointed as the Occupational Health and Safety (OHS) Manager for a newly established company specialising in importing food products. The company operates across multiple domains, including administration offices, truck fleets, and warehouses with extensive storage racking systems. While the company does not intend to pursue safety certification, it is committed to developing a robust noncertified Safety Management System (SMS) to ensure compliance with legal requirements and promote a safe and sustainable working environment. In a report of 1700 words:

- a) Reflect on how you would approach risk profiling for this company. Identify the most critical hazards the organisation may face and outline how applicable legislation prioritises these hazards. (40%)
- b) Design a simple and practical framework for the company's Safety Management System (SMS). Your framework should include strategies for managing key physical, chemical, biological, and ergonomic hazards, addressing psychosocial risks, and integrating effective communication, consultation, and training initiatives. Discuss how your framework aligns with principles of sustainability and organisational resilience. (60%)



# Assignment Q3

## ◆ Key Focus Areas:

- ✓ **Risk Profiling & Hazard Prioritisation** – What are the most critical hazards?
- ✓ **Developing a Safety Management System (SMS)** – Structuring policies and procedures.
- ✓ **Integrating Sustainability & ESG in OHS** – Long-term resilience.

# Assignment Q3

## Step-by-Step Approach:

### 1 Introduction:

- Define what an **OHS Management System (SMS)** is.
- Explain the **importance of risk profiling**.

### 2 Hazard Identification:

- Key risks: **Warehouse hazards, transportation safety, food contamination risks.**
- Relevant Maltese and EU **OHS legislation**.

### 3 SMS Design:

- **Adopt a model**
- **Physical, chemical, biological & ergonomic risk management.**
- **Emergency response plans & training initiatives.**
- **Worker consultation & communication methods.**

### 4 Sustainability & ESG in OHS:

- **Linking safety efforts to corporate sustainability goals.**

### 5 Conclusion: How the proposed SMS ensures **compliance, safety, and business resilience.**

# Harvard Referencing & Academic Writing



## Requirements:

- ✓ Use 15+ Harvard-style references.
- ✓ Cite credible sources (peer-reviewed journals, government reports, legislation).
- ✓ Demonstrate critical analysis – avoid just summarising information.



## Example Reference (Harvard Style):

### Example In-Text Citation (Harvard Style):

- (U.S. Chemical Safety and Hazard Investigation Board, 2023)

### Full Reference for the Bibliography (Harvard Style):

- U.S. Chemical Safety and Hazard Investigation Board (2023) *Fatal Liquid Nitrogen Release at Foundation Food Group, Gainesville, GA | Incident Date: January 28, 2021 | No. 2021-03-I-GA: Investigation Report*. Washington, DC: U.S. Chemical Safety and Hazard Investigation Board. Available at: [www.csb.gov](http://www.csb.gov) (Accessed: [insert date of access]).

# Break





# Preparing for the 10-Minute Presentation

## Purpose of the Presentation:

- This is **not your final assignment**, but an opportunity to **showcase your initial research and approach**.
- You will receive **valuable feedback** before submitting your final report.
- You can demonstrate **your ability to apply learning from previous lectures**.
- Marks will be awarded based on **presentation quality, structure, and critical thinking** (see rubric).

# Preparing for the 10-Minute Presentation

## Your Presentation Should Cover:

- 1 What is your chosen assignment topic?
- 2 Why did you choose this topic?
- 3 What case study, issue, or workplace challenge are you analysing?
- 4 What OHS theories, laws, or best practices will you use?
- 5 What solutions or recommendations do you plan to include?
- 6 What challenges or gaps still need further research?

# Presentation Guidelines

## Presentation Guidelines:

- ✓ You have **10 minutes** – practice to stay within the time limit.
- ✓ Use **PowerPoint (or equivalent slides)** to structure your key points.
- ✓ Keep slides **simple, clear, and engaging** – avoid long blocks of text.
- ✓ Be prepared to **answer questions**.

# Presentation Checklist

- ✓ **Your 10-minute presentation should showcase:**
  - ◆ Your initial research and ideas for the assignment.
  - ◆ How you plan to develop your arguments.
  - ◆ What you still need to explore further before submitting the final report.
  - ◆ Your ability to apply OHS concepts from previous lectures.

## **Ask Yourself Before Presenting:**

### ✓ **1. Structure & Clarity**

- Is your introduction clear and engaging?
- Have you logically structured your points so your audience can follow?
- Have you clearly stated your research focus and key arguments?

# Presentation Checklist

## ✓ 2. Content & Critical Thinking

- Have you explained your chosen case study or topic clearly?
- Have you analysed the key OHS issues and not just described them?
- Have you linked your discussion to relevant legislation, standards (ISO 45001, CSRD, Cap. 646), and best practices?
- Have you proposed practical, well-researched solutions?

## ✓ 3. Visuals & Engagement

- Have you kept slides simple, with relevant images, graphs, or data?
- Are you avoiding too much text and reading directly from slides?
- Are your examples engaging and relevant to your audience?



# Presentation Checklist

## ✓ 4. Timing & Preparedness

- Have you practised to keep within the 10-minute limit?
- Have you planned where to pause for emphasis or engagement?
- Do you know which parts you need to expand or summarise if needed?

## ✓ 5. Handling Questions & Discussion

- Are you ready to defend your ideas with confidence?
- Can you justify your points with research and evidence?
- Have you thought about potential gaps or counterarguments in your approach?


# How to Improve Before Your Presentation

 What can you do if...


? You're struggling with time? → **Practice, prioritise key points, and avoid over-explaining details.**

? You feel nervous? → **Remember, this is just a discussion – show what you know so far.**

? You're not sure about an argument? → **Prepare to discuss gaps and seek constructive feedback!**

 **You still have 7 weeks and 3 days** until the final submission deadline (8th May) for your Assignments.

 This presentation helps you refine your approach, so **use this chance to test your ideas!**

 Even if you haven't started writing, you should have a **clear research plan and structure.**

 **Think of this as a 'pitch' of your assignment – you're showing your plan, research, and critical thinking!**







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