BOOST
THE LEADING TRAINING PROVIDER

Health, Safety and Environment

Basic Principles of Occupational Hygiene

Course Introduction

Occupational hygiene is the science of protecting and enhancing the health and well-being of workers by identifying, evaluating, and controlling workplace hazards.

Occupational Hygiene

Participants for this training will learn the importance of Occupational hygiene in today’s rapidly evolving work environments, where it plays a critical role in protecting workers' health, ensuring regulatory compliance, and promoting productivity and sustainability.

Participants will also develop their skills and knowledge on the basic principles of occupational hygiene centered on anticipating, recognizing, evaluating, controlling, and confirming the management of health risks in the workplace.

This training program will focus on understanding what the physiology of the human body is and how it can be affected by occupational exposure to chemical and physical agents.

Course Methodology, Will include:

- Lectures: Delivered by experienced occupational hygienists.
- Practical Exercises: Hands-on activities to reinforce learning.
- Case Studies: Real-world examples to illustrate key concepts.
- Group Discussions: Encouraging collaboration and knowledge sharing.
- Handouts: Copies of slides, SDS, and risk assessment templates.
- Assessments: Quizzes, exercises, pre and post assessment test.

Target Audience

- Health and safety professionals.
- Operations and Facility Managers.
- Technical and Engineering Staff.
- Engineers and technicians.

- HR personnel involved in workplace safety.
- Regulatory and Compliance Officers.
- Anyone responsible for workplace health and safety.

Learning Objectives

- Understand the fundamental concepts of occupational hygiene & its importance in workplace safety.
- Learn to recognize chemical, physical, biological, and ergonomic hazards in the workplace.
- Gain skills in hazard evaluation techniques, including exposure monitoring and risk assessment.
- Understand the hierarchy of controls and how to implement effective control measures.
- Develop the ability to apply occupational hygiene principles to improve workplace health and safety.
- Understand the broad principles of Occupational Hygiene
- Recognizing the basis for anticipation, recognition, evaluation and control of hazards that can be encountered in the workplace
- Understand the history and background of the development of Occupational Hygiene
- Familiar with the importance of occupational hygiene today.
- Explaining the implemented tools for Hazard Recognition, Evaluation, and Control.

Course Outline

- **DAY 01**

  Introduction to Occupational Hygiene:

  - Overview of occupational hygiene: Definition, history, and importance.
  - Occupational Hygiene Vs. Industrial Hygiene

- Key concepts: Hazards, exposure, and risk.
- History and background of the development of Occupational Hygiene
- The importance of occupational hygiene today
- The role of occupational hygiene in workplace safety and health.

• **Day 02**

Hazard Recognition:

- Introduction to chemical hazards: Types, sources, and health effects.
- Reviewing Safety Data Sheets (SDS) and chemical labels.
- Physical hazards: Noise, vibration, radiation, and temperature extremes.
- Using a sound level meter to measure noise levels.
- Biological hazards: Bacteria, viruses, and fungi.
- Ergonomic hazards: Repetitive strain, poor posture, and manual handling.
- Practical exercise: Conducting a workplace inspection to identify hazards.

• **Day 03**

Hazard Evaluation:

- Principles of exposure assessment: Air sampling, noise monitoring, and thermal stress evaluation.
- Conducting air sampling for dust or vapours.
- Risk assessment techniques: Qualitative and quantitative methods.
- Practical exercise: Using a risk assessment matrix to evaluate hazards.

• **Day 04**

Control of Hazards

- Hierarchy of controls: Elimination, substitution, engineering controls, administrative controls, PPE.
- Practical exercise: Designing engineering controls (e.g., ventilation systems).
- Case studies: Implementing controls in real-world scenarios (e.g., reducing silica dust in construction).
- Group activity: Developing a control plan for a hypothetical workplace.

• **Day 05**

Implementation, Monitoring and Improvement:

- The physiology of the human body.
- Occupational exposure to chemical and physical agents.
- Developing and implementing workplace hygiene programs.
- Regulatory compliance: Overview of OSHA, NIOSH, and other standards.
- Review and update.
- Continuous improvement.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 7, 2025	April 11, 2025	5 days	4250.00 $	UAE - Dubai
July 28, 2025	Aug. 1, 2025	5 days	4250.00 $	UAE - Abu Dhabi
Oct. 13, 2025	Oct. 17, 2025	5 days	4950.00 $	Netherlands - Amsterdam