

COURSE OVERVIEW HE0127
Industrial Hygiene Certification Program
W507: Health Effects of Hazardous Substances
(Accredited by OHTA-BOHS)

Course Title

Industrial Hygiene Certification Program: W507: Health Effects of Hazardous Substances *(Accredited by OHTA-BOHS)*

Course Reference

HE0127

Course Duration

Training: Five days/4.5 CEUs/45 PDHs
 Exam: One day/3 Hours
 Total: 6 Days



Course Date/Venue

Session(s)	Date	Venue
1	October 22-26, 2023	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
2	December 10-14, 2023	
3	March 03-07, 2024	

Course Description



This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.

This course aims to provide an introduction to the principles of toxicology, physiology and epidemiology. The course will cover the main types of harmful effects to target organs from exposure to chemical hazards at work and the hazards associated with common hazardous substances.



On completing this course successfully, the participants will be able to:-

- Provide definitions of commonly used toxicology terms
- Describe the main routes by which hazardous substances can enter the body and the factors which influence their absorption, distribution, storage and elimination
- Describe the main sources of information on hazardous substances and processes
- Describe the main features of the principal target organs affected by hazardous substances at work and the factors which influence the degree of harm
- Describe the main routes of exposure and toxic and health effects for hazardous substances commonly encountered in the workplace
- Carryout basic interpretation of the results from epidemiological studies



The course normally run as a taught course over 5 days (minimum of 45 hours including lectures, tutorials, practical/demonstration sessions, guided reading, overnight questions and examination). There will be a 40 short answer question “open book” examination with an allowed time of 120 minutes.

This course is designed to provide participants with a detailed and up-to-date overview of health effects of hazardous substances. It covers the commonly used toxicological terms; the basic principles of toxicology covering the pharmacokinetics, dose response relationship and toxicity testing; the types of combined effects as well as the general health effects comprising of carcinogenicity, sensitisers and reproductive effects; the physiology and target organs comprising of respiratory system, skin, nervous system, circulatory system, liver, kidney and reproductive system; and the epidemiology, the health effects and industrial processes.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Achieve the OHTA-BOHS Certificate in W507: Health Effects of Hazardous Substances
- Define the commonly used toxicological terms
- Discuss the basic principles of toxicology covering the basic pharmacokinetics, dose response relationship and toxicity testing
- Identify the types of combined effects as well as the general health effects comprising of carcinogenicity, sensitisers and reproductive effects
- Recognize the physiology and target organs covering respiratory system, skin, nervous system, circulatory system, liver, kidney and reproductive system
- Discuss epidemiology and the health effects and industrial processes

Exclusive Smart Training Kit - H-STK®



*Participants of this course will receive the exclusive “Haward Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials, sample video clips of the instructor’s actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.*

Who Should Attend

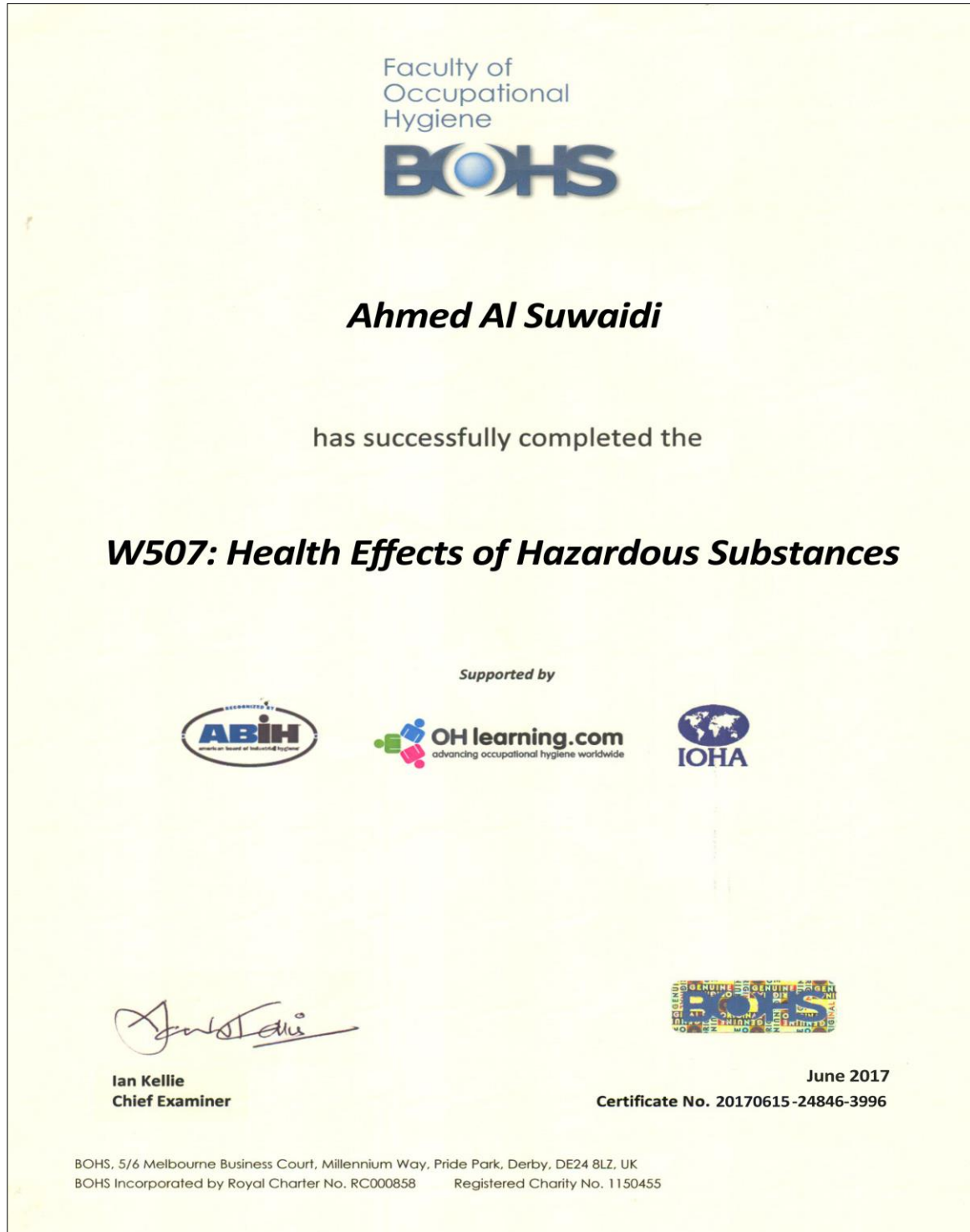
This course covers deeper appreciation and wide understanding of health effects of hazardous substances for health and safety professionals, occupational health specialists including physicians and nurses. Specialists in subjects such as acoustics, ergonomics, human factors, occupational psychology, work organisation, biosafety, engineering, analytical chemistry and those who want a broader appreciation of how their role interfaces with other professions over health issues in the workplace will find this course beneficial.

Course Certificate(s)

- (1) BOHS Certificates will be issued to participants who have successfully completed the course and passed the exam of the course.

BOHS Certificate(s)

The following certificate is a sample of the BOHS certificates that will be issued to successful candidates:-



- (2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course

* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *



Haward Technology Middle East

Continuing Professional Development (HTME-CPD)

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CEU Official Transcript of Records

TOR Issuance Date: 15-June-17

HTME No. PAR213628

Participant Name: Ahmed Al Suwaidi

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE127-IH	W507: Health Effects of Hazardous Substances	June 11-15, 2017	45	4.5

Total No. of CEU's Earned as of TOR Issuance Date **4.5**

TRUE COPY



Maricel De Guzman
Academic Director

Haward Technology is an Authorized Training Provider by the International Association for Continuing Education and Training (IACET), 11130 Sunrise Valley Drive, Suite 350 Reston, VA 20191, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2013 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology is accredited by












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Certificate Accreditations

Haward Technology is accredited by the following international accreditation organizations:-

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The British Occupational Hygiene Training Association (OHTA-BOHS)

Haward Technology is an OHTA Approved Training Provider under the W201 and W500 series modules that promote better standards of occupational hygiene practice throughout the world. OHTA is the British Occupational Hygiene Training Association.

Haward Technology supports hygiene professionals who wanted people around the world to enjoy the benefits of healthy working environments.


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The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **4.5 CEUs** (Continuing Education Units) or **45 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

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British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council for Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Peter Jacobs, is a **Senior HSE Consultant** with almost **25 years** of extensive experience within **Oil & Gas, Refinery and Petrochemical** industries. His wide experience covers in the areas of **Incident Command & Report Writing, HAZOP, HAZMAT, HAZID, Health Risk Assessment, Modern Safety Risk Management, Process Risk Management, Root Cause Analysis Techniques, HSE Management System Development & Implementation, Handling Hazardous Chemicals, Industrial Safety & Housekeeping, Job Safety & Hazard Analysis, Hazardous Substances Measurement, Workplace Control, Physical Agents, Emergency Response, Chemical & Biological Operations, Basic Safety & Loss Prevention, Safety in Chemical Laboratory, Confined Space Safety, Industrial Hygiene, Occupational Health & Hygiene, Ergonomics, Biological Assessment, Radiation with Radon/Thoron Assessment, Radiation Protection Safety, Radiation Monitoring, Natural Radiation Sources, Nuclear Regulatory Act, Industrial Ventilation, Air Pollution Dispersion Modelling, Basic Clandestine Drug Laboratory Investigation, Chemical Engineering, Fire Safety & Evacuation, Evacuation Safety, Safety Orientation, Hand & Power Tools Safety, Isokinetic Stack Sampling, Dust Exposure, Quantifying Workplace Stressors, Noise & Airborne Pollutants, Thermal Stress, Illumination, Mine Health & Safety, Statistical Method Validation, Legal Audit Compliance, Riot & Crowd Control, ISO 14000, OHSAS 18000, ISO 17025 and ISO 9000.**

During his career life, Mr. Jacobs has gained his practical and field experiences through his various significant positions and dedication as the **Forensic Science Laboratory Manager, Occupational Hygienist, Radiation Protection Officer, Lead Practitioner, Safety, Health & Environmental (SHE) Specialist, First Responder, OHS Inspector, Ambulance Assistant and LPG Distributor Auditor** from various international companies like the Sedulitas, Richards Bay Minerals, Sasol and South African Police Service.

Mr. Jacobs has a **Master's** degree in **Public Health – Occupational Hygiene**, a **National Diploma in Purchasing Management** and held an Intermediate Certificate in Mine Environmental Control. Further, he is a **Certified Instructor/Trainer**, an Appointed Commissioned Officer, a SAIOH/ IOHA President, an Assessor/Moderator of Health & Welfare SETA, a **Registered Occupational Hygienist** of the Southern African Institute for Occupational Hygiene, awarded as a SAIOH **Occupational Hygienist of the Year Award** and a well-regarded member of the British Occupational Hygiene Society (**BOHS**), Mine Ventilation Society of South Africa (MVSSA) and South African Radiological Protection Association (SARPA). He has further delivered numerous trainings, courses, seminars, workshops and conferences worldwide.

Training Methodology

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Workshops & Work Presentations
- 30% Case Studies & Practical Exercises
- 20% Software, Simulators & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Fee

US\$ 7,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0745	Registration & Coffee
0745 – 0800	Welcome & Introduction
0800 – 0815	PRE-TEST
0815 – 0930	Basic Principles of Toxicology: Definitions Acute • Chronic • Local • Systemic • Allergic Reaction • Sensitiser • Carcinogen • Mutagen • Teratogen • Xenobiotic • Stochastic • Non-Stochastic
0930 – 0945	Break
0945 – 1200	Basic Principles of Toxicology: Basic Pharmacokinetics Absorption (Routes of Absorption for Substances, When Ingestion can Occur, Situations Where Skin Absorption & Penetration can Occur) • Distribution (Main Distribution Pathways, Blood, Lymphatic System) • Storage (How Chemical Properties of a Substance Influence Site of Storage; Common Examples of Where Materials are Stored Including Solvents in Fatty Tissues, Lead in Bones, Liver as a Storage Organ) • Biotransformation (Meaning of Biotransformation, Where Biotransformation Occurs? How Biotransformation can Initiate or Enhance Toxic Effects Examples Benzene, Dichloromethane, Methanol) • Elimination (Definition of Biological Half-life, Wide Variation of Half-lives, Shape of Curve)
1200 – 1230	Lunch
1230 – 1430	Basic Principles of Toxicology: Dose Response Relationships Meaning of Dose Response Relationships • Typical Shape of Dose Response Curve • Concept of Threshold and No-observed Adverse Effect Level • Dose Response Curves without Threshold • Importance of Slope of Curve
1430 – 1445	Break

1445 – 1600	Basic Principles of Toxicology: Toxicity Testing Meaning of LD50, LDLo, LC50, LCLo, TD50, TDLo, TC50 and TDLo • Units Used to Express Results of Animal Testing • Types of Toxicity Testing – Toxiconec Studies, Acute Toxicity Studies, Sensitisation Studies, Repeated Dose Toxicity Studies, Genotoxicity Studies, Reproductive & Developmental Toxicity Studies, Carcinogenicity Studies • Uses of Toxicological Data & Estimation of Safe Human Dose • Limitations of Toxicity Testing Data
1600 – 1720	Basic Principles of Toxicology: Types of Combined Effects Addition • Synergism • Potentiation • Antagonism • Independent
1720 – 1730	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1730	End of Day One

Day 2

0730 – 0945	Basic Principles of Toxicology: General Health Effects Asphyxia • Irritation • Narcosis • Toxicity • Carcinogens (Basic Mechanisms of Carcinogenicity [Geneotoxicity, Irritant, etc.]; Benign & Malignant Tumours; Difficulties in Identifying Causal Agents, Long Latency Periods; IARC Classification) • Sensitisers (How Sensitisation Affects Individuals?; Sensitisers [Respiratory, Animal Allergy, Skin-Chromium]; Uncertainty About Thresholds; Mechanisms of Sensitisation & Assessment Methods • Reproductive Effects (Teratogens)
0930 – 0945	Break
0945 – 1200	Physiology & Target Organs: Respiratory System The Main Regions of the Respiratory System (Head Airways Region: Role of Turbinates, Filtration Mechanisms; Tracheobronchial Region: Structure, Dimensions of Air Passages; Mucociliary Escalator; Alveolar Region: Surface Area, Retention Time of Particles, Lack of Cilia) • Particles (Definition of aerodynamic Diameter; Relevance of Particle Size; Particle Deposition & Clearance; Main Deposition Mechanisms; Interception, Impaction, Sedimentation, Diffusion; Particle Size Ranges from Each of the Three Regions; Particles: Those Deposited in the Alveoli, Fate of Particles Deposited Elsewhere including Absorption via Digestive Tract; ISO Curves: Inspirable, Thoracic & Respirable Curves, Shape of Respirable Curve
1200 – 1230	Lunch
1230 – 1430	Physiology & Target Organs: Respiratory System (cont'd) Gases & Vapours (Absorption through the Lungs; Gases; Importance of Solubility) • The Lung as a Target Organ (Gaseous Contaminants: Acute Irritancy, Role of Solubility in Determining Region Affected, Chronic Effects; Causes & Consequences of Inflammation; Benign Pneumoconiosis: Definition, Main Agents (Iron, Tin, Barium); Fibrosis: Definition [Crystalline Silica, Asbestos, Inc.]; Emphysema [Cadmium Oxide etc.]; Cancer [Rubber Fume, Arsenic, Hexavalent Chromium etc.]; Allergic Conditions (Rhinitis – Symptoms, Non-specific Nature, Wide Range of Agents; Asthma – Symptoms, Common Causes [Isocyanates, Solder Fume, Metals, Latex, Vegetable Dusts, Animal Proteins & Enzymes (Industrial & Food Utilisation)]; Allergic Alveolitis – Symptoms, Causative Agents for Farmer's Lung & Other Moulds; Byssinosis – Symptoms, Main Stages of Textile Process Associated with Disease; Assessment Methods – Lung Function Testing, Challenge Testing, Skin Prick Testing, Blood iGe Analysis etc.)
1430 – 1445	Break

1445 – 1600	<p>Physiology & Target Organs: Skin <i>Structure – The Structure & Function of the Different Layers & Components: Stratum Corneum & Epidermis; Dermis; Hair Follicles; Sweat Glands; Nerves; Fat</i> • <i>Mechanisms of Cutaneous Protection Against Chemical Penetration & Biological Agents</i> • <i>The Skin as a Target Organ</i> • <i>Definitions, Main Mechanisms & Common Causes of Irritant Contact Dermatitis, Allergic Contact Dermatitis [Nickel, Epoxy Resins], Folliculitis, Pigment Disturbances, Ulceration, Cancer)</i></p>
1600 – 1720	<p>Physiology & Target Organs: Nervous System <i>Central & Peripheral Nervous Systems: Definitions, Roles, Structure of Nerve Cells, Transmission of Nerve Impulses; Transmission Along Cells, Transmission Across Synaptic Gap</i> • <i>Nervous System as a Target organ</i> • <i>Role of Volatile Organic Compounds as Depressant</i> • <i>Definitions, Main Mechanisms & Common Causes of Damage to Nerve Cells [Lead, Mercury, N-Hexane, Manganese]; Deactivation of Cholinesterase [Organophosphates]</i></p>
1720 – 1730	<p>Recap <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow</i></p>
1730	End of Day Two

Day 3

0730 – 0930	<p>Physiology & Target Organs: Circulatory System <i>Composition of Blood & Role of Constituents</i> • <i>Blood as a Target Organ</i> • <i>Definitions & Common Causes of Haemolysis [Arsine & Stibene]; Carboxyhaemoglobin Formation [Carbon Monoxide – from Direct Exposure & from Metabolisation of Dichloromethane]; Methaemoglobin Formation [Aromatic Amines]; Anaemia [Lead, Benzene]; Leukaemia [Benzene]</i></p>
0930 – 0945	Break
0945 – 1100	<p>Physiology & Target Organs: Liver <i>Position of Liver in the Circulatory System</i> • <i>Role in Biotransformation & Consequent Vulnerability to Toxic Agents</i> • <i>Structure of Liver Lobules</i> • <i>Main Agents Which can Cause Liver Damage [eg Alcohol, Chlorinated Hydrocarbons, Metal Compounds]</i></p>
1100 – 1200	<p>Physiology & Target Organs: Kidney <i>Structure and Function</i> • <i>Role in Homeostasis and Excretion</i> • <i>Link to Circulatory System</i> • <i>Structure and Role of Nephrons</i> • <i>Kidney as a Target Organ: Effects of Cadmium, Lead, Mercury & Organic Compounds</i></p>
1200 – 1230	Lunch
1230 – 1445	<p>Physiology & Target Organs: Reproductive System <i>Effective on Unborn Child: Heredity and Teratogenicity</i> • <i>Interference with the Male & Female Systems</i></p>
1430 – 1445	Break
1445 – 1720	<p>Epidemiology <i>Types of Epidemiological Study</i> • <i>Importance of Study Design</i> • <i>Definitions of Cohort/Case-Referent, Retrospective/Prospective, Cross Sectional/Longitudinal, Designs, Mortality/Morbidity Ratios</i></p>
1720 – 1730	<p>Recap <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow</i></p>
1730	End of Day Three



Day 4

0730 – 0930	Epidemiology (cont'd) Use of Epidemiological Data, Limitations & Restrictions, Confounding Factors Bradford Hill Criteria
0930 – 0945	Break
0945 – 1145	Epidemiology (cont'd) Limitations of Epidemiological Studies, Importance of Study Size, Link to Exposure Standards
1145 – 1200	Health Effects & Industrial Processes: Risk and Safety Phrases International System for Risk & Safety Phrases
1200 – 1230	Lunch
1230 – 1330	Health Effects and Industrial Processes: Sources of Information Safety Data Sheets • Literature • National Data Bases including REACH
1330 – 1430	Health Effects and Industrial Processes: Gases Use a Selection of the Gases Given Below to Illustrate the Principal Toxic Effects [Simple Asphyxiation, Chemical Asphyxiation, Upper & Lower Respiratory Tract Irritation, Blood Effects, Lung Damage, Cancer] from Exposure to Gaseous Substances. The Occurrence of these Gases and their Common Applications should be included (Inert Gases, Carbon Dioxide and Carbon Monoxide, Hydrogen Cyanide, Ammonia, Chlorine, Hydrogen Sulphide, Oxides of Nitrogen and Ozone, Acid Gases [Sulphur Dioxide, Hydrogen Chloride, Hydrogen Fluoride] & Metal Hydrides)
1430 – 1445	Break
1445 – 1720	Health Effects & Industrial Processes: Vapours Describe the Generic Hazards of Organic Vapours [ie Narcosis, Respiratory Irritation, Skin Irritation & Dermatitis, Skin Absorption, Organ Damage] & Use Some of the Substances Given Below to Illustrate these: The Occurrence of these Vapours and their Common Applications should be included (Anaesthetic Gases eg Halothane, Nitrous Oxide, Aniline and Phenol, Benzene, Toluene and Xylene, Formaldehyde, Isocyanates, Styrene, Halogenated Hydrocarbons, Vinyl Chloride, N-hexane, Glycol Ethers & Acetone/MEK)
1720 – 1730	Recap
1730	End of Day Four

Day 5

0730 – 0930	Health Effects & Industrial Processes: Dusts & Particulate Materials Minerals - Use the Minerals given below to Illustrate the Principal Toxic Effects of such Substances. The Occurrence of these Minerals and their Common Applications should be included Crystalline Silica [Quartz, Cristobalite and Tridymite]; Asbestos [Serpentine and Amphibole]; Machine-Made Mineral Fibres [Glass, Rock, Refractory Ceramic Fibre] • Organic & Other Dusts (Nanoparticles, Flour & Other Components [Industrial & Manufacturing]; Diesel Fume; Latex [Manufacturing & Use]; Enzymes [Detergents & food Industries]; Physiological Active Materials [Pharmaceuticals]
0930 – 0945	Break
0945 – 1200	Health Effects & Industrial Processes: Metals & their Compounds Use Some of the Metals Given Below to Illustrate the Principal Toxic Effects [Nuisance, Respiratory Effects, Organ Damage, Lung Damage, Fibrosis, Skin Irritancy/Sensitisation, Systemic Effects, Cancer] from Exposure to such metals & their Compounds. The Occurrence of these Metals & their Common Applications should be Included Arsenic, Aluminium, Beryllium, Cadmium, Chromium & Nickel, Cobalt, Iron, Lead [Including Differences Between Inorganic & Organic Lead Compounds], Mercury, Manganese, Vanadium, Zinc & Copper



1200 – 1230	Lunch
1230 – 1300	Health Effects & Industrial Processes: Common Industrial Processes Working with Metals [Grinding, Machining, Welding] • Surface Coating & Treatments [Chromium Plating, Galvanising, etc.] • Soldering • Handling & Processes Involving Solvents [Open & Closed Systems; Degreasing, Painting, etc.] • Handling of Solids & Powders
1300 – 1330	Health Effects and Industrial Processes: Specific Industry Profiles Smelting & Refining of Iron & Steel • Foundries, Mining & Quarrying • Oil & Petroleum Industry • Pharmaceutical Industry
1330 – 1345	Break
1345 - 1645	Biological Agents Principal Toxic Effects & Sources (Legionella & Humidifier Fever; Infections of Blood Borne Diseases [Hepatitis & HIV]; Zoonoses [Definitions, How Infection can Occur, Common Examples [Anthrax, Leptospirosis, Salmonellosis], Bloodborne Infections; Moulds; Pandemics; Genetic Modification)
1645 – 1700	Course Conclusion Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course
1700 – 1715	POST-TEST
1715 – 1730	Presentation of Course Certificates
1730	End of Course

MOCK Exam

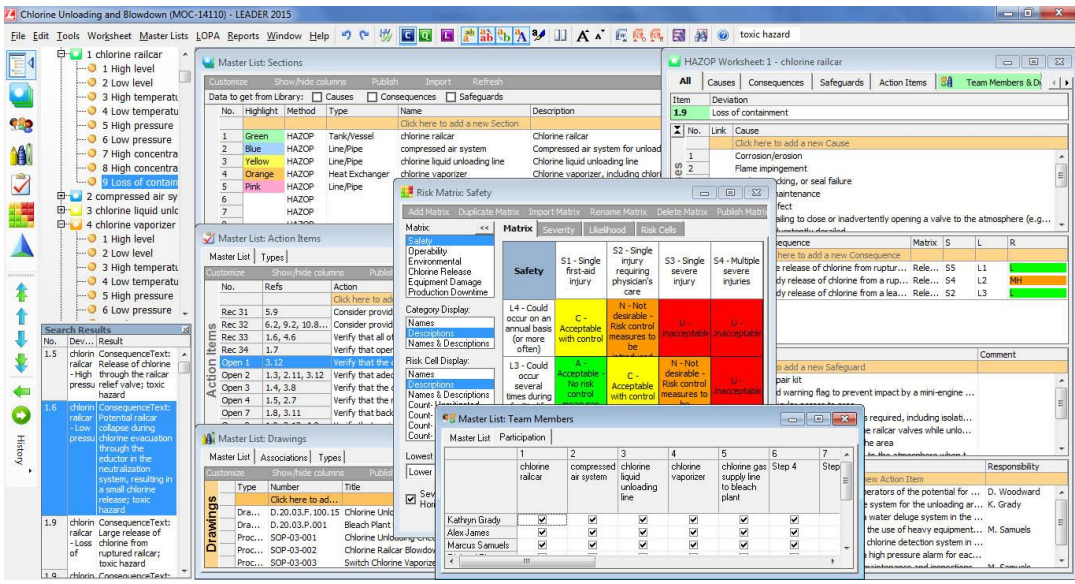
Upon the completion of the course, participants have to sit for a MOCK Examination similar to the exam of the Certification Body through Haward's Portal. Each participant will be given a username and password to log in Haward's Portal for the MOCK exam during the 7 days following the course completion. Each participant has only one trial for the MOCK exam within this 7-day examination window. Hence, you have to prepare yourself very well before starting your MOCK exam as this exam is a simulation to the one of the Certification Body.

Day 6: OHTA BOHS Online Exam (to be scheduled within 30 days of course completion)

0900 - 0915	OHTA-BOHS Exam Registration/Briefing
0915 - 1145	OHTA-BOHS Exam
1145 - 1200	Closing Ceremony
1200	End of Exam

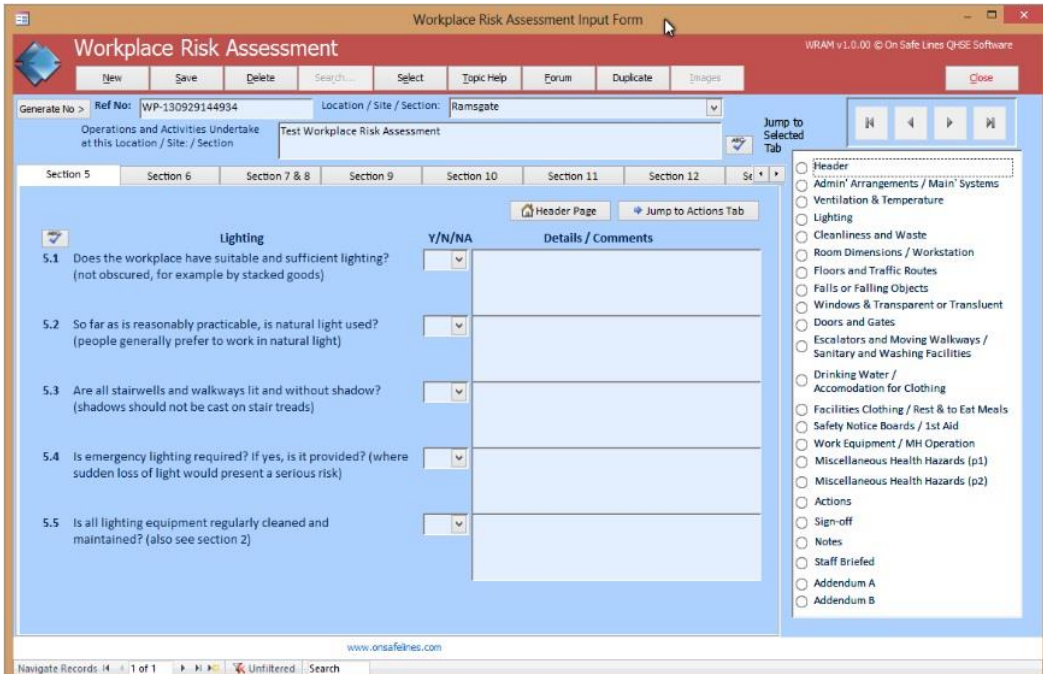
Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carry out various exercises using our state-of-the-art “PHA/HAZOP”, “Workplace Risk Assessment” “Industrial Hygiene Virtual Laboratory” and “CIHprep V9.0” simulators.



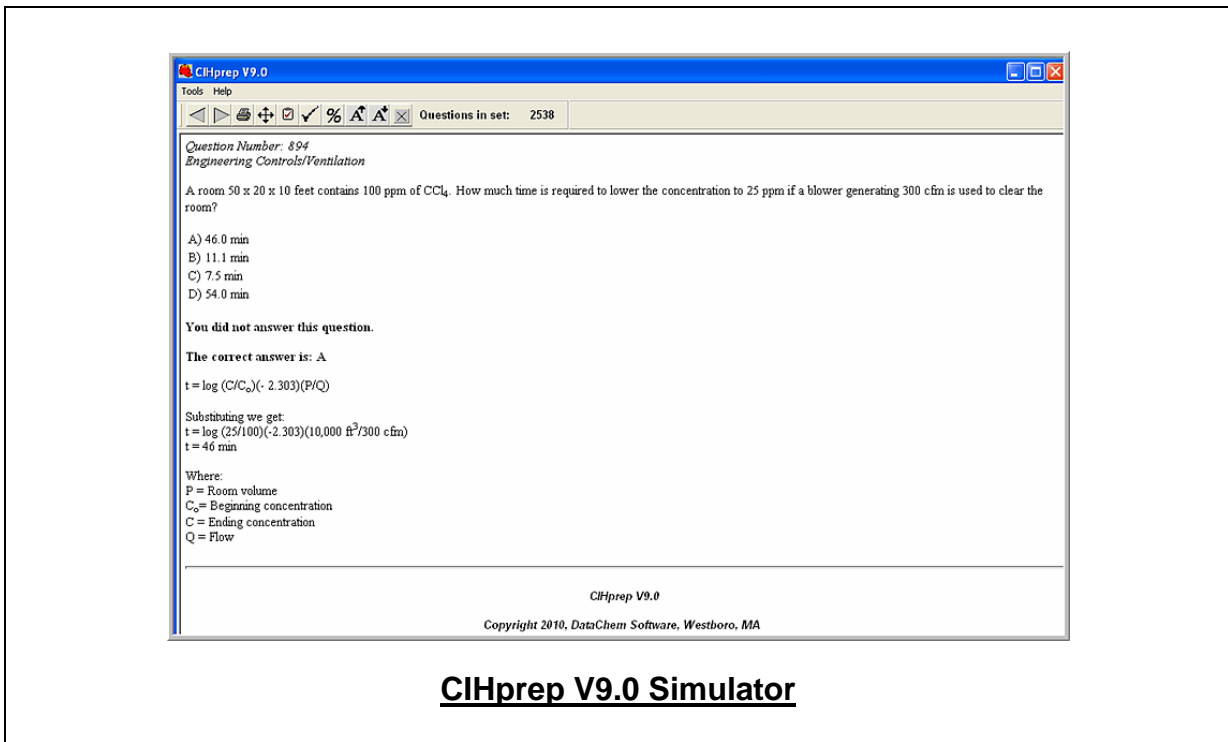
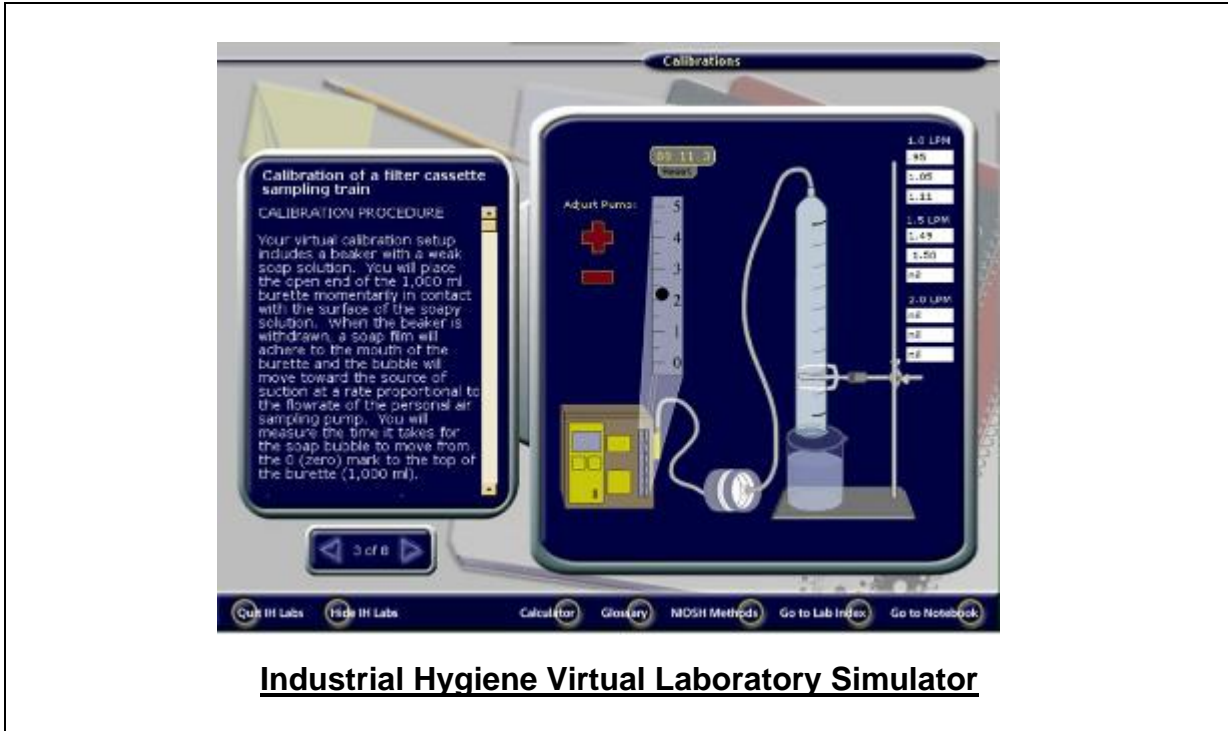
The screenshot displays the PHA/HAZOP Simulator interface. It features a central 'Risk Matrix Safety' table with columns for Severity, Lifehood, and Risk Cells. The matrix contains risk levels such as S1 (Single first-aid injury), S2 (Single injury requiring physician's care), S3 (Single severe injury), and S4 (Multiple severe injuries). Below the matrix are several data tables including 'Master List: Sections', 'Master List: Action Items', 'Master List: Drawings', and 'Master List: Team Members'. The interface also includes a search bar, navigation buttons, and a detailed description of the hazard being assessed.

PHA/HAZOP Simulator



The screenshot shows the Workplace Risk Assessment (WRAM) software interface. It features a header with the title 'Workplace Risk Assessment' and a navigation bar with buttons like 'New', 'Save', 'Delete', 'Select', 'Topic Help', 'Forum', 'Duplicate', and 'Images'. The main area displays a checklist of safety questions under the heading 'Lighting'. The questions are numbered 5.1 through 5.5, each with a 'Y/N/NA' column and a 'Details / Comments' column. A right-hand sidebar contains a list of categories for risk assessment, such as 'Header', 'Admin' Arrangements / Main' Systems', 'Ventilation & Temperature', 'Lighting', 'Cleanliness and Waste', 'Room Dimensions / Workstation', 'Floors and Traffic Routes', 'Falls or Falling Objects', 'Windows & Transparent or Translucent', 'Doors and Gates', 'Escalators and Moving Walkways / Sanitary and Washing Facilities', 'Drinking Water / Accommodation for Clothing', 'Facilities Clothing / Rest & Eat Meals', 'Safety Notice Boards / 1st Aid', 'Work Equipment / MH Operation', 'Miscellaneous Health Hazards (p1)', 'Miscellaneous Health Hazards (p2)', 'Actions', 'Sign-off', 'Notes', 'Staff Briefed', 'Addendum A', and 'Addendum B'.

Workplace Risk Assessment



Course Coordinator

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