COURSE OVERVIEW HE1937
Industrial Hygiene Certification Program
BOHS-M502: Thermal Environment
(Accredited by the British Occupational Hygiene Society - BOHS)

Course Title
Industrial Hygiene Certification Program: BOHS-M502: Thermal Environment *(Accredited by the British Occupational Hygiene Society - BOHS)*

Course Date/Venue
Please see page 4

3.7 CEUS (37 PDHS) AWARD

Course Reference
HE1937

Course Duration
Five days/3.7 CEUs/37 PDHs

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 candidates with a sound understanding of the effects of the thermal environment on people, and the means of assessing and controlling the risks associated with thermal stress.

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

- Identify sources of thermal stress within the working environment
- Understand the nature of thermal strain on the body
- Make an assessment of the thermal environment through appropriate measurement and other means
- Evaluate the possible risks from exposure to thermal stress
- Suggest appropriate control approaches for the thermal environment

This course is designed to provide participants with a detailed and up-to-date overview of BOHS-M502: Thermal Environment. It covers the thermal spectrum covering extreme temperatures and moderate temperatures; the principles of heat stress, heat strain, homeostasis and thermal regulation including feedback and control mechanisms; assessing physiological responses to hot environment and cold environments; the heat production and heat exchanges with the surroundings and heat balance equation; the metabolic heat production and efficiency, sensible heat exchanges, latent heat loss and acclimatisation; the effects of excessive heat strain covering hot and cold environments; and the predisposing factors.

During this interactive course, participants will learn the thermal comfort, scales for subjective evaluation of comfort, actual ideal indoor environments and the work of fanger; evaluating hot environments covering heat stress indices and effect of heat stress, effective and corrective effective temperatures, heat stress index, required sweat rate (PHS) and WBGT; the control of hot environments comprising of personal factors mitigating against 'hot' work, simple introduction to control by engineering and organisational measures and hot surface; the thermal survey, assessing the degree of risk and evaluating cold environments and control of cold environments; the various approaches to risk assessment covering AIOH tiered approach, SA DoMR code of practice for an occupational health programme on thermal stress and ACGIH thermal stress TLVs; and the difference between quantitative and qualitative approaches and physiological assessments.

This course will require at least 45 hours of study time, of which at least 37 hours will be taught (teaching and practical assessments) and 8 hours will be independent (in the candidates' own time).

Course Objectives

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

- Achieve the BOHS Certificate in BOHS-M502: Thermal Environment
- Discuss the thermal spectrum covering extreme temperatures and moderate temperatures
- Explain the principles of heat stress, heat strain, homeostasis and thermal regulation including feedback and control mechanisms
- Assess physiological responses to hot environment and cold environments as well as discuss heat production and heat exchanges with the surroundings and the heat balance equation
- Recognize metabolic heat production and efficiency, sensible heat exchanges, latent heat loss and acclimatisation
- Identify the effects of excessive heat strain covering hot and cold environments and the predisposing factors
- Discuss thermal comfort, scales for subjective evaluation of comfort, actual ideal indoor environments and the work of fanger
- Evaluate hot environments using heat stress indices and recognize the effect of heat stress, effective and corrective effective temperatures, heat stress index, required sweat rate (PHS) and WBGT

- Discuss the control of hot environments comprising of personal factors mitigating against 'hot' work, simple introduction to control by engineering and organisational measures and hot surface
- Apply thermal surveys, assess the degree of risk and evaluate cold environments and control of cold environments
- Carryout various approaches to risk assessment covering AIOH tiered approach, SA DoMR code of practice for an occupational health programme on thermal stress and ACGIH thermal stress TLVs
- Differentiate quantitative versus qualitative approaches and apply physiological assessments

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 conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of thermal environment for technicians and technologists who conduct measurements and testing in workplaces.

Exam Eligibility & Structure

There are no prerequisites required for this qualification.

Suggested References and Further Reading

(1) Human Thermal Environments: The Effects of Hot, Moderate, and Cold Environments on Human Health, Comfort, and Performance
(2) A guide to managing heat stress: Developed for use in the Australian environment
(3) Guideline for Compilation of a Mandatory Code of Practice for an Occupational Health Programme (Occupational Hygiene and Medical Surveillance) on Thermal Stress
(4) ISO 7243: 1989 Hot environments – Estimation of heat stress on a worker, based on the WBGT – Index (Wet Bulb Globe Temperature)
(5) BS 7915:1998 Ergonomics of the thermal environment – Guide to design and evaluation of working practices in cold indoor environments
(6) ISO 11079:2007 Ergonomics of the thermal environment - Determination and interpretation of cold stress when using required clothing insulation (IREQ) and local cooling effects (IREQ)
(7) ISO 7730:2005 Ergonomics of the thermal environment – Analytical determination and interpretation of thermal comfort using calculation of the PMV and PPD indices and local thermal comfort criteria
(8) ISO 10551:1995 Ergonomics of the thermal environment – assessment of the influence of the thermal environment using subjective judgment scales
(9) ISO 12894:2001 Ergonomics of the thermal environment – Medical supervision of individuals exposed to extreme hot or cold environments
(10) ISO 7933:2004 ISO 7933:2004 Ergonomics of the thermal environment – Analytical determination and interpretation of heat stress using calculation of the predicted heat strain
(11) BS 7963:2000 Ergonomics of the thermal environment – Guide to the assessment of heat strain in workers wearing personal protective equipment
(12) ISO 7726: 1998Ergonomics of the thermal environment – Instruments for measuring physical quantities
(13) BS EN 14058 Protective clothing garments for protection against cool environments

(14) ISO 15265:2004 Ergonomics of the thermal environment – Risk assessment strategy for the prevention of stress and discomfort in thermal working conditions
(15) BS EN 511: 2006 Protective Gloves Against Cold
(16) ISO 13732-3:2006 Ergonomics of the thermal environment – Methods for the assessment of human responses to contact with surfaces - Part 3: Cold Surfaces
(17) ISO 11399:1995 Ergonomics of the thermal environment – Principles and application of relevant international standards
(18) ISO 9920:2007 Ergonomics of the thermal environment – Estimation of the thermal insulation and water vapor resistance of a clothing ensemble
(19) ISO 13732:1:2006 Ergonomics of the Thermal Environment: Methods for assessment of human response to contact with surfaces: Part 1: Hot Surfaces

Course Date/Venue

Session(s)	Date	Venue
1	February 16-20, 2025	Slaysel 02 Meeting Room, Movenpick Hotel & Resort Al Bida'a Kuwait, City of Kuwait
2	April 13-17, 2025	Al Aziziya Hall, The Proud Hotel Al Khobar, Al Khobar, KSA
3	July 13-17, 2025	Club B Meeting Room, Ramada Plaza by Wyndham Istanbul City Center, Istanbul, Turkey
4	October 13-17, 2025	Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

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

Course Fee

Kuwait	**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
Al Khobar	**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
Istanbul	**US$ 8,000** per Delegate + **VAT**. This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Abu Dhabi	**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

Exam Fee

US$ 175 per Delegate + **VAT**

Accommodation

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

Course Certificate(s)

(1) BOHS-M502 – Thermal Environment will be awarded to participants who have successfully completed the course and passed all the parts (A and B) within 12 months.

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 Middle East

Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date: 15-Nov-23

HTME No. 74851

Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE1937	Industrial Hygiene Certification Program BOHS-M502: Thermal Environment *(Accredited by the British Occupational Hygiene Society - BOHS)*	November 11-15, 2023	37	3.7

Total No. of CEU's Earned as of TOR Issuance Date 3.7

TRUE COPY

Jaryl Castillo
Academic Director

Haward Technology has been approved as an Accredited Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2018 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 1-2018 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

P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

Certificate Accreditations

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

- The British Occupational Hygiene Society (BOHS)

Haward Technology is an Approved Training Partner of the British Occupational Hygiene Society (BOHS) for the M201 and M500 series modules, which are designed to maintain a high standard of occupational hygiene education.

Together with BOHS, Haward Technology supports hygiene professionals in their mission to create safe working environments globally and is committed to advancing the practice of occupational hygiene to promote healthier workplaces worldwide.

- 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.

- 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 **3.7 CEUs** (Continuing Education Units) or **37 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.

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 **OHTA Modules** (Measurement of Hazardous Substances, Thermal Environment, Noise Measurement & Its Effects, Asbestos & Other Fibers, Control of Hazardous Substances, Ergonomics Essentials, Health Effects of Hazardous Substances), Advanced **Industrial Hygiene**, **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, **SAESI Hazardous Materials** for the **First Responder Operations (NFPA 472)**, **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 an **Intermediate Certificate in Mine Environmental Control** an **Accredited South African Emergency Services Institute** (**SAESI**). 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.

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, Welcome & Introduction*
0745 - 0800	***PRE-TEST***
0800 - 0930	***The Thermal Spectrum*** *Extreme Temperatures: Examples of Work Environments where Extreme Temperatures can be Found*
0930 – 0945	*Break*
0945 - 1015	***The Thermal Spectrum (cont'd)*** *Moderate Temperatures: How Work in Moderate Thermal Environments can Present a Risk*
1015 - 1230	***Principles*** *Definition of Heat Stress • Definition of Heat Strain • Homeostasis (Understand the Principles of Homeostasis; Be Aware of Typical Core, Muscle, & Skin Temperatures & how they Vary with Environmental & Other Conditions • Thermal Regulation including Feedback & Control Mechanisms (Thermoregulation Through a Feedback System; The Role of the Hypothalamus; Thermoreceptors; Control Actions Such as Shivering, Vasomotor etc) • Physiological Responses to Hot Environment (Vasodilation; Sweating; Electrolyte Changes; Dehydration; Heart Rate; Respiration Rate; Other Effects) • Physiological Responses to Cold Environments (Vasoconstriction; Shivering; Piloerection; Cold Diuresis; Respiration; Heart Rate; Dehydration; Psychological; Other Responses)*
1230 – 1330	*Lunch*
1330 - 1500	***Principles (cont'd)*** *Heat Production & Heat Exchanges with the Surroundings (External Heat Sources; Internal Heat Sources; Basic Thermodynamics) • The Heat Balance Equation Definitions of Terms (The Heat Balance Equation; Definition of Terms) • Metabolic Heat Production & Efficiency (Metabolic Heat Production; Typical Values of Metabolic Heat Production for Different Tasks; Work) • Sensible Heat Exchanges (Convection; Radiation; Conduction) • Latent Heat Loss (Evaporative Heat Loss) • Acclimatisation (Physiological Mechanisms)*
1500 – 1515	*Break*
1515 - 1620	***Effects of Temperature Extremes*** *Effects of Excessive Heat Strain – Hot Environments (Syncope; Salt Balance; Dehydration; Cramps; Hyperpyrexia; Prickly Heat; Heat Stroke)*
1620 – 1630	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today & Advise them of the Topics to be Discussed Tomorrow*
1630	*End of Day One*

Day 2

0730 – 0930	***Effects of Temperature Extremes (cont'd)*** *Effects of Excessive Heat Strain – Cold Environments (Frostbite; Trench Foot; Hypothermia)*
0930 - 0945	*Break*
0945 – 1015	***Effects of Temperature Extremes (cont'd)*** *Predisposing Factors (Age; General Health; Weight & Physical Fitness; Hydration State; Acclimatisation; Alcohol; Drugs; Diet; Fatigue)*

1015 - 1215	***Thermal Comfort*** *Thermal Comfort (What is Thermal Comfort?; Why Thermal Comfort can be Important) • Scales for Subjective Evaluation of Comfort (Bedford; ASHRAE) • Actual Ideal Indoor Environments (Temperature, Humidity, & Air Movement) • An Introduction to the Work of Fanger (Predicted Percentage Dissatisfied (PPD); Predicted Mean Vote (PMV); ISO 7730)*
1215 – 1315	*Lunch*
1315 - 1530	***Evaluation of Hot Environments*** *The Use of Heat Stress Indices (Definition of Terms & Environments where Indices can be Applied; Effective & Corrected Effective Temperature, WBGT, Heat Stress Index, Required Sweat Rate)*
1530 – 1545	*Break*
1545 - 1620	***Evaluation of Hot Environments (cont'd)*** *Effect of Heat Stress (Physiological Measurements as Predictors of Heat Strain)*
1620 – 1630	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today & Advise Them of the Topics to be Discussed Tomorrow*
1630	*End of Day Two*

Day 3

0730 – 0930	***Evaluation of Hot Environments (cont'd)*** *Effective & Corrective Effective Temperatures (Application of Basic Effective Temperature (BET) & Corrective Effective Temperature (CET)) • Heat Stress Index (Application of the Heat Stress Index)*
0930 - 0945	*Break*
0945 - 1000	***Evaluation of Hot Environments (cont'd)*** *Required Sweat Rate (PHS) (Application of the Required Sweat Rate) • WBGT (Application; ISO 7243; Threshold Limit Values of ACGIH)*
1000 - 1230	***Control of Hot Environments*** *Personal Factors Mitigating Against 'Hot' Work (Obesity; Medication; Age; State of Acclimatisation)*
1230 - 1330	*Lunch*
1330 – 1515	***Control of Hot Environments (cont'd)*** *A Simple Introduction to Control by Engineering & Organisational Measures (Control Strategies; Engineering Controls; Management Controls; Personal Protective Clothing; Refuges)*
1515 - 1530	*Break*
1530 - 1620	***Control of Hot Environments (cont'd)*** *Hot Surfaces (Exposure to Hot Surfaces)*
1620 – 1630	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today & Advise Them of the Topics to be Discussed Tomorrow*
1630	*End of Day Three*

Day 4

0730 - 0930	***Thermal Surveys*** *Measurement Equipment (Air Temperature; Radiant Temperature; Humidity; Air Movement; Integrating Meters; Personal Monitoring)*
0930 - 0945	*Break*
0945 - 1130	***Thermal Surveys (cont'd)*** *Surveys (Strategies) • Assessment of the Degree of Risk (Use of Measurement Data)*
1130 - 1230	***Evaluation of Cold Environments*** *Assessment Indices (Wind Chill Index)*
1230 – 1330	*Lunch*
1330 – 1530	***Evaluation of Cold Environments (cont'd)*** *Assessment Indices (Equivalent Chilling Temperature)*
1530 - 1545	*Break*
1545 - 1620	***Evaluation of Cold Environments (cont'd)*** *Assessment Indices (IREQ; ACGIH TLV Standards)*
1620 - 1630	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today & Advise Them of the Topics to be Discussed Tomorrow*
1630	*End of Day Three*

Day 5

0730 - 0930	***Control of Cold Environments*** *Personal Factors (Heart & Lung Conditions; Circulatory Problems)*
0930 - 0945	*Break*
0945 - 1230	***Control of Cold Environments (cont'd)*** *Engineering Controls (Wind Barriers; Refuges)*
1230 - 1330	*Lunch*
1330 - 1415	***Control of Cold Environments (cont'd)*** *Management Controls (Monitoring; Work – Rest Regimes/Warming Regimes) • Clothing (Clothing Insulation & CLO Values; Wind Proofing; Water Proofing; Gloves; Heated Clothing)*
1415 - 1430	*Break*
1430 - 1545	***Approaches to Risk Assessment*** *AIOH Tiered Approach (Overview & Application; Advantages & Disadvantages) • SA DOMR Code of Practice for an Occupational Health Programme on Thermal Stress (Overview & Application; Advantages & Disadvantages) • ACGIH Thermal Stress TLVs (Overview & Application; Advantages & Disadvantages) • Quantitative Vs Qualitative Approaches • Physiological Assessments*
1545 – 1600	***POST-TEST***
1600 - 1615	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1615 - 1630	*Presentation of Course Certificates*
1630	*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 30 days following the course completion. Each participant has only one trial for the MOCK exam within this 30-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.

Examinations & Assessment

Candidates are required to pass all of the following parts (A and B below) to be awarded this qualification.

(A) Practical Assessment

The practical assessment will be conducted by the Tutor during relevant parts of the course for all candidates. This is to ensure that every candidate can demonstrate their individual ability and correct method.

The studies are designed to assess the basic skill and knowledge of each candidate in the techniques in making measurements of conditions for the purpose of assessing the thermal environment.

The exercises will involve:

- The setting up and reading of a static wet and dry bulb thermometer and calculation of humidity etc.
- The set up and use of a whirling hygrometer and a globe thermometer to evaluate a WBGT value.

Full details of the practical requirements and individual candidate reporting can be found in the Practical Evaluation Report which is available from www.bohs.org

(B) Written Examination

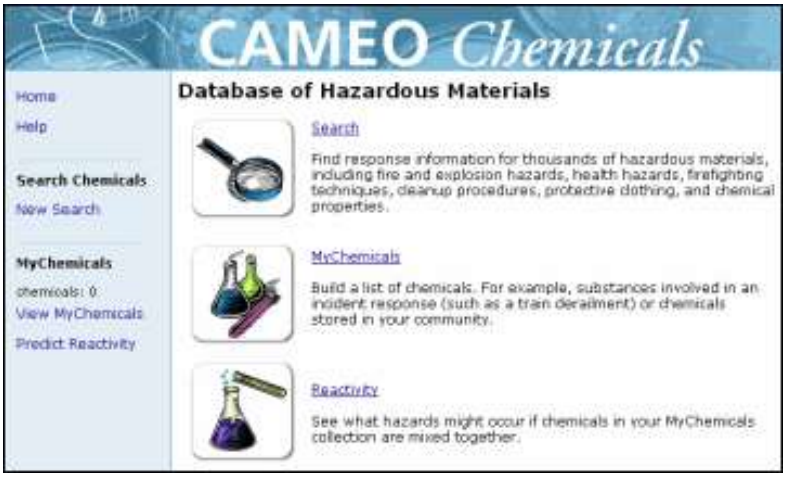
This is an open-book examination comprising of 40 (160 marks) short-answer questions illustrated by photographs and diagrams as appropriate to be answered in 2 hours. Each question is worth 4 marks

The examination covers all sections of the syllabus and is overseen by an invigilator.

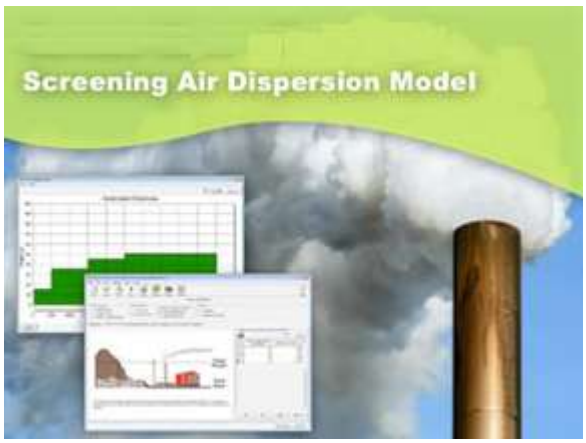
The pass mark for this examination is 50 %

Simulators (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 carryout various exercises using the Environmental simulators "CAMEO Chemicals Suite Software", "US EPA SCREEN3 Model", "AERSCREEN Model", "Industrial Hygiene Virtual Laboratory Simulator" and "CIHprep V9.0 Simulator".



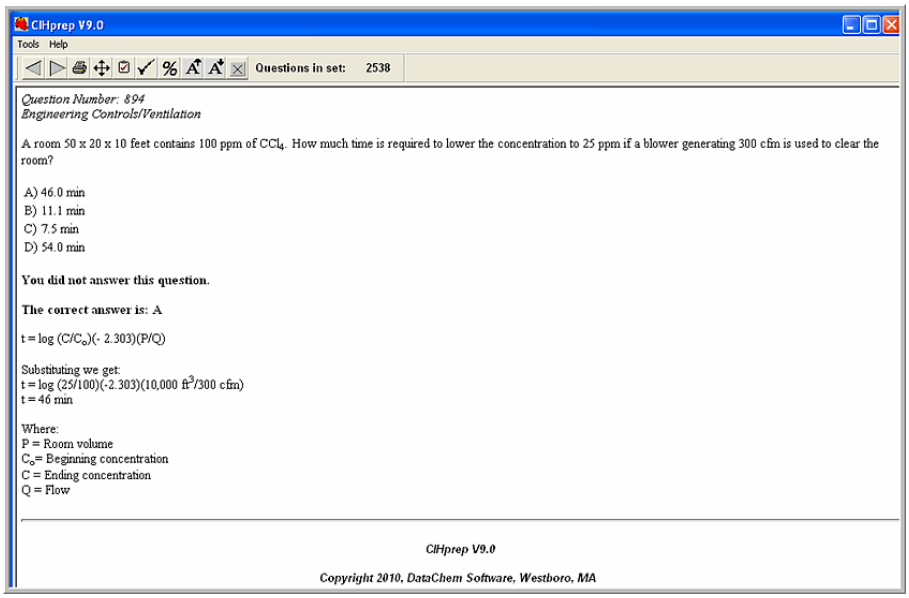
CAMEO Chemicals Suite Software



US EPA SCREEN3 Model

AERSCREEN Model

Industrial Hygiene Virtual Laboratory Simulator



ClHprep V9.0 Simulator

Course Coordinator
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