

Industrial Hygiene is the discipline of **anticipating, recognizing, evaluating and controlling health hazards** in the working environment with the objective of **protecting worker health** and well-being and safeguarding the community at large.

— INTERNATIONAL OCCUPATIONAL HYGIENE ASSOCIATION (IOHA)

The ILO estimates that nearly **440,000 people** throughout the world **died** as a result of **occupational exposure** to hazardous substances in 2005.

— INTERNATIONAL LABOUR ORGANISATION

Measuring sound levels at a facility in Trinidad and Tobago (2005).  
Photo credit: Elva E. Clarke



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UWI OESH PROFESSIONAL DEVELOPMENT COURSES

## Introduction to **Industrial Hygiene**

Workplace  
Hazard Recognition,  
Evaluation and Control

**Date:** *October 30 – November 1, 2009  
(plus 6 hours to be determined)*

**Time:** *8:30 a.m. – 4:30 p.m. daily*

**Venue:** *Room C6, Chemistry Dept.  
UWI Mona Campus*

**Cost:** *JMD 50,000.00*

## Aim

To prepare practitioners to recognize, evaluate and develop programmes for prevention and control of occupational hazards.

## Target Audience

Safety Managers, Safety Officers, Occupational Nurses or anyone with direct responsibility for occupational safety and health.

## Pre-requisites

Knowledge of basic science and algebra is required. Tertiary level education in occupational safety and health, environment, science, engineering, health or related fields is also desirable.

## Course requirements

All representatives will be required to participate fully in all course activities. These may include presentations, discussions, laboratory exercises, preparation of reports or other forms of assessment.

## Objectives

- evaluate physical, chemical and biological hazards
- determine the best protective measures from among personal protection equipment, engineering and administrative controls
- discuss ethical issues relevant to occupational and environmental safety and health
- explore, discuss and evaluate exposure values, standards and limits

## Learning Outcomes

- recognize and evaluate potential hazards in the workplace
- source and interpret local, regional and international standards pertaining to risk
- perform workplace hazard assessments and make basic risk assessments
- make recommendations for prevention and control measures and programmes

## Topics Covered

- Overview of occupational hazards — physical, chemical and biological
- Principles of hazard evaluation
- Occupational risk assessment databases
- Exposure limit values, standards and guidelines
- Administrative controls — materials substitution, process changes, work scheduling
- Personal protective equipment — respirators and gloves
- Engineering controls — enclosure, area and local exhaust ventilation, fume hoods
- Occupational hygiene programme management, including worker involvement in hygiene
- Ethics of occupational hygiene
- Health promotion



## Lecturers

### Dr. D. Gary Brown Dr.PH, CIH

Dr. D. Gary Brown is a Certified Industrial Hygienist (CIH) who is currently an Associate Professor at Eastern Kentucky University (EKU) in the Department of Environmental Health Science (EHS). He is on the staff of the OSHA Training Institute located at EKU. He has over 20 years professional experience in the environmental, industrial hygiene (IH) and safety arenas to include performing environmental/safety audits; developing written compliance programs; performing industrial hygiene surveys; developing, instituting, managing and evaluating behavior-based safety systems. He is extremely interested in the promotion of the field of Environmental Health Science (EHS)/Occupational Health Science (OHS)/Industrial Hygiene (IH) nationally and internationally.

### Mr. Norbert Campbell, MPH

Mr. Campbell is a lecturer at the University of the West Indies Mona Campus in the Department of Community Health and Psychiatry. He has been involved in the training of Public Health inspectors and Environmental Health professionals for over a decade. He has worked as an Occupational Safety and Health specialist in the Environmental Health Unit of the Ministry of Health, is a founding member of Jamaica Occupational Health Professionals' Association (JOHPA) and was the pioneer programme coordinator for UWI's OESH programme. Mr. Campbell is passionate about occupational health and enthusiastic about sharing his expertise.

## Resources

- Plog, Barbara A. and Quinlan, Patricia J. (eds.): *Fundamentals of Industrial Hygiene*, 5th ed., National Safety Council, Itasca, IL, 2001
- DiNardi, Salvatore R. (ed.): *The Occupational Environment: Its Evaluation, Recognition and Control*, 2nd ed. AIHA Press, American Industrial Hygiene Association, Fairfax, VA, 2003
- OSHA Technical Manual [www.osha.gov/dts/osta/otm/otm\\_toc.html](http://www.osha.gov/dts/osta/otm/otm_toc.html)
- National Institute for Occupational Safety and Health (NIOSH) *Manual of Analytical Methods*, [www.cdc.gov/niosh/nmam](http://www.cdc.gov/niosh/nmam)