

*Enhance your career through  
comprehensive training and education*



## **Environmental, Health and Safety Programs**

*Take individual courses or earn  
a certificate or award*

- **Health and Safety**
- **Hazardous Waste Operations —  
HAZWOPER**
- **Emergency Management**
- **OSHA Training Institute**

**Spring 2009**

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**UC DAVIS  
EXTENSION**  
**ENVIRONMENTAL,  
HEALTH AND SAFETY**



CONTINUING AND PROFESSIONAL EDUCATION

# Our Health and Safety Programs

## Workplace Health and Safety Certificate Program

The Bureau of Labor Statistics reported more than 4.1 million nonfatal injuries and illnesses in private industry workplaces in 2006. In addition, fines from OSHA for noncompliance with workplace health and safety laws have increased in recent years, with the heaviest fines charged to those businesses that ignore the most basic regulations. If you are responsible for employee health and safety at your workplace, it may be time to expand your knowledge of current health and safety issues and regulations, and learn new skills to create and maintain a safer work environment.

### How you benefit

This program is designed to expand and improve the practical skills of those responsible for employee health and safety, and develop staff expertise in health and safety strategies. The courses examine critical safety and health issues of private business, industry and government, and provide training necessary for managing a proactive health and safety program.

### Who earns the certificate

The certificate program attracts a diverse group of professionals, including:

- Safety directors and officers
- Environmental supervisors
- Union representatives
- Health and safety technicians
- Occupational health specialists/nurses
- Managers: risk, compliance, facilities
- Production supervisors
- Human resource specialists

Many individuals are sponsored by their employers, who know that sending an employee — or team of employees — to the program is an efficient way to develop staff expertise in health and safety strategies. The types of organizations that have used this approach include:

- Utility companies
- Food processors
- Insurance companies
- Electronic/semiconductor firms
- Refineries
- Equipment manufacturers
- Public health organizations
- Emergency response teams
- Chemical companies
- Analytical laboratories
- The military
- Job training and rehabilitation agencies

- Industrial supply companies
- Health management corporations
- School districts and community colleges
- Sanitation districts

The certificate is awarded upon successful completion (“C” or better) of nine required units and 12 elective units.

## Health and Safety Trainer Specialized Studies Program

This Specialized Studies Program is designed to bring together two key areas for the health and safety trainer. Core health and safety classes communicate underlying principles of good health and safety management and analysis, and the educational component provides you with key methods involving the design and delivery of health and safety training.

### How you benefit

The program gives students a solid foundation in basic health and safety material and provides the knowledge and skills needed for developing and delivering health and safety programs. This curriculum is designed to meet trainer requirements of a portion of the Code of Federal Regulations 1910.120 (e)(5) and (q)(5), which states that students must “have the academic credentials and instructional experience necessary for teaching the subjects. Instructors shall demonstrate competent instructional skills and knowledge of the applicable subject matter.”

The SSP is awarded upon successful completion (“C” or better) of 13 required units.

## Intensive Certificate Program in Health and Safety

This program is a more concise version of the *Workplace Health and Safety Certificate Program* and begins in June each summer. Get the skills and knowledge to manage a proactive health and safety program and an understanding of the essentials of occupational health and safety management during five weeks of courses spread out during the months of June, July and August. Total course credit for the program is 18 units.

### For more information

Please call (800) 752-0881 or visit our website.

[www.extension.ucdavis.edu/safety](http://www.extension.ucdavis.edu/safety)

For specific program information, contact (530) 757-8607, fax (530) 757-8634 or email [environinfo@unexmail.ucdavis.edu](mailto:environinfo@unexmail.ucdavis.edu).

## Backed by the University of California

Each certificate program course is reviewed by the Public Service Committee of the Academic Senate at UC Davis and an academic department on campus. This means courses meet the standards of the University of California, an assurance of quality. UC has a long tradition of excellence, and UC Davis Extension consistently rates as one of the country’s best continuing education organizations.

# Health and Safety

## Health and Safety Training for Hazardous Waste Workers—40 hour

4 CEUs.

5 ABIH CEUs.

Complete the portion of the OSHA Standard 29 CFR 1910.120 (T8 CCR 5192 in California) that specifies training requirements for hazardous waste workers (HAZWOPER). Designed for workers involved in investigation and clean-up of hazardous waste sites, this course features lectures and hands-on exercises with field instruments and personal protective equipment to help you learn about hazard awareness, hazardous waste regulations and exposure, medical monitoring, health and safety planning, respiratory protection, personal protective equipment, monitoring and sampling equipment, site characterization and control, decontamination, operational hazards, field investigation, health and safety laws and rights, and provides an emergency response overview.

Instructors emphasize interactive exercises throughout the course, and you may use level B personal protective equipment during field investigation exercises. Because of the physical stress that respiratory protection devices and impermeable protective clothing can cause, it is important that you have had a recent medical exam (within one year) with clearance for respirator use.

**KENNETH R. BEUTLER**, C.I.H., is a senior industrial hygienist with the California Department of Toxic Substances Control, Emergency Response Branch. He has more than 20 years of experience in the comprehensive practice of industrial hygiene, addressing areas such as employee exposure monitoring and sampling, health and safety program development, blood borne and airborne pathogens, indoor air quality and clandestine drug labs and mold remediation.

**CHRIS COSTAMAGNA** is a battalion chief with the Sacramento City Fire Department.

**ROBERT L. FORD**, C.I.H., is an industrial hygienist for the California Department of Fish and Game and has more than 15 years of practical experience in the field.

**JEFFREY HICKS**, M.P.H., C.I.H., is a principal scientist with Exponent. An industrial hygienist with more than 25 years of multidisciplinary experience, Hicks' project and managerial expertise encompasses indoor air quality, mold/fungal investigations, illness cluster studies, building ventilation, contamination of the built environment, chemical exposure assessments, air pollution emissions and modeling, and evaluation of physical agent hazards.

**LAWRENCE S. WONG**, C.I.H., is the University of California system-wide health and safety program manager. He has more than 30 years experience in the environmental health and safety field and has taught courses at UC Davis Extension since 1989.

■ **5 meetings.**

■ **May 4-8:** Mon.-Fri., 8 a.m.-5 p.m.

■ **Sacramento:** Sutter Square Galleria, 2901 K St.

■ **\$675.** Includes course materials and morning refreshments. **Enroll in section 084HSX100.**

■ **Special discounts:** Groups.

**NEW!**

## OSHA Recordkeeping

.75 quarter unit academic credit, X431.33.  
1 ABIH CEU.

The OSHA Recordkeeping rule requires employers to prepare and maintain records of work-related injuries and illnesses. Become functionally familiar with the latest requirements and mechanics of OSHA injury and illness documentation. Current regulations have improved employee involvement, calling for greater employee privacy protection. Learn about the most current regulatory requirements: simpler forms and greater employer flexibility to use computers to verify OSHA requirements are being met. Gain confidence that your recordkeeping is reliable and compliant with regulatory requirements.

This workshop is designed for experienced and newly-assigned supervisors, managers, health and safety personnel and others responsible for injury and illness recordkeeping. This course is an elective in the *Workplace Health and Safety Certificate Program*.

**RICHARD HIGHT**, OHST, retired as the chief of safety for the Sacramento Air Logistics Center, one of five heavy industrial complexes within the U.S. Air Force that contained some of the most complex industrial operations in the country. He continued his safety career as a safety consultant for Cal/OSHA Consultation Service, retiring at the end of 2007.

■ **1 meeting.**

■ **May 12:** Tues., 8:30 a.m.-5 p.m.

■ **Sacramento:** Sutter Square Galleria, 2901 K St.

■ **\$375.** Includes course materials and morning refreshments. **Enroll in section 084HSD545.**

■ **Special discounts:** Groups.

## Health and Safety Refresher for Hazardous Waste Workers—8 hour !/!

.8 CEU.

1 ABIH CEU.

Renew your certification as a hazardous waste site worker with this annual refresher training in health and safety issues. This course meets requirements established by OSHA Standard 29 CFR 1910, 120(e)(8) for training hazardous waste workers (HAZWOPER), T8 CCR 5192 (e)(8) in California. This refresher course is revised each year to provide you with the most up-to-date information. A newly designed program, including new exercises to accompany each module, will be available.

**Prerequisite:** *Health and Safety Training for Hazardous Waste Workers—40 hour.*

**KENNETH R. BEUTLER, C.I.H.**, is a senior industrial hygienist with the California Department of Toxic Substances Control, Emergency Response Branch. He has more than 20 years of experience in the comprehensive practice of industrial hygiene, addressing areas such as employee exposure monitoring and sampling, health and safety program development, blood borne and airborne pathogens, indoor air quality and clandestine drug labs and mold remediation.

- **1 meeting.**
- **May 15:** Fri., 8 a.m.-5 p.m.
- **Sacramento:** Sutter Square Galleria, 2901 K St.
- **\$195.** Includes course materials and morning refreshments. **Enroll in section 084HSX101.**
- **Special discounts:** Groups.

## Electrical Safety !/!

1.5 quarter units academic credit, X431.38.

2 ABIH CEUs.

Electricity is such a familiar part of our lives that it isn't always given the respect and caution it deserves. Learn how electricity can become a hazard and the most common causes of electrical injuries, including: contact with power lines; lack of ground-fault protection; path to ground missing or discontinuous; equipment not used in the manner prescribed; improper use of extension and flexible cords; and failure to lockout electrical circuits. Gain insight into OSHA regulations, lockout/tagout of machinery and equipment, and industry best practices that go beyond OSHA requirements. This course is an elective in the *Workplace Health and Safety Certificate Program*.

**MICHAEL T. DONLON, P.E.**, is a senior safety engineer with Cal/OSHA, Region 2, where he provides guidance to associate Cal/OSHA engineers and conducts complex inspections and accident investigations.

- **2 meetings.**
- **May 19-20:** Tues.-Wed., 8:30 a.m.-5 p.m.
- **Sacramento:** Sutter Square Galleria, 2901 K St.
- **\$515.** Includes course materials and morning refreshments. **Enroll in section 084HSX049.**
- **Special discounts:** Groups.

### THE 14<sup>TH</sup> ANNUAL

## Intensive Certificate Program in Health and Safety

Earn your certificate in Health and Safety in just three months. Five weeks of class time are spread out over the months of June, July and August—so you'll receive your certificate before fall begins.

This program is a more concise version of the *Workplace Health and Safety Certificate Program* and begins in June 2009. Get the skills and knowledge to manage a proactive health and safety program and an understanding in the essentials of occupational health and safety management. Total course credit for the program is 18 units. There are four required core courses and eight required elective courses.

Tuition for the *Intensive Certificate Program in Health & Safety* is \$5,900 if you enroll by May 31 (a deposit of \$600 is required at that time). If you enroll after May 31, the full fee of \$6,300 is due at the time of your enrollment. The fee includes all lectures, educational materials, morning refreshments daily, a parking permit and the certificate fee. Enroll in section 091HSD505.

To request a brochure for this program, please call (530) 757-8607 or email [environinfo@unexmail.ucdavis.edu](mailto:environinfo@unexmail.ucdavis.edu)

#### For more information or to enroll

Please call (800) 752-0881, email [environinfo@unexmail.ucdavis.edu](mailto:environinfo@unexmail.ucdavis.edu) or visit us online.

[www.extension.ucdavis.edu/safety](http://www.extension.ucdavis.edu/safety)

## Designing and Delivering Effective Health and Safety Training

4 quarter units academic credit, X426.6.

5 ABIH CEUs.

Build the skills necessary to effectively train others in health and safety. Learn to design, develop and deliver workplace health and safety training programs using a wide range of instructional methods. Explore various approaches to instruction, including participatory techniques and tips for engaging a specific audience and facilitating discussions and small group activity methods.

Topics include: adult learning principles, assessing audience needs, course development, instructional methods, presentation techniques, evaluation and feedback. You will develop and deliver a presentation using the techniques covered and are encouraged to bring work-related projects and supporting materials. A laptop computer is recommended, but not required. This is a required course for the Health and Safety Trainer Specialized Studies Program. Two units from this course can be applied as elective credit toward the *Workplace Health and Safety Certificate Program*.

**DINORAH BARTON ANTONIO, M.P.H.**, is program coordinator for the Western Region Universities Consortium at the Labor Occupational Health Program, UC Berkeley.

**ELAINE EL ASKARI, M.P.H.**, is labor coordinator for the Labor Occupational Health Program at the School of Public Health, UC Berkeley. She is widely recognized for her work in the area of employee safety. Askari is a member of the California Tuberculosis Elimination Task Force, Occupational Health/Infection Control & Environmental Control subcommittee.

- **5 meetings.**
- **June 15-19:** Mon.-Fri., 8 a.m.-5 p.m.
- **Sacramento:** Sutter Square Galleria, 2901 K St.
- **\$530.** Includes course materials and morning refreshments. **Enroll in section 084HSX122.**
- **Special discounts:** Groups.

**NEW!**

## Introduction to Chemical Hazards

.75 quarter units academic credit, X431.39.

1 ABIH CEU.

Proper management of hazardous materials is vital to minimizing potential health and/or environmental damage. Improve your understanding of the underlying health and environmental impacts of chemical hazards by reviewing the toxic effects of materials and the basic mechanism of action of classes of toxic agents. Examine basic chemical principles and definitions; important physical characteristics, such as physical states of chemicals, solubility, and vapor pressure and density; common hazardous properties, such as flammable and explosive agents; and corrosive effects. Discuss the use of occupational and environmental thresholds and criteria. Case studies demonstrate how these principles apply to actual situations.

Those with limited scientific training who plan to take more advanced health and safety or environmental health courses, such as Industrial Hygiene, will benefit. This course is an elective course in the *Workplace Health and Safety Certificate Program*.

**JEFFREY HICKS, M.P.H., C.I.H.**, is a principal scientist with Exponent. An industrial hygienist with more than 25 years of multidisciplinary experience, Hicks' project and managerial expertise encompasses indoor air quality, mold/fungal investigations, illness cluster studies, building ventilation, contamination of the built environment, chemical exposure assessments, air pollution emissions and modeling, and evaluation of physical agent hazards.

- **1 meeting.**
- **June 10:** Wed., 8:30 a.m.-5 p.m.
- **Sacramento:** Sutter Square Galleria, 2901 K St.
- **\$375.** Includes course materials and morning refreshments. **Enroll in section 084HSD554.**
- **Special discounts:** Groups.

### Partners in Education

These projects support grant #ES-04-005 from the National Institute of Environmental Health Sciences (NIEHS), NIH, to the Western Region Universities Consortium, a coalition of non-profit organizations with expertise in conducting worker health and safety training programs. For more info, call (530) 757-8607 or email [environinfo@unexmail.ucdavis.edu](mailto:environinfo@unexmail.ucdavis.edu).

## GENERAL INFO

### Group discounts

Organizations enrolling three or more at the same time in one class may do so with a 10 percent discount off each enrollment. Group discounts cannot be combined with other discounts. All enrollments must be submitted at one time and fees paid with check, credit card or purchase order.

# Emergency Management

## **ONLINE**

### **CAMEO Hazardous Materials Software Training**

4 quarter units academic credit, X431.40.  
5 ABIH CEUs.

Learn to use Computer Aided Management of Emergency Operations (CAMEO) to assist in hazardous materials emergency response and planning. This software includes three computer programs—the CAMEO database, the ALOHA air plume modeling program and the MARPLOT mapping program—to enhance your emergency planning and provide critical data in the event of a hazardous materials emergency. Learn to find information on a chemical within seconds; plot where that chemical will travel over a map of your city; store chemical and emergency information for facilities in your area; store information regarding sensitive populations; and plot the location of these facilities. This is an elective in the *Workplace Health and Safety Certificate Program*.

**KEVIN SMITH** serves as the hazardous materials deputy fire marshal for the Chino Valley Fire District in San Bernardino County. Smith has responded to hundreds of hazardous materials incidents since he became involved in hazardous materials emergency response and planning for the fire service in 1986. He also designed and taught the nation's first online course in hazardous materials emergency planning.

- **Enroll now through May 1 and complete by June 12.**
- **\$375.** Includes course materials and instructional support. **Enroll in section 084HSX180.**
- **Special discounts:** Groups.

## **ENROLL**

[www.extension.ucdavis.edu/safety](http://www.extension.ucdavis.edu/safety)

## **ONLINE**

# Environmental Management

### **Toxic and Environmental Laws and Regulations**

.75 quarter unit academic credit, X485.8.  
7 MCLE CEUs.  
1 ABIH CEU.

Examine the key federal, state and local environmental regulatory programs that environmental managers, consultants, planners, citizen activists and regulators need to know about to remain compliant. This basic overview provides insight into the major environmental programs and permitting requirements governing industrial processes and activities. Learn about the specific regulations pertaining to air and water quality, toxic materials and hazardous wastes. Significant emphasis is given to the key elements of the regulatory programs from compliance and auditing perspectives. This course is an elective in the *Workplace Health and Safety Certificate Program*.

This course is oriented toward industrial processes and compliance and is not designed to cover or address programs governing natural resources, threatened or endangered wetlands or land-use considerations.

**GARY LUCKS, J.D., C.E.P.A.**, is a principal attorney and scientist with Beyond Compliance, where he advises clients on multimedia environmental management systems (EMS) and environmental compliance matters. He has more than 20 years of environmental regulatory compliance and sustainability experience. Lucks specializes in environmental compliance auditing, EMS, environmental training, environmental permitting and pollution prevention.

- **1 meeting.**
- **May 29:** Fri., 8:30 a.m.-5 p.m.
- **Sacramento:** Sutter Square Galleria, 2901 K St.
- **\$375.** Includes course materials and morning refreshments. **Enroll in section 084HAM601.**
- **Special discounts:** Groups.

## **F O R M A T I O N**

### **Accommodations**

Course fees do not include accommodations. Upon request, we will send information about nearby motels that are reserving rooms for program participants, along with rates and reservation deadlines.

## Environmental and Toxics Regulatory Update

.4 CEU.

4 MCLE CEUs.

.5 ABIH CEU.

Learn what's new and pending in environmental legislation and regulations. A number of environmental policy initiatives emerged from recent California legislative sessions, the most recent of which became effective on January 1, 2009. Examine key developments in climate change, air quality, energy policy, hazardous materials and waste, storm water and flood protection. Explore these and other forthcoming environmental laws and the implications for their compliance. This course is intended for environmental managers in government and industry, lawyers, elected officials and policy makers.

**GARY LUCKS, J.D., C.E.P.A.**, is a principal attorney and scientist with Beyond Compliance, where he advises clients on multimedia environmental management systems (EMS) and environmental compliance matters. He has more than 20 years of environmental regulatory compliance and sustainability experience. Lucks specializes in environmental compliance auditing, EMS, environmental training, environmental permitting and pollution prevention.

- **1 meeting.**
- **June 12:** Fri., 8:30 a.m.-12:30 p.m.
- **Sacramento:** Sutter Square Galleria, 2901 K St.
- **\$215.** Includes course materials and morning refreshments. **Enroll in section 084HAM606.**
- **Special discounts: Groups.**

## OSHA Training Institute

### OSHA Standards for the Construction Industry (OSHA 510) !/!

3 quarter units academic credit from UC San Diego, 4C299.

4 ABIH CEUs.

Private sector personnel receive an introduction to OSHA policies, procedures and standards, as well as construction safety and health principles. Learn about the scope and application of OSHA construction standards with special emphasis on those areas that are the most hazardous, using OSHA standards as a guide. Learn to find correct OSHA Standards in 29 CFR 1926, identify common causes of accidents and fatalities in hazardous areas of the construction industry and abatement techniques for those hazards. Take home a complimentary copy of 29 CFR 1926; a detailed work manual, a valuable reference to help you implement the skills learned; Field Inspection Reference Manual (FIRM)—the new manual used by OSHA compliance officers for inspections; charts of the most frequently cited standards; and an OSHA construction industry safety and health 30-hour course completion card.

#### OSHA TRAINING INSTITUTE FACULTY

- **4 meetings.**
- **April 6-9:** Mon.-Thurs., 8 a.m.-4:30 p.m.
- **Sacramento:** Sutter Square Galleria, 2901 K St.
- **\$725.** This course is offered under a partnership with OSHA Training Institute through UC San Diego. Enrollments and grading are handled by OTI-UCSD at (800) 358-9206 or <http://osha.ucsd.edu/510.htm>. **Section ID: 067255.**

## CUSTOM TRAINING FOR YOUR ORGANIZATION



Premier training to help you stay up-to-date on workplace health and safety issues, including OSHA and CalOSHA regulations, hazardous materials HAZWOPER certification, and industry best practices.

- **Health and Safety**
- **Hazardous Materials**
- **Emergency Management**

Contact us today about customizing a course or program to meet your specific needs.

Call Nathan Sands at (530) 757-8607, or email us.

[environinfo@unexmail.ucdavis.edu](mailto:environinfo@unexmail.ucdavis.edu)

#### Cancellations and Refunds

UC Davis Extension reserves the right to discontinue, postpone, combine classes and change instructors. Classes may be canceled at or before the first scheduled meeting if fewer than the required number of students pre-enroll. Students will automatically be given full refund for canceled classes unless the student requests transfer of the enrollment fee to another course.

# ENROLLING IS EASY!

**BY MAIL** complete this form and send it to the Registration Office, UC Davis Extension, University of California, 1333 Research Park Drive, Davis, CA 95618-4852.  
**BY PHONE** call toll free (800) 752-0881. From Davis or Woodland call 757-8777.  
 Please have your Visa, MasterCard, American Express or Discover account number handy.

**BY FAX** to (530) 757-8558. If you are enrolling with a company purchase order, please fax a completed enrollment form along with a copy of the purchase order. For security purposes, we can no longer accept credit card payments via fax.  
**IN PERSON** at our Registration Office, 8:30 a.m.-4:30 p.m., 1333 Research Park Drive, Davis.  
**ONLINE** at [www.extension.ucdavis.edu/business](http://www.extension.ucdavis.edu/business).

## 1. YES! Please enroll me in the following courses:

Title	Section number	\$	Fee
		\$	Fee

**NO**, I can't enroll at this time, but please add me to the mailing list for future information about courses in Environmental, Health and Safety.

## 2. Customer information:

Mr.  Mrs.  Ms. \_\_\_\_\_ Name

Current position/job title \_\_\_\_\_

Social Security number\* \_\_\_\_\_

**IMPORTANT:** Where would you like to receive mail?  work  home (Please fill in all blanks below)

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Employer name \_\_\_\_\_

( ) ( ) \_\_\_\_\_

Daytime telephone \_\_\_\_\_

Evening telephone \_\_\_\_\_

Email address \_\_\_\_\_ If you do not wish to receive periodic email about UC Davis Extension courses and programs in your area of interest, please check this box

Please add [extension@ucdavis.edu](mailto:extension@ucdavis.edu) to your address book or safe list to ensure that our email messages are delivered properly.

\*UC Davis Extension is required by federal law to report your Social Security Number (SSN) and other pertinent information to the Internal Revenue Service pursuant to the reporting requirements imposed by the Taxpayer Relief Act of 1997. UC Davis Extension also will use the SSN you provide to verify your identity. SSN disclosure is mandatory. This notification is provided to you as required by the Federal Privacy Act of 1974.

## 3. Payment information:

- Enclosed is a check payable to UC Regents.
- Enclosed is a company purchase order (a complete enrollment form, or all information requested on the enrollment form, must be included with purchase orders).
- Please charge Visa/MasterCard/American Express/Discover:

Account number \_\_\_\_\_

Expires \_\_\_\_\_

Name of cardholder \_\_\_\_\_

Authorized Signature \_\_\_\_\_

084 134

Credit card verification number \_\_\_\_\_ The CCV is the last three digits of the number printed on the back of your credit card (for American Express it is the last four digits of the number printed on the front).

## 4. Important! Key code: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

For efficient processing of your enrollment, please fill in this code as it appears on your mailing label, whether or not it is addressed to you. If you enroll by phone, please be prepared to provide this code to your customer service representative. Also include it on all purchase orders.

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Key Code

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