

OHS - OCCUPATIONAL HEALTH SCIENCE (OHS)

***Course Fees are Per Credit Hour**

OHS 301. Occupational Safety and Health. (3 Credits)

Principles of occupational health and safety covering standard techniques for the recognition, evaluation and control of workplace and environmental health hazards with emphasis on the role of regulatory agencies, the Occupational Safety and Health Act of 1970, and workplace safety and health regulations. (Fall, Summer)

Course Fees: \$60

OHS 301CH. Occupational Safety and Health - China Onsite. (3 Credits)

Principles of occupational health and safety covering standard techniques for the recognition, evaluation and control of workplace and environmental health hazards with emphasis on the role of regulatory agencies, the Occupational Safety and Health Act of 1970, and workplace safety and health regulations. (Fall, Summer)

OHS 310. Ergonomics, Human Factors and Workplace Design. (3 Credits)

This course studies the role of industrial ergonomics in preventing cumulative trauma and improving occupational safety and health, work organization and productivity. Topics include ergonomics risk factors, cumulative trauma, physical and cognitive ergonomics, and principles of workstation design. A term paper may be required. Prerequisite: OHS 301. (Spring)

Course Fees: \$60

OHS 310CH. Ergonomics, Human Factors and Workplace Design - China Onsite. (3 Credits)

This course studies the role of industrial ergonomics in preventing cumulative trauma and improving occupational safety and health, work organization and productivity. Topics include ergonomics risk factors, cumulative trauma, physical and cognitive ergonomics, and principles of workstation design. A term paper may be required. Prerequisite: OHS 301. (Spring)

OHS 311. Occupational Safety I. (3 Credits)

Review of the voluntary compliance outreach program (OSHA 501) for general industry. This program includes a review of the OSHA Act; record keeping and recording requirements; the use of the Code of Federal Regulations and the application of safety standards. General principles of occupational safety are discussed along with the regulatory issues. Term projects may be required. Prerequisite: OHS 301. (Fall)

Course Fees: \$60

OHS 311CH. Occupational Safety I - China Onsite. (3 Credits)

Review of the voluntary compliance outreach program (OSHA 501) for general industry. This program includes a review of the OSHA Act; record keeping and recording requirements; the use of the Code of Federal Regulations and the application of safety standards. General principles of occupational safety are discussed along with the regulatory issues. Term projects may be required. Prerequisite: OHS 301. (Fall)

OHS 312. Occupational Safety II. (3 Credits)

Review of advanced principles of occupational safety and health related to general industry and construction. Term projects may be required. Prerequisite: OHS 311. (Spring)

Course Fees: \$60

OHS 312CH. Occupational Safety II - China Onsite. (3 Credits)

Review of advanced principles of occupational safety and health related to general industry and construction. Term projects may be required. Prerequisite: OHS 311. (Spring)

OHS 322. Occupational Health Problems. (3 Credits)

Review of issues concerning the practice of the occupational health and safety profession. Study of health and safety hazards associated to common industrial operations and processes with emphasis on hazard analysis including qualitative and quantitative techniques. Field trip and term project are required. Prerequisites: CH 112, 112L; OHS 301. (Summer)

Course Fees: \$60

OHS 322CH. Occupational Health Problems - China Onsite. (3 Credits)

Review of issues concerning the practice of the occupational health and safety profession. Study of health and safety hazards associated to common industrial operations and processes with emphasis on hazard analysis including qualitative and quantitative techniques. Field trip and term project are required. Prerequisites: CH 112, 112L; OHS 301. (Summer)

OHS 333. Occupational Toxicology. (3 Credits)

Review of human physiology and recognition of physiological effects of toxic agents; TLV and LD concepts; use of medical technology; modes of contact and entry of toxic agents and dosage, time, and concentration effects; recognition of toxic agents, occupational diseases, and epidemiology. Term projects may be required. Requires concurrent enrollment in BI 242 (unless already completed). Prerequisites: OHS 301, MA 147. Prerequisite or Corequisite: BI 242. (Spring)

Course Fees: \$60

OHS 333CH. Occupational Toxicology - China Onsite. (3 Credits)

Review of human physiology and recognition of physiological effects of toxic agents; TLV and LD concepts; use of medical technology; modes of contact and entry of toxic agents and dosage, time, and concentration effects; recognition of toxic agents, occupational diseases, and epidemiology. Term projects may be required. Requires concurrent enrollment in BI 242 (unless already completed). Prerequisites: OHS 301, MA 147. Prerequisite or Corequisite: BI 242. (Spring)

OHS 335. Physical Agents. (3 Credits)

Review of sources of energy in the workplace that may cause injury or disease including noise, vibration, extremes in temperature, and ionizing and non-ionizing radiation. Covers the potential health effects, methods of exposure evaluation, and principles of control. Prerequisites: BI 241, BI 242, PH 241, OHS 301. (Fall)

Course Fees: \$60

OHS 335CH. Physical Agents - China Onsite. (3 Credits)

Review of sources of energy in the workplace that may cause injury or disease including noise, vibration, extremes in temperature, and ionizing and non-ionizing radiation. Covers the potential health effects, methods of exposure evaluation, and principles of control. Prerequisites: BI 241, BI 242, PH 241, OHS 301. (Fall)

OHS 422. Control of Airborne Hazards. (3 Credits)

This course presents principles for hazard analysis and control of industrial airborne contaminants. Emphasis is given to general ventilation and local exhaust ventilation. A term paper may be required. Requires concurrent enrollment in OHS 422L. Prerequisites: OHS 322, OHS 311. Corequisite: OHS 422L. (Fall)

Course Fees: \$60

OHS 422CH. Control of Airborne Hazards - China Onsite. (3 Credits)

This course presents principles for hazard analysis and control of industrial airborne contaminants. Emphasis is given to general ventilation and local exhaust ventilation. A term paper may be required. Requires concurrent enrollment in OHS 422L. Prerequisites: OHS 322, OHS 311. Corequisite: OHS 422L. (Fall)

OHS 422L. Control of Airborne Hazards Laboratory. (1 Credit)

This laboratory presents principles of design and methods for the evaluation of controls with emphasis given to general and local exhaust ventilation. The use of fit testing techniques for personal respirators are also illustrated. One 3-hour laboratory period per week. Field trips may be required. Requires concurrent enrollment in OHS 422. Prerequisites: OHS 322, OHS 311. Corequisite: OHS 422. (Fall)

Course Fees: \$60

OHS 422LC. Control of Airborne Hazards Laboratory - China Onsite. (1 Credit)

This laboratory presents principles of design and methods for the evaluation of controls with emphasis given to general and local exhaust ventilation. The use of fit testing techniques for personal respirators are also illustrated. One 3-hour laboratory period per week. Field trips may be required. Requires concurrent enrollment in OHS 422. Prerequisites: OHS 322, OHS 311. Corequisite: OHS 422. (Fall)

OHS 444. Occupational Air Sampling Methods. (3 Credits)

This course presents air sampling techniques used for the evaluation of airborne gases, vapors, aerosols and biological agents found in the workplace. Quantitative methods of frequent use in occupational health are illustrated following an integrated approach that includes components of sampling strategies, collection techniques, data analyses, and exposure assessment principles. A term paper may be required. Requires concurrent enrollment in OHS 444L unless already completed. Prerequisites: OHS 333, OHS 311. (Spring)

Course Fees: \$60

OHS 444CH. Occupational Air Sampling Methods - China Onsite. (3 Credits)

This course presents air sampling techniques used for the evaluation of airborne gases, vapors, aerosols and biological agents found in the workplace. Quantitative methods of frequent use in occupational health are illustrated following an integrated approach that includes components of sampling strategies, collection techniques, data analyses, and exposure assessment principles. A term paper may be required. Requires concurrent enrollment in OHS 444L unless already completed. Prerequisites: OHS 333, OHS 311. (Spring)

OHS 444L. Occupational Air Sampling Methods Laboratory. (1 Credit)

This course presents techniques and equipment used for collection of airborne contaminants, including integrated and real time methods. Experiments also focus on quality control including calibration techniques, preparation of test atmospheres, and statistical methods of data analysis. One 3-hour laboratory period per week. Field trips may be required. Requires concurrent enrollment in OHS 444 unless already completed. Prerequisites: OHS 333, OHS 311. (Spring)

Course Fees: \$60

OHS 444LC. Occupational Air Sampling Methods Laboratory - China Onsite. (1 Credit)

This course presents techniques and equipment used for collection of airborne contaminants, including integrated and real time methods. Experiments also focus on quality control including calibration techniques, preparation of test atmospheres, and statistical methods of data analysis. One 3-hour laboratory period per week. Field trips may be required. Requires concurrent enrollment in OHS 444 unless already completed. Prerequisites: OHS 333, OHS 311. (Spring)

OHS 465. Environmental Regulations. (3 Credits)

A study of the fundamental environmental laws and regulations of the United States. Primary emphasis will be on the Safe Drinking Water Act, the Clean Water Act, the Clean Air Act and the Resource Conservation and Recovery Act. Prerequisites: CH 112, 112L. (Summer)

Course Fees: \$60

OHS 465CH. Environmental Regulations - China Onsite. (3 Credits)

A study of the fundamental environmental laws and regulations of the United States. Primary emphasis will be on the Safe Drinking Water Act, the Clean Water Act, the Clean Air Act and the Resource Conservation and Recovery Act. Prerequisites: CH 112, 112L. (Summer)

OHS 490. Management of Occupational Health and Safety Programs. (3 Credits)

This course presents the principles of managing occupational safety and health including: assessing safety performance; exploration of corporate culture; leadership, negotiation and communication skills; legal aspects; ethical consideration; and best practices. Prerequisite: OHS 312. (Spring)

Course Fees: \$60

OHS 490CH. Management of Occupational Health and Safety Programs - China Onsite. (3 Credits)

This course presents the principles of managing occupational safety and health including: assessing safety performance; exploration of corporate culture; leadership, negotiation and communication skills; legal aspects; ethical consideration; and best practices. Prerequisite: OHS 312. (Spring)

OHS 494. Internship in Occupational Health. (0 Credits)

Occupational Health Science students are required to complete a pre-professional internship. The internship affords students the opportunity to apply comprehensive and cumulative knowledge acquired in occupational health and supporting courses to an industrial operation. Internships involve 150 hours of direct contact work and must be completed during one regular semester or a regular summer term. Students must obtain approval from the instructor as to the comprehensiveness of the proposed experience and also by the submission of a project proposal prior to beginning the internship. In special circumstances, a theoretical internship involving a case study or industrial operation may be substituted in place of a pre-professional internship with permission from the OHS Program Director. International students must receive approval from the Office of International Affairs prior to course registration. (Fall, Spring, Summer)

Course Fees: \$60

OHS 494CH. Internship in Occupational Health - China Onsite. (0 Credits)

Occupational Health Science students are required to complete a pre-professional internship. The internship affords students the opportunity to apply comprehensive and cumulative knowledge acquired in occupational health and supporting courses to an industrial operation. Internships involve 150 hours of direct contact work and must be completed during one regular semester or a regular summer term. Students must obtain approval from the instructor as to the comprehensiveness of the proposed experience and also by the submission of a project proposal prior to beginning the internship. In special circumstances, a theoretical internship involving a case study or industrial operation may be substituted in place of a pre-professional internship with permission from the OHS Program Director. International students must receive approval from the Office of International Affairs prior to course registration. (Fall, Spring, Summer)

OHS 495. Senior Research. (1-3 Credits)

Independent research on individual projects under faculty supervision for selected occupational health majors who have completed at least 84 credit hours with a minimum 3.0 overall scholastic average. Scheduled work and conferences require a minimum average of four hours per week per credit hour. Research may be off campus at a preapproved site with credit depending on scope of project. May be repeated for a maximum of three credit hours. Prerequisite: Departmental approval required. (Fall, Spring, Summer)

Course Fees: \$60

OHS 496. Senior Seminar in Occupational Health. (1 Credit)

Student will generate and present a detailed overview of their pre-professional internship project with components of recognition, evaluation and control. In addition, all students will be given a comprehensive exit exam. Open to occupational health science majors who have completed or are currently enrolled in OHS 494 and are in their last semester of studies. (Fall, Spring)

Course Fees: \$60

OHS 496CH. Senior Seminar in Occupational Health - China Onsite. (1 Credit)

Student will generate and present a detailed overview of their pre-professional internship project with components of recognition, evaluation and control. In addition, all students will be given a comprehensive exit exam. Open to occupational health science majors who have completed or are currently enrolled in OHS 494 and are in their last semester of studies. (Fall, Spring)