

Environmental Safety & Health Courses

(SAFETY)

SAFETY 581

Motor Fleet Safety 3 u

An analysis of fleet safety problems and programs. Detailed study of the truck transportation industry, motor carrier responsibilities, federal regulations and safety supervision programs.

Prerequisite: SAFETY 380

SAFETY 582

Safety in the Construction Industry 3 u

This course examines safety-related problems and practices found in the construction industry. Administrative and organizational policies necessary to develop a construction safety program are examined. Students will be introduced to specific detailed problems and countermeasures for correction through lectures and field trips. The course provides an in-depth analysis of applicable OSHA standards.

Prerequisite: SAFETY 380 or consent of instructor.

SAFETY 583

Introduction to Security 3 u

A study of the physical, personnel, and informational aspects of the security field. Concepts of these areas will be integrated with safety management concepts and will be discussed in relationship to industrial and business environments.

Prerequisite: An industrial safety course or consent of instructor.

SAFETY 584

Construction Accident Prevention 3 u

A combination of principles and practices designed to provide the student with a basis for understanding the nature of accident prevention, health preservation and loss reduction in construction operations. The topics to be examined include federal safety and health regulations, techniques of hazard control, strategies for minimizing injuries and losses, and sources of assistance in resolving safety and health problems.

Prerequisite: SAFETY 382/582 or consent of instructor.

SAFETY 650

Behavioral Aspects of Accident Prevention 3 u

Selected theories of accident causation and countermeasures are studied. Examination of physiological, medical, psychological, and sociological factors which influence behavior, and methods for modifying unsafe behavior.

Prerequisite: Consent of instructor.

SAFETY 671

Applied Methods in Ergonomics 3 u

Students will study methods and techniques for job and workstation evaluation to identify potential ergonomic hazards that contribute to work-related musculoskeletal disorders. At the conclusion of the course students will be able to select and apply appropriate ergonomics methods and techniques to industry-specific problems.

Prerequisite: SAFETY 688 or consent of instructor.

SAFETY 672

Advanced Industrial Ergonomics 3 u

This course focuses on the specific needs of key industries that present high incidence of work-related musculoskeletal disorders. These industries display specific working conditions with large and diverse workforces. In addition, ergonomic issues of work populations with special needs are also reviewed. The course will involve applied problem solving projects in different work settings.

rereq: SAFETY 671 or consent of instructor.

SAFETY 679

Principles and Methods of Industrial Hygiene 5 u

An introduction to the science and art of anticipating, recognizing, evaluating, and controlling the chemical, physical, and biological agents that affect the health and safety of workers. The laboratory provides working knowledge and hands-on experience with equipment for recognizing, analyzing, and evaluating occupational health hazards in industry. One 2.5 hour lecture and one 2.5 hour lab per week.

Prerequisite: CHEM 102 or consent of instructor.

SAFETY 682

Construction Safety Management 3 u

An examination of the practices of managing occupational safety and health programs in the construction field. The course is designed to provide the student with an understanding of how the regulatory and financial responsibilities of accident prevention, health preservation and loss reduction in construction operations are met.

Prerequisite: SAFETY 384/584

SAFETY 683

Occupational Safety Management 3 u

Emphasis will be on the organizational and administrative problems that relate to risk assessments, occupational accidents, worker compensation management, safety committees and employee safety training programs. The course is designed for students majoring in the business related areas and future safety professionals who desire to develop an understanding of these management problems as well as applicable solutions.

Prerequisite: SAFETY 380 or consent of instructor.

SAFETY 685

Fire Protection/Prevention 3 u

Control of fires through study of building construction to prevent fire spread, occupancy-hazard relationships, exposure to and from adjacent occupancies, lifesaving aspects, and the development of

professional knowledge of flammable gases, liquids, combustible solids, dusts, chemicals, and explosives. Interpretation of appropriate codes will be covered.
Prerequisite: CHEM 102 or one semester of general college chemistry and or consent of instructor.

SAFETY 687

Product Safety 3 u

An analysis of the trends of the product liability problem and the agencies regulating products. Special emphasis will be given to legal theories related to product liability and landmark litigation providing the basis for case law. A substantial portion of the course will be devoted to examining the elements of product safety programming.

Prerequisite: An industrial safety course or consent of instructor.

SAFETY 688

Ergonomics 3 u

This course is intended to provide the student with basic introductory information concerning human information processing capabilities and limitations. Ergonomic strategies for preventing manual material handling, repetitive motion injury and ergonomic design and evaluation of man-machine systems will be included in the course.

Prerequisite: Consent of instructor.

SAFETY 690

Workshop in Safety 1-6 u

Prerequisite: Consent of instructor.

SAFETY 691

Travel Studies 1-3 u

SAFETY 696

Special Studies in Safety 1-3 u

Prerequisite: Consent of instructor.

SAFETY 701

Research Methods in ESH 3 u

This course introduces key concepts and skill development in scientific inquiry in Environmental Safety & Health. The course covers: foundations for scientific inquiry, types of research methodology, validity and reliability (biases & error), how to search for and review research literature, basic understanding of statistical significance, and how to develop research question/hypotheses.

SAFETY 711

Principles of Institutional Safety 3 u

The course will review safety and environmental conditions and requirements in hospitals, nursing homes and correctional institutions. The appropriate state, federal and Joint Commission on Accreditation of Hospital regulations and standards will be covered. Problems involving infection control, laundry sanitation, fire safety, employee and patient safety, life safety codes, emergency disaster plans,

hazardous materials management, public health control of insects and rodents, Institutional Safety Committee and Safety Officer will be developed.

Prerequisite: Consent of instructor.

SAFETY 712

Disaster Planning and Response 3 u

This course provides an overview of the organizational processes of preparing for and responding to disasters, both natural and technological. The course will begin with emergency response planning and preparation, then move into emergency operations and incident management, and conclude with a module on incident investigation and root cause analysis.

SAFETY 753

Environmental Safety & Health Law 3 u

An examination of federal and state laws with legal interpretations having application to safety professionals and industries will be emphasized. Federal acts, such as OSHA, CPSA and others will be dealt with in respect to their involvement with the industry. Liability to individuals and to the public will be stressed.

SAFETY 757

Principles of Occupational Epidemiology 3 u

This course will introduce the principles of occupational epidemiology and discuss the application of these principles in the recognition, control and prevention of disease and injury. The course will review the etiology of various acute, chronic, infectious, occupational and environmental diseases.

Prerequisite: ECON 245 or EDFOUND 482/682 or MATH 231.

SAFETY 779

Advanced Topics in Industrial Hygiene 3 u

The course will address industrial hygiene topics from the perspective of an EHS manager. Topics include adjustment of occupational exposure limits for various working conditions, alternative methods of assessment, emergency response, and comprehensive health and safety program management. Professional issues including leadership, risk communication, and ethics will also be discussed.

SAFETY 783

Environmental and Safety Management 3 u

This course is designed for Occupational Safety majors, prior to fieldwork experience. Attention will be given to the environmental safety management structures and Risk Management and loss control functions within multi-facility corporate structures. Emphasis will be placed on developing multi-facility risk management and loss control programs.

SAFETY 784

Advanced Ergonomics 3 u

Study of methods for job and workstation analysis aiming at the identification, characterization and mitigation of ergonomic hazards. Review of common musculoskeletal disorders, their etiology,

epidemiology and prevention. Examination of high-risk industries and their specific needs. Selection and application of appropriate methods to different settings and industries.

SAFETY 787

System Safety Analysis 3 u

Introduction to the system technique as applied to the recognition of potential accident situations in occupational environments. Concentration will be on the qualitative aspects of safety, utilizing numerous examples and problems.

Prerequisite: MATH 230 (or equivalent statistics) or consent of instructor.

SAFETY 789

Readings and Research in Safety 3 u

Students will examine research and professional issues and apply the information to a problem of their choice. This course will be required of students who choose the non-thesis option of the M.S. in Safety. In lieu of a thesis, students will complete this course and 33 additional graduate units. This course will provide a "capstone" graduate program experience.

SAFETY 790

Workshop 1-6 cr

SAFETY 793

Practicum 1-6 u

Prerequisite: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements.

SAFETY 794

Seminar 1-3 u

SAFETY 796

Special Studies 1-3 u

SAFETY 798

Individual Studies 1-3 u

SAFETY 799

Thesis Research 1-6 u

Students must complete a Thesis Proposal Form in the Graduate Studies Office before registering for this course.