

# Occupational & 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.

Prereq: 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. Prereq: 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.

Prereq: 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.

Prereq: SAFETY 382/582 or consent of instructor.

### SAFETY 620

#### **Principles Of Environmental Management 3 u**

This course addresses the U.S. Environmental Protection Agency regulations and the related responsibilities of the safety professional to insure compliance. Areas to be covered are: Safe Drinking Water Act, Storm Water Discharges, Hazardous Waste Disposal, Environmental Audits, Clean Air Act, etc.

## 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.

Prereq: Consent of instructor.

## SAFETY 661

### **Problems And Materials Of Driver Education 3 u**

Emphasis is placed on driver and traffic safety education professional issues and classroom curricular content, methods and resources. Organization and administration of the high school program will also be examined.

Prereq: SAFETY 688 or 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.

Prereq: SAFETY 620 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.

Prereq: 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.

Prereq: 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.

Prereq: 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.

Prereq: 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.

Prereq: 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.

Prereq: 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.

Prereq: Consent of instructor.

## SAFETY 689

### **Hazardous Materials Management 3 u**

This course addresses OSHA, NFPA & ANSI standards as they relate to the use and storage of chemical, biological and Radiological hazardous materials in the workplace. Standards to be covered include Process Safety Management of Highly Hazardous Chemicals, Hazardous Chemical Communication, Personal Protective Equipment Regulations, Laboratory Safety Standard, DOT Shipping Regulations, Nuclear Regulatory Commission Standards, Etc.

Prereq: CHEM 102 and CHEM 104 or one year of general college chemistry or consent of instructor.

## SAFETY 690

### **Workshop In Safety 1-6 u**

Prereq: Consent of instructor.

## SAFETY 691

### **Travel Studies 1-3 u**

## SAFETY 696

### **Special Studies In Safety 1-3 u**

Prereq: Consent of instructor.

## 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.

Prereq: Consent of instructor.

## SAFETY 752

### **Safety Communications 3 u**

Investigation of the communication processes as related to the field of safety. Design and manipulation of the communication processes to influence safe behavior. Planning public information and community support programs.

## SAFETY 753

### **Legal Aspects In Occupational Safety 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.

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

## 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 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.

Prereq: 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**

Prereq: 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.