



College of Education

**OCCUPATIONAL AND ENVIRONMENTAL SAFETY
& HEALTH COURSES
(SFTYGEN, SFTYTRAF, SFTYIND, SFTYPRAC)**

GENERAL (SFTYGEN)

SFTYGEN-581

Motor Fleet Safety 3 cr

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: An industrial safety course and/or consent of instructor.

SFTYGEN-650

Behavioral Aspects Of Accident Prevention 3 cr

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.

SFTYGEN-653

Legal Aspects In Safety 3 cr

An examination of federal and state laws with judicial interpretations having application to traffic, school, and occupational safety, and the liability of public officials. Problems such as professional liability, workers' compensation, insurance, and product safety laws will be dealt with in respect to their involvement with either industrial, school, or public liability.

Prereq: SFTYIND-380 or consent of instructor.

SFTYGEN-688

Ergonomics 3 cr

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.

SFTYGEN-690**Workshop In Safety Education 1-6 cr**

Prereq: Consent of instructor.

SFTYGEN-691**Travel Studies 1-3 cr****SFTYGEN-696****Special Studies In Safety Education 1-3 cr**

Prereq: Consent of instructor.

SFTYGEN-752**Safety Communications 3 cr**

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.

SFTYGEN-787**System Safety Analysis 3 cr**

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: SFTYGEN-688 or consent of instructor.

SFTYGEN-788**Advanced Human Factors Engineering 3 cr**

An in-depth analysis of the human system, and how that system interacts with various machine systems. Current research in the area of human factors will be emphasized, with practical applications for countermeasures being established.

Prereq: MATH-441/641 (or equivalent statistics), SFTYGEN-488/688 and consent of instructor.

SFTYGEN-789**Readings And Research In Safety 3 cr**

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 proposed 36 credit option with the M.S. in Safety - Traffic. In lieu of completing a comprehensive examination or thesis, students will complete this course and 33 additional graduate credits. This course will provide a "capstone" graduate program experience.

SFTYGEN-790**Workshop 1-6 cr****SFTYGEN-794****Seminar 1-3 cr**

SFTYGEN-796
Special Studies 1-3 cr

SFTYGEN-798
Individual Studies 1-3 cr

SFTYGEN-799
Thesis Research 1-6 cr

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

TRAFFIC (SFTYTRAF)

SFTYTRAF-661
Problems And Materials Of Driver Education 3 cr

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: SFTYTRAF-260 or consent of instructor.

OCCUPATIONAL (SFTYIND)

SFTYIND-582
Safety In The Construction Industry 3 cr

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: SFTYIND-380 or consent of instructor.

SFTYIND-583
Introduction To Security 3 cr

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.

SFTYIND-584
Construction Accident Prevention 3 cr

A combination of principles and practices designed to provide 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: SFTYIND 382/582 or consent of instructor.

SFTYIND-620**Principles Of Environmental Safety 3 cr**

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.

Prereq: CHEM-102 and CHEM-104.

SFTYIND-657**Principles Of Occupational Epidemiology 3 cr**

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.

SFTYIND-680**Industrial Hygiene Instrumentation 3 cr**

Occupational Safety students will gain a working knowledge of Industrial Hygiene and Safety equipment, which will aid them in recognizing, analyzing, and evaluating specific health hazards in industrial settings. Chemical, physical, biological and ergonomic hazards will be evaluated for potential hazards involving: noise, heat, cold, ionizing radiation, nonionizing radiation, ventilation, electrical, illumination, hazardous atmospheres, and other related environments.

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

Coreq: SFTYIND-484/684 or consent of instructor.

SFTYIND-682**Construction Safety Management 3 cr**

An examination of the practice 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 operation are met.

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

Coreq: SFTYIND-384/584: CONSTRUCTION ACCIDENT PREVENTION is a prerequisite for this course.

SFTYIND-683**Industrial Safety Management 3 cr**

Emphasis will be on the organizational and administrative problems that relate to an occupational accident prevention program. The course is especially designed for students majoring in the business related areas as well as teachers and future safety professionals who desire to emphasize an understanding of these management problems as well as some applicable solutions.

Prereq: An industrial safety course or consent of instructor.

SFTYIND-684**Industrial Hygiene 3 cr**

An introduction to the science and art of industrial hygiene including the chemical, physical, and biological agents which affect the health and safety of employees; the application of control measures for the various agents.

Prereq: BIOL-120, PHYSCS-130, CHEM-102, and CHEM-104 or consent of instructor.

SFTYIND-685**Fire Protection/Prevention 3 cr**

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 and CHEM-104 or consent of instructor.

SFTYIND-686**Safe Handling Of Materials 3 cr**

Students will study the mechanical and manual safe handling of materials as major contributors to accident causation in industry. Using a systems safety approach, students will be exposed to personnel training and placement, equipment operation and maintenance, flow of materials, and the handling of hazardous materials.

Prereq: SFTYIND-380 or consent of instructor.

SFTYIND-687**Product Safety 3 cr**

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.

SFTYIND-689**Chemical Safety 3 cr**

This course addresses OSHA, NFPA & ANSI standards as they relate to the use and storage of chemicals 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 Requirements, etc.

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

SFTYIND-696**Special Studies 1-3 cr**

Repeatable to 6 credits in degree. A course which offers special topics in safety which are not regularly included in the curriculum.

SFTYIND-711**Principles Of Institutional Safety 3 cr**

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, and environmental safety and sanitation of institutions will be discussed. The role of the Institutional Safety Committee and Safety Officer will be developed.

Prereq: Consent of instructor.

SFTYIND-753**Legal Aspects In Occupational Safety 3 cr**

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.

SFTYIND-783**Corporate Safety Management 3 cr**

This course is designed for Occupational Safety majors, prior to fieldwork experience. Attention will be given to the corporate structure of industry and loss control functions within the corporate structure. Special emphasis will be placed on developing a corporate loss control program.

PRACTICUM (SFTYPRAC)**SFTYPRAC-793****Practicum 1-6 cr**

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