Date: February 24, 2010
Course Number: ERE 531
Course Title: Construction Safety (Shared Resource with WPE 331)

☐ New Course  OR  ☐ Changes in existing course (check all that apply):

☐ Prefix
☐ Number
☐ Credits
☐ Title
☐ Description
☐ Pre-requisite(s)
☐ Co-requisite(s)
☐ Shared Resources
☐ Course Format
☐ Content
☐ Semester Offered

This course meets the General Education standards in the following knowledge and skills area (check all that apply):

☐ American History  ☐ Humanities  ☐ Other World Civilizations
☐ The Arts  ☐ Mathematics  ☐ Social Sciences
☐ Basic Communication  ☐ Natural Sciences  ☐ Western Civilization

Prequisites or co-requisite requirements:

☐ Prerequisites: None  ☐ Co-requisites: None

Institutional Impact:

Anticipated Enrollment: 3-5 per semester

Technology and Classroom Resource Demands: Computer and computer projection system, document camera projector, internet access, smart board and white board, video, VHS and DVD capability

Computing Resources: Student computer laboratory with server capacity and student computer configuration to allow rapid data storage and access for word processing, presentation development and internet access

Library Resources: None

Transportation Requirements: None

Forest Properties or Field Practicum Facilities Required: None
Health and Safety Considerations:

Conditions or situations present in association with the course? Yes / No

1. Will substances with any of the following properties be used during instruction: flammability, toxicity, corrosivity, reactivity, registered pesticide, legally controlled, or other characteristics with the potential to cause harm or injury? No

2. Will any physical hazards be present during instruction? (e.g., machines that need safety guards; razor blades or syringes; compressed gases, etc.). No

3. Will any biological hazards be present during instruction? (e.g., handling animals (rabies or hantavirus); cultures or stocks of infectious agents (fungal spores, viruses, bacteria, etc.). No

4. Will any radiation hazards be present during instruction? (e.g., radioisotopes, X-rays, ultraviolet rays, lasers, etc.). No

5. Will any electrical equipment that, due to its design, location, or method of use, pose any threat to safety during instruction? (Give considerable thought to electrical use outdoors, or any potentially wet location.). No

6. Will there be any personal safety issues related to the class? (e.g., due to time of day or location, at the end of any organized class exercise, will students be in danger of physical assault, etc.). No

7. Will any students be driving official state or research sponsored land or water vehicles during any class or instructional exercise? No

8. Will any type of personal protective equipment be necessary during class exercises? (e.g., hard-hats, eye/face protection, hearing protection, hand/foot protection, lab coat, visibility clothing, etc.) No

If the answer was “Yes” to any of the HEALTH AND SAFETY questions, please explain:

CATALOG DESCRIPTION (Please provide using the precise format currently used in the ESF catalog, please do not exceed 500 characters):

ERE 531 Construction Safety (3)
Occupational Safety and Health Practices in the construction industry with coverage of the U. S. Department of Labor, Occupational Safety and Health Regulations (CFR 1910 and 1926 Standards). Construction safety programs will be also addressed. OSHA 30 Hr. card earned.
Note: Credit will not be granted for both ERE 531 and WPE 331.

Prerequisite(s): None
DETAILED COURSE DESCRIPTION

COURSE: ERE 531 Construction Safety (Shared Resource with WPE 331)  
3 Credit Hours – Fall Semester  
3 Hours Lecture/discussion per Week  
Prerequisite(s): none

SCOPE:

1. **Level of Instruction:**
2. ERE 531 is a graduate level course sharing resources with WPE 331. Students in ERE 531 will do additional work as described below.
3. **Relation to curriculum or to other ESF or Syracuse University courses:**
   a. ERE 531 provides the introductory concepts to Construction Safety. This material may be of interest to several ESF disciplines as well as several Syracuse University disciplines. The course is open to all students at ESF and SU subject to permission of the instructor.
   b. Shared resource requirements: Offered in conjunction with WPE 331 Construction Safety.

STUDENT LEARNING OUTCOMES:

After completing this course the student should be able to:

1. To provide a basic comprehension of safety and health principles as applied to the construction industry.
3. To understand the requirements of the safety and health regulations as they apply to the construction workforce.
4. To understand the role of project management in safety and health.

MAJOR CONCEPTS OR METHODOLOGIES:

ERE 531 is an introductory course in Construction Safety. The course presents an in depth review of current Federal OSHA regulations as applied to the construction industry. How safety and health programs are created and administered is discussed. Topics that are covered include but are not limited to: general safety and health requirements, hazard communication, confined space entry, lockout/tagout programs, workplace violence, personal protective equipment, fire protection, signs and barricades, rigging, small tools-hand and power, welding and cutting, electrical, scaffolding, fall protection, scaffolding, cranes, mobile equipment, excavation and trenching, steel erection, stairways and ladders and permissible exposure limits. Guest lectures by local practicing construction professionals are also used to present current issues and trends in construction safety. This course through its assignments and final project allows the students to apply the principles of construction safety.

Graduate students enrolled in ERE 531 will produce a paper of 15 or more pages on a Construction Safety topic describing how the topic is applied to a specific construction firm or project with prior instructor approval; the paper must include an annotated bibliography of relevant books and papers.

CATALOG DESCRIPTION (Please provide using the precise format to be included in the ESF catalog, please do not exceed 50 words)

ERE 531 Construction Safety (3)  
Occupational Safety and Health Practices in the construction industry with coverage of the U. S. Department of Labor, Occupational Safety and Health Regulations (CFR 1910 and 1926)
Standards). Construction safety programs will be also addressed. OSHA 30 Hr. card earned.
Note: Credit will not be granted for both ERE 531 and WPE 331.

Prerequisite(s): none

COURSE HISTORY:

Course first approved: 11/00

Course revised: 2/24/10 to new college format only