ISC 115
CONSTRUCTION SAFETY

COURSE DESCRIPTION:

Prerequisites: DMA 010, 020, 030, 040, 050; EHS 111
Corequisites: EHS 113

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of applicable safety regulations and safely participate in construction projects. Course Hours Per Week: Class, 2. Semester Hours Credit, 2.

LEARNING OUTCOMES:

Upon completion of this course, the student will be able to:

a. Identify and interpret the major OSHA standards for the construction industry of 29 CFR part 1926.
b. Interpret OSHA regulations for scaffolds at a basic level.
c. Differentiate between fall protection and fall prevention devices.
d. Describe ladder safety training requirements.
e. Describe the elements of the OSHA excavations standard (29 CFR 1926 Subpart P).
f. Interpret, at a basic level, OSHA standards for cranes, derricks, hoists, and conveyors.

OUTLINE OF INSTRUCTION:

I. Legal Regulation of construction safety and health
   a. Federal agencies: OSHA, NIOSH
   b. Regulation at the state level: NC Dept. Labor
   c. Inspections, citations, penalties
   d. OSHA construction standards (29 CFR 1926)
   e. Recordkeeping and reporting

II. Fall prevention and protection
   a. Hazard assessment
   b. Fall protection program
   c. Fall prevention
   d. Fall protection
   e. Scaffolds
   f. Ladders
III. Cranes, hoists, elevators, and conveyors
   a. Cranes and derricks
   b. Material hoists, personnel hoists, elevators
   c. Conveyors

IV. Excavations
   a. OSHA excavations standard
   b. Hazardous atmospheres
   c. Competent person and selection of protective measures
   d. Ingress and egress

V. Concrete and steel construction
   a. Concrete and masonry construction
   b. Steel erection

REQUIRED TEXTBOOK AND MATERIALS:

To be selected by the Instructor/Program Chair.