Occupational Health & Safety

Code	Credit Hours
OHS- 101	1-0

Course Description

This course introduces the student to the study of workplace occupational health and safety. The student will learn safe work practices in offices, industry and construction as well as how to identify and prevent or correct problems associated with occupational safety and health in these locations as well as in the home.

Text Book:

Introduction to Health and Safety at Work Sixth Edition by Phil Hughes MBE, MSc, CFIOSH, Chairman NEBOSH 1995–2001. President of IOSH 1990–1991 and Ed Ferrett PhD, BSc (Hons Eng), CEng, MIMechE, MIET, CMIOSH Vice Chairman NEBOSH 1999–200

Reference Book:

1. The A-Z of health and safety by Jeremy Stranks, 2006.
2. The Manager's Guide to Health & Safety at Work by Jeremy Stranks, 8th edition, 2006.

Occupational safety and health law handbook by Ogletree, Deakins, Nash, Smoak and Stewarts, second edition, 2008

Prerequisites

Nil

ASSESSMENT SYSTEM FOR THEORY

Quizzes	10%
Assignments	10%
Mid Terms	30%
Semester Project	10%
ESE	40%

ASSESSMENT SYSTEM FOR LAB

Assignments	N/A
Lab Work and Report	N/A
Lab ESE/Viva	N/A

Teaching Plan

Week No	Topics	Learning Outcomes
1-2	Course Introduction, Health and Safety Foundations	Nature and scope of health and safety Reasons/benefits and barriers for good practices of health and safety Legal frame work and OHS Management System (ISO_45001)
3-4	Fostering a Safety Culture	Four principles of safety- RAMP (Recognize, Assess, Minimize, Prepare) Re-thinking safety-learning from incidents Safety ethics and rules Roles and responsibilities towards safety Building positive attitude towards safety Safety cultures in academic institutions
5-6	Accidents & Their Effect on Industry	Costs of accidents Time lost Work injuries, parts of the body injured on the job Chemical burn injuries Construction injuries Fire injuries
7-8	Assessing and Minimizing the Risks from Hazards	Risk Concept and Terminology Risk assessment procedure Risk Metric's Risk Estimation and Acceptability Criteria Principles of risk prevention Selection and implementation of appropriate Risk controls Hierarchy of controls
9	**MID Term Exam**	
10-11	Recognizing and Communicating Hazards	Hazards and Risk Types of hazards: Physical (mechanical and non-mechanical), Chemical (Toxic and biological agents), electrical, fire, construction, heat and temperature, noise and vibration, falling and lifting etc. Learning the language of safety: Signs, symbols and labels

12-13	Finding Hazard Information	Material safety data sheets Safety data sheets and the GHS (Globally Harmonized Systems) Safety Drills / Trainings: Firefighting Evacuation in case of emergency
14-15	Stress and Safety at Work Environment	Workplace stress and sources Human reaction to workplace stress Measurement of workplace stress Shift work, stress and safety Improving safety by reducing stress Stress in safety managers Stress and workers compensation
16-17	Incident Investigation	Importance of investigation Recording and reporting Techniques of investigation Monitoring Review
18	**End Semester Exam**	