

No	List of Topics	Contact hours
1	Concept of Safety, Safety Standards	1
2	General Safety	4
	2.1 Important definitions (hazard, risk, accident, incident, etc.)	
	2.2 Types of emergencies	
	2.3 Emergency evacuations	
	2.4 Emergency Action Plans	
	2.5 Important safety signs	
	2.6 Emergency aid equipment (safety shower, eye wash, first aid kit, fire blanket, etc.)	
	2.7 Fire and classifications of fire	
	2.8 Firefighting techniques	
	2.9 Types of fire extinguishers and use of each type	
	2.10 Housekeeping and its importance	
	2.11 Electrical hazards and control measures	
	2.12 Personal protective equipment (PPE's)	
3	Industrial and Lab Safety hazards and their controls	2
	3.1 Importance of laboratory safety	
	3.2 Types of Machinery hazards (mechanical, electrical, chemical)	
	3.3 Machinery safeguards types and safe handling techniques	
	3.4 Handheld tools hazards and control measures	
	3.5 Power tools hazards and control measures	
	3.6 Manual handling injuries, handling hazards and their control measures	
4	Management of Safety and Health, Promoting a safety culture	1
Total		8

REFERENCE TEXTBOOKS AND OTHER TEACHING AIDS:

1. "Occupational Safety and Health for Technologists, Engineers, and Managers" by David L. Goetsch, ISBN-13: 9780137408900, Pearson
2. "Fundamental Principles of Occupational Health and Safety" by Benjamin O. Alli, ISBN 978-92-2-120454-1, International Labour Office, GENEVA
3. "Prudent Practices in the Laboratory: Handling and Management of Chemical Hazards" by National Academies Press (US); 2011
4. "Recommended Practices for Safety and Health Programs" by www.osha.gov/safetymanagement