

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E Semester: 2

Master of Environmental Engineering

Subject Name **Inter Disciplinary 2 Environmental and Occupational Health and Safety (for Other than Students of Environmental Engineering Specialization)**

| Sr.No | Course content |
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| 1 | Introduction to Occupational Health :Objectives, Occupational environment, Occupational hazards, Occupational diseases, Basic health statistics. |
| 2 | Safety Engineering :Causes of accidents, risk in work places, first aid, technical equipments, safety requirements for machinery, Work place climate, lighting & noise, Chemical risks to health. |
| 3 | Study on Human Ergonomics, Ways to improve work organization, Hours of work, Daily activities for safety, Accident presentation signs |
| 4 | Fire and electrical safety, Radiation safety, Emergency plan, Personal protective equipment |
| 5 | International Standards For Environmental management ISO – 14000 s Introduction to ISO and Detail ISO 14001,2,3,4,5 Etc. ISO 14000 – 14009 : Environmental Management Systems ISO 14010 – 14019 : Environmental Audit ISO 14020 – 14029 : Environmental Labeling ISO 14030 – 14039 : Environmental Performance Evaluation ISO 14040 – 14049 : Life Cycle Assessment ISO 14050 – 14059 : Terms and Definitions ISO 14060 : Environmental Aspects in Product Stand |
| 6 | Environmental standards for occupational health and safety. |

List of Experiments:Exercise

- 1.Exersice on the data collection for different occupational where human interaction with inbuilt and outdoor environment.
2. Exercise on the safety related norms and other provisions
3. Occupational risk analysis and accidental events.
4. Occupational exposure to disease causing materials and etiological agents
- 5.Satey norms for different occupations and industry
- 6 Field visit of industry , trade and professional oraganisation.
7. Report preparation for exposures to risk with specific case study of related branch
- 8 Presentation of report to the continuous assessment committee

Reference Books:

- 1.American Management Association - Hand Book for Safety Managers
- 2.Encyclopedia for Occupational Health published International organization UNO.
- 3.Industrial safety By Dr.K.U. Mistry