HFSY357 Environmental Management and Sustainable Development

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY SEMESTER

Synopsis:

A set of international standards is required to bring a world-wide focus to the environment, encouraging a cleaner, safer, healthier world for us all. The existence of the standards allows organizations to focus environmental efforts against an internationally accepted criterion. This course covers environmental systems, environmental audit, environmental management principles, environmental labelling, environmental performance evaluation and life cycle assessment.

Topics:

- 1) Industrial Pollution; 2) Introduction to ISO 14000 Environmental Management System (EMS)
- 1) Establishing the ISO 14001 Environmental Management System; 2) Overview of EMS Certification and Maintenance
- 1) Review of ISO 14000 EMS Audit and Reporting Requirements; 2) On-Site Audit
- 1) Introduction to Life Cycle Assessment (LCA); 2) LCA Case Studies
- 1) Introduction to Sustainable Development (SD) and Industrial Ecology (IE); 2) Industrial Symbiosis (IS) and Design for the Environment and Sustainability (DfES)
- 1) Introduction Corporate Social Responsibility (CSR); 2) SR Opportunities and CSR Audits

Textbooks:

Blackburn: The Sustainability Handbook: The Complete Management Guide to Achieving Social, Economic and Environmental Responsibility (eBook) Earthscan, Routledge (Taylor & Francis) ISBN-13: 9781136552021

Learning Outcome:

- Examine how environmental pollution occurs in an industrial setting.
- Discuss a “cradle-to-grave” concept based on a powerful life cycle analysis (LCA) tool.
- Illustrate concepts and purposes of environmental audit.
- Evaluate environmental pollution of factories using EMS principles.
- Propose an environmental management system (EMS) using an ISO14000 international standard.
- Apply sustainable development principles to the triple-bottom line (economic profit, environment, social responsibility).

Assessment Strategies (Evening Class):

Components	**Description**	**Weightage Allocation (%)**
Overall Continuous Assessment	QUIZ 1	10
	TUTOR-MARKED ASSIGNMENT 1	20
Overall Examinable Components	Written Exam	70
Total		**100**