Liverpool John Moores University

Title:	SUSTAINABILITY & THE ENVIRONMENT
Status:	Definitive
Code:	**5101ENG** (117190)
Version Start Date:	01-08-2016
Owning School/Faculty:	Electronics and Electrical Engineering
Teaching School/Faculty:	Electronics and Electrical Engineering

Team	Leader
Adam Papworth	Y

Academic Level:	FHEQ5	**Credit Value:**	24	**Total Delivered Hours:**	72
Total Learning Hours:	240	**Private Study:**	168		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	60
Off Site	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Rpt		50	
Report	Rpt		50	

Aims

The aim of this module is to show the students the impact that humans have on their environment and the need for sustainable development. It will provide the opportunity to develop the knowledge, values, and skills to participate in decisions about the way we do things, individually and collectively, both locally and globally, that will improve the quality of life now and without damaging the planet for the future

Learning Outcomes

After completing the module the student should be able to:

1 Define the principle concepts of sustainable development
2 Identify and critically evaluate the legislative drivers of sustainable development
3 Identify and review the key local, national, and international pressure groups and governing bodies
4 Undertake a life-cycle assessment on a typical consumer product

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Report 1	1	2
Report 2	3	4

Outline Syllabus

Definition of sustainable development (SD); history and development of sustainable development; legislative drivers; waste electrical and electronic equipment (WEEE); Restriction of hazardous substances (RoHS) directive; End of life vehicles (EOL); Eco-design; the systems approach; life cycle assessment; regional and global impact categories; Reduction of consumption and production; The impact of humans on the environment / nature and the need for sustainable development. Knowledge of population / resource. Natural resource protection and environmental enhancement. Wellbeing. The global market and third world countries; Climate change and the global environment. Pollution of land, sea and air. Recycling and global warming. carbon dioxide emissions; increasing products function and value; introduction to ISO14001 Environmental Management System; issues and limitations of sustainable developments; the role of local, national and international sustainable communities, pressure groups, governing bodies and political parties.

Learning Activities

A range of structured lectures with student centred learning activities including local and global case studies. Students will be expected to partake in a number of local field trips.

Notes

This module sets the overall scene of sustainable development and both the negative and positive impact product design has on the environment.