

Liverpool John Moores University

Title: ENVIRONMENTAL PROJECT AND DISSERTATION
Status: Definitive
Code: **6500BETAR** (119507)
Version Start Date: 01-08-2012

Owning School/Faculty: Built Environment
Teaching School/Faculty: Built Environment

Team	Leader
Matthew Tucker	Y

Academic Level: FHEQ6
Credit Value: 36.00
Total Delivered Hours: 36.00
Total Learning Hours: 360
Private Study: 324

Delivery Options

Course typically offered: Non Standard Year Long

Component	Contact Hours
Lecture	24.000
Tutorial	12.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Report		20.0	
Dissertation	Diss		80.0	

Aims

To develop the students' understanding of global environmental problems and policies, including the core principle of sustainability, in the context of the application of environmental management systems in the construction industry.
To enable students to complete a substantial piece of individual work and build on their expertise in a selected area of study.
To develop students research, time management, presentation and written communication skills.

Learning Outcomes

After completing the module the student should be able to:

- 1 Evaluate the global concept and application of sustainability within the context of the construction industry.
- 2 Analyse the relationships between the construction industry and informal and formal environmental management systems.
- 3 Evaluate the processes and tools available and their application to environmental management in the construction industry.
- 4 Critically analyse environmental impacts relating to current issues such as waste minimisation, air quality, water resources and management, and energy all applied in the context of construction work and finished structures.
- 5 Identify a research question, problem or hypothesis in the field of environmental management/sustainability and establish aims and objectives to support the investigation.
- 6 Collate, and appraise existing knowledge in the chosen field and present a critical evaluation in the form of a literature review.
- 7 Develop and refine a research and data collection strategy appropriate to the research question / problem posed.
- 8 Synthesise, analyse and critically evaluate the research findings using reasoned and logical arguments within a structured written framework.

Learning Outcomes of Assessments

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

Individual report	1	2	3	4
Research-based project	5	6	7	8

Outline Syllabus

Note: This module is in two distinct parts which initially informs the student in relation to environmental management and then secondary provides details in relation to producing a dissertation.

Sustainability in the context of construction and properties.

Why manage the environment? Informal and formal environmental management.

Environmental management and sustainability. An introduction to formal environmental management systems. Environmental management systems in a global context.

Methods and techniques of environmental audit. Environmental management tools: such as life cycle assessment; environmental labeling; developing sustainability indicators;

ecological footprints. Environmental leadership and sustainability. Environmental management issues and case studies, such as waste minimisation; water resources and management; air quality; sustainable transport, and energy issues.

Introduction to the Dissertation- The selection of a Research Topic and formulation

of a research question, establishing a research aim and setting / tailoring objectives to fulfil that goal and the structure and purpose of a dissertation.

Research Approaches and Strategies- The Inductive versus Deductive Approach, Qualitative and Quantitative Research, Data Collection Strategies (Interviews, Field Tests, Lab Tests, Surveys, Questionnaires, Case Studies) and The Knowledge Database. Effective Literature Searching and Literature Reviews. Data Collection and Analysis - Data Collection Tools including Bristol on-line surveys, Qualitative and Quantitative Data Analysis and Data Analysis tools including SPSS and NVivo

Learning Activities

This is a distance learning module using videoed lectures and workshop activities.

References

Course Material	Book
Author	O'Riordan, T.
Publishing Year	2000
Title	Environmental Science for Environmental Management
Subtitle	
Edition	
Publisher	Longman
ISBN	978-0582356337

Course Material	Book
Author	Whitelaw, K.
Publishing Year	2004
Title	ISO 14001 Environmental Systems Handbook
Subtitle	
Edition	
Publisher	Butterworth-Heinemann
ISBN	978-0750648431

Course Material	Book
Author	Bell, S., & Morse, S.
Publishing Year	2003
Title	Sustainability indicators: measuring the immeasurable
Subtitle	
Edition	
Publisher	Earthscan
ISBN	978-1853834981

Course Material	Book
Author	Baker, S.

Publishing Year	2005
Title	Sustainable Development
Subtitle	
Edition	
Publisher	Routledge
ISBN	0415282101

Course Material	Book
Author	Naoum,S.G.
Publishing Year	2007
Title	Dissertation Research and Writing for Construction
Subtitle	
Edition	
Publisher	Butterworth Heinemann
ISBN	

Notes

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