Liverpool John Moores University

Title: SUSTAINABLE POLICY AND LEGISLATION
Status: Definitive
Code: **7080BEPG** (119551)
Version Start Date: 01-08-2013

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

Team		Leader
Andrew Ross		Y
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Academic Level:	FHEQ7	**Credit Value:**	10.00	**Total Delivered Hours:**	26.00
Total Learning Hours:	100	**Private Study:**	74		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Online	24.000

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	UNSEEN EXAM	60.0	2.00
Essay	AS2	2500 WORD ESSAY	40.0	

Aims

To provide students with knowledge such that they can critically examine International, European and National policies, legislation, regulations and incentives in the context of sustainability applied to the Built Environment.

Learning Outcomes

After completing the module the student should be able to:

1   Critically analyse the ways in which human activity impacts upon the environment, showing particularly the role played by the built environment.
2   Identify and critically evaluate environmental issues which concern the construction industry, showing how these issues are traditionally addressed
3   Understand the role of current environmental legislation, policy and tools in reducing the impact that the built environment has on the environment.
4   Critically evaluate the role that technology does (or must) play in achieving legislative goals for sustainability and suggest areas for improvement or innovation.

Learning Outcomes of Assessments

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

EXAM   1   2

ESSAY   3   4

Outline Syllabus

Definition of sustainable development and a brief discussion of its history along with motivations for change such as climate change with specific examples.

Discussion of green design principles, including ecological design and how it can be implemented. Green roof schemes introduced in addition to the notion of the Urban Heat Island effect and how it can be counteracted.

Development of understanding in relation to emissions and associated policy for both transport and built environment. Regulatory moves to reduce emissions will be discussed, in addition to whether current ideas are truly fitting with the previously defined idea of sustainability.

Energy generation, distribution and policy will be discussed briefly, with a brief overview of topics such as Renewable Obligations and the Green Deal (for example). The EU energy agenda for 2020/2050 will also be discussed and methods by which this can be achieved alluded to.

Issues of waste in the built environment will be discussed, including land contamination issues and diversion of waste from landfill. In addition, technology specific waste issues will be discussed including waste electrical and electronic equipment (WEEE) and restriction of hazardous substances (RoHS) directives.

Issues of water and waste water will be discussed in terms of environmental impact and quality. Technical aspects will focus on metering and monitoring of waste water.

Discussion of how to make communities more sustainable through items such as energy saving, improved (bulk) transportation, waste management and effective food provision. Best practise examples given.

Introduction of environmental measurement tools such as waste strategy management, ecological/carbon foot printing and life cycle analysis.

In-depth discussion of ISO14001 alongside case studies of use and issues that environmental management systems can raise.

Learning Activities

Online lectures, interactive workshop.

References

Course Material	Book
Author	Baker, S.
Publishing Year	2006
Title	Sustainable Development
Subtitle	
Edition	
Publisher	Routledge
ISBN	0415282101

Course Material	Book
Author	Edwards, B. and Turrent, D.
Publishing Year	2000
Title	Sustainable Development
Subtitle	
Edition	
Publisher	Spon Press
ISBN	0419246207

Course Material	Book
Author	Bell, S. and Morse, S.
Publishing Year	1999
Title	Sustainability Indicators: measuring the immeasurable
Subtitle	
Edition	
Publisher	Earthscan
ISBN	085383498X

Course Material	Book
Author	Glasson, J., Therivel, R., and Chadwick, A.
Publishing Year	2005
Title	Introduction to Environmental Impact Assessment
Subtitle	
Edition	
Publisher	Taylor & Francis

ISBN	978-0415338370

Course Material	Book
Author	Morris, P. and Therivel, R.
Publishing Year	2003
Title	Methods of Environmental Impact Assessment
Subtitle	
Edition	
Publisher	Routledge
ISBN	978-0415239592

Course Material	Book
Author	Graham, P.
Publishing Year	2003
Title	Building Ecology: First Principles for a Sustainable Built Environment
Subtitle	
Edition	
Publisher	Blackwell Publishing
ISBN	0632064137

Course Material	Book
Author	Nathanail, C.P.
Publishing Year	2004
Title	Reclamation of Contaminated Land
Subtitle	
Edition	
Publisher	John Wiley and Sons Ltd
ISBN	0471985617

Notes

Considers the impact of human activity on the environment and develops an understanding of how the built infrastructure contributes to environmental change. Key policy and legislation will be introduced and critically analysed with respect to how this impacts on current trends in technology use. Green design principles, including ecological design and how it can be implemented will be presented. Green roof schemes will be introduced in addition to the notion of the Urban Heat Island effect and how it can be counteracted. Emissions and associated policy for both transport and built environment will be reviewed. Regulatory moves to reduce emissions will be discussed, in addition to whether current ideas are truly fitting with the previously defined concept of sustainability. The idea that sustainable design and green design are not always aligned will be debated. Issues of water and waste water will be discussed in terms of environmental impact and quality. Technical aspects will focus on metering and monitoring of waste water. Thus, the module will develop student ability or thoughts toward how technology in the built environment can reduce current environmental impact.