

MODULE SPECIFICATION

Part 1: Information							
Module Title	Sustainable Transport Management and Operations						
Module Code	UBGLWP-15-M		Level	Level 7			
For implementation from	2019-20						
UWE Credit Rating	15		ECTS Credit Rating	7.5			
Faculty	Faculty of Environment & Technology		Field	Geography and Environmental Management			
Department	FET [FET Dept of Geography & Envrnmental Mgmt					
Module type:	Project						
Pre-requisites		None					
Excluded Combinations		None					
Co- requisites		None					
Module Entry requirements		None					

Part 2: Description

Educational Aims: See Learning Outcomes

Outline Syllabus: Sustainability definitions and climate change science applied to transport generally and aviation in particular

Transport markets, environmental economics and regulation

Transport policy and politics, and particularly aviation policy, with an emphasis on the potential for and limits to substitution between modes

Users and non-users' experiences and expectations of transport systems

Planning and operation of terminii, including integration with strategic spatial planning, the emergence of large service hinterlands, and access management to termini and logistics hubs

Best environmental operating practice for transport operators

Future trends in technological development and environmental performance

STUDENT AND ACADEMIC SERVICES

Science and technology issues of sustainable transport development – focusing on design efficiency, emission and noise control

Current and future demands on vehicle and aircraft design and manufacture, including propulsion, aerodynamics, structures and on-board systems

Teaching and Learning Methods: Contact with students will be in one of two forms: a) weekly or bi-weekly basis across a single semester; b) two blocks of three days each of teaching.

The learning will be made up of the following number of hours:

Directed contact learning: 36 hours Independent Study: 36 hours

Assessment, including preparation: 78 hours

Total: 150 hours

Scheduled learning

The contact time will comprise interactive lecture-discussion slots, combined with individual and small group work on assigned tasks. This module may be taught over a semester or as a block, depending on demand, and the theory will be applied and assessed in a project assignment, based on a topic agreed between the student and module team with a presentation made within the final module session in order to gain 20% of available marks, plus receive formative feedback.

Independent learning

There will be pre-work to familiarise students with the concepts to be taught. The post module assignment will require further independent learning. The particular examples that students can learn from will be varied and include road public transport, rail, aerospace, and roadfreight.

Part 3: Assessment

The single component will be a project assignment which will be assessed in two elements. The first will be an individual presentation of the chosen individual project topic lasting 5-10 minutes and delivered in the final module session for 20% of the marks. The second will be a project report of word-length 3200 words. The assignment will require demonstration of independent learning of theory and critical reflection on work undertaken both in the classroom and during the assignment period outside the classroom. Individual written feedback will be provided.

First Sit Components	Final Assessment	Element weighting	Description
Report - Component A	✓	80 %	Individual project report (3200 words)
Presentation - Component A		20 %	Individual presentation of project topic (5-10 minutes)
Resit Components	Final Assessment	Element weighting	Description
Report - Component A	✓	100 %	Project (4000 words)

	Part 4: Teaching and Learning Methods							
_earning Outcomes	On successful completion of this module students will achieve the following learning outcomes:							
	Module Learning Outcomes							
	Show a detailed knowledge and understanding of how transport syste interrelate with the principles and policy of sustainable development, it climate change science		MO1					
	Show a detailed knowledge and understanding of the relative modal dependencies of different transport markets							
	Show a detailed knowledge and understanding of the potential that change in different transport sectors has both to influence the achievement of future sustainability objectives and to secure a profitable future for the transport industry							
	Demonstrate knowledge of how different designs, technologies and techniques, both existing and evolving, influence the environmental and economic							
	performance of transport systems from the perspectives of transport operators Demonstrate sophisticated awareness of the institutional constraints on development of a suitable sustainable transport policy framework							
	Show cognitive skills with respect to the relative importance of different aspects within a holistic perspective on the production of an efficient and integrated transport system, including service quality and economic and environmental costs							
	Transferable skills in communication, self-management, IT skills, problem formulation and decision making, progression to independent learning, awareness of professional literature and working with others							
Contact Hours	Independent Study Hours:							
	Independent study/self-guided study 1							
	Total Independent Study Hours: 11							
	Scheduled Learning and Teaching Hours:							
	Face-to-face learning 3							
	Total Scheduled Learning and Teaching Hours: 3							
	Hours to be allocated 1							
	Allocated Hours	150						
Reading	The reading list for this module can be accessed via the following link:							

STUDENT AND ACADEMIC SERVICES

Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Transport Engineering and Planning [Sep][PT][Frenchay][2yrs] MSc 2018-19

Transport Planning [Sep][PT][Frenchay][2yrs] MSc 2018-19